# Enhancing Transparency and Risk Reporting in Islamic Banks

by

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In the Name of Allah, the Most Beneficent, the Most Merciful Dedicated To My Husband Ahmad Damiri and My Children, Nurhanani, Nurhilya, Nurhusnina & Luqman Hakim. Thank you all for your love and support.

#### Abstract

This thesis examines transparency and risk reporting issues in Islamic banks. Based on a postal questionnaire survey of 28 Islamic banks in 14 countries, supplemented by a follow-up e mails and interviews, the thesis addresses the following specific issues on: (a) the nature of risks that Islamic banks are exposed; (b) the risk measurement and management used by Islamic banks; (c) the information required by Islamic bank supervisors to monitor the risk profile of Islamic banks; (d) the importance of transparency and market discipline in Islamic banks; and (e) the adequacy of current risk reporting in Islamic banks.

The results of the study indicate that Islamic banks are exposed to similar risks as those in conventional banks. Furthermore, the results also reveal that the degree of the importance of the risks is also similar to those in conventional banks, except the nature of the risks. However, Islamic banks do not adequately report risk information in their annual reports, particularly the qualitative risk information, which highlights that Islamic banks lack behind best practice adopted by leading conventional banks. In addition, Islamic banks' supervisors required more risk information than that which is required by financial reporting standards (apart from the issue of frequency) in order to monitor the risk profile of Islamic banks.

The findings of the thesis have policy making implication on the issue of transparency with particular reference to risk reporting in Islamic banks, which could benefit AAOIFI, IFSB and Islamic bank supervisors. These bodies may find it useful to assess the level of adequacy of risk reporting in Islamic banks and come up with the new guidelines for risk reporting that would bolster up market discipline as well as enhance the soundness and stability of the financial systems in which these banks operate. Furthermore, this study has filled a gap in the literature by empirically exploring the risk reporting issues from an Islamic banking perspective.

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## List of Abbreviations

AAOIFI	The Accounting and Auditing Organisation for Islamic Financial Institutions
BIS	Bank for International Settlements
BCBS	Basel Committee on Banking Supervision
BMA	Bahrain Monetary Agency
BOPEC	Bank subsidiaries, Other non-bank subsidiaries, Parent company, Earnings and Capital adequacy
CAMELS	Capital adequacy, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risk.
CAR	Capital Adequacy Ratio
CEO	Chief Executive Officer
CFO	Chief Financial Officer
EEC	European Economic Community
FAS	Financial Accounting Standard
FASB	Financial Accounting Standards Board
FRS	Financial Reporting Standard
FSA	Financial Services Authority
IAS	International Accounting Standard
IASB	International Accounting Standard Board
IASC	International Accounting Standard Committee
IASs	International Accounting Standards
IFSB	Islamic Financial Services Board
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
PSIA	Profit Sharing Investment Accounts
SEC	Securities and Exchange Commission

- SSAP Statement of Standard Accounting Practice
- SFAS Statement of Financial Accounting Standards
- UN United Nations

## Islamic Terminology

Al Wadiah	Safe keeping (trust)
Bai' Muajjal	Deferred payment
Bai' Salam	Prepaid purchase
Fatwa	An authoritative legal opinion based on the Shari'a
Fiqh	Jurisprudence
Gharar	Uncertainty
Hadith	Prophet's commentary on Qur'an
Hallal	Lawful
Haram	Unlawful
Hiba	Premium
Ijarah	Leasing
Istisna'a	Manufacturing or construction
Maslaha	Social welfare
Maysir	Speculation
Mudaraba	Profit sharing
Mudarib	Entrepreneur – borrower
Murabaha	Cost plus or mark up
Musharaka	Equity participation
Qard Hasan	Benevolent loan (interest free)
Rabbul mal	Owner of capital
Riba	Interest
Shari'a	Islamic law
Sukuk	Participation securities; coupons; investment securities
Ummah	Society

*Urboun* Over-the-counter Islamic derivatives

Zakah Islamic tax

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## Chapter 1 Introduction

#### **1.1** Theoretical Motivation of the Research Study

Financial crises in the mid 1990s awakened certain national and bank regulators to the need for enhancing transparency in financial reporting on risks. Previous research develops the theory and evidence that the financial crises in mid 1990s, particularly in the East Asian countries, were due, among other things<sup>1</sup>, to inadequate risk disclosure, particularly foreign exchange risk, in the financial reports of banks (Fons, 1998, Rahman, 1999 and Llewellyn, 2001). If adequate information on risk exposure had been provided or required periodically, banks might have exercised better risk management, or allowed international investors and creditors to register their concern, and thus avoided the sudden withdrawal of capital from the region. In other words, the banks could have avoided the crises if they had disclosed more information on risks to the public. This is consistent with the signalling theory as argued by Watts and Zimmerman (1986).

Islamic banks are no exception. In fact, due to their profit-sharing arrangements, Islamic banks are expected to be more transparent than conventional banks as the investment account holders may require more information from the banks to monitor their investments. The Basel Committee on Banking Supervision<sup>2</sup> (BCBS) has Pillar 3 in the New Basel Accord<sup>3</sup> (Basel II), published in June 2004 on the issue of market discipline, which could also apply to Islamic banks. In order to enhance transparency, banks are encouraged to disclose more information, particularly on risk information.

<sup>&</sup>lt;sup>1</sup> The heavy reliance on unhedged foreign loans is also a cause of that crisis.

<sup>&</sup>lt;sup>2</sup> The Basel Committee on Banking Supervision is a committee of banking supervisory authorities which was established by the central bank Governors of the Group of Ten countries in 1975. It consists of senior representatives of bank supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States. It usually meets at the Bank for International Settlements in Basel, where its permanent Secretariat is located.

<sup>&</sup>lt;sup>3</sup> The Basel Accord has been introduced by the BCBS in July 1988. This Accord focuses on the total amount of bank capital, which is vital in reducing the risk of bank insolvency and the potential cost of a bank's failure for depositors. Basel II, which is proposed in April 2003 and finalised in June 2004, intends to improve safety and soundness in the financial system by placing more emphasis on banks' own internal control and management, the supervisory review process and market discipline. Section 3.2.4 gives more explanation on this Basel II.

There is also ongoing discussion on the current International Accounting Standards (IASs), particularly, IAS 30: Disclosures in the Financial Statements of Banks and Similar Financial Institutions and IAS 32: Financial Instruments: Disclosure and Presentation, which are relevant to the banks. The discussions lead to the publication of the exposure draft of a new International Financial Reporting Standards (IFRS), ED 7: Financial Instruments: Disclosures, which aims to replace IAS 30 and IAS 32 and to improve financial reporting by helping users to understand the significance of financial instruments in the financial statements, by giving more information about companies' capital and by revealing more clearly the risks attached to holding financial instruments.

The study of risk has a particular significance for financial reporting, as the banking risks have a direct effect on monetary assets and liabilities. For instance, the realisation of currency risks arising from foreign currency denominated loans can worsen the liquidity and solidity of the banks to such an extent that the bank's continuity is threatened. Furthermore, risk reporting enables stakeholders to better assess and understand banking risks and assists shareholders to select the banks that have an appropriate risk profile.

It is therefore appropriate that banks should disclose their overall risk management philosophy together with information about the origin of the risks, and the way in which they are measured, managed and controlled. Conventional banks use several risk measurement and mitigation techniques (Bessis, 2002). They include credit ratings, gap analysis, duration analysis, Value at Risk (VaR), Risk Adjusted Return on Capital (RAROC) and others. It is interesting to see whether Islamic banks use the same techniques used by their conventional counterparts, in particular the more technically advanced risk measurement approaches (for example, VaR, Simulation techniques, Estimates of Worst Case – Stress Tests, RAROC and Internal Rating Based System).

Risk management is seen as a key factor in assessing the future performance and financial position of a bank, as well as in evaluating the quality of its management. Conventional banks have a variety of risk management techniques which include credit derivatives and financial derivatives to manage the exposure to market risks for

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example swaps, forwards, futures and options. Because of prohibition of *riba*, many of these risk management techniques based on conventional tools are not used in Islamic banks<sup>4</sup>.

#### **1.2** The Research Objectives and Research Questions

This study aims to achieve the following research objectives:-

- To ascertain the perceptions of Islamic bankers on nature of risks, risk measurement and risk management approaches of Islamic banks in comparison to those of conventional banks and with reference to the market environment in which Islamic banks typically operate.
- To ascertain the information that the supervisors of Islamic banks require most to monitor the risk profile of Islamic banks, but which is not required by existing financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) ), and also the most important supervisory tool to monitor the risk profile of Islamic banks.
- To examine the implications of transparency with particular reference to market discipline for Islamic banks and disclosure of risk and risk management.
- To evaluate the adequacy of risk reporting in existing Islamic banks' annual reports.
- To explore policy implications from the above for the Islamic banks' regulators (central banks) and standard setters (IFSB and AAOIFI), with reference to Pillar 2 and Pillar 3 of Basel II.

With regard to the research objectives above, several questions have been raised. More specifically, this study is concerned with the endeavour to answer the following questions:

 How does the risk perception of Islamic bankers differ from conventional bankers with respect to the market in which Islamic banks typically operate? Do Islamic banks use the more technically advanced risk measurement techniques? Apart from using similar risk mitigation approaches as in conventional banks, do Islamic

<sup>&</sup>lt;sup>4</sup> However, some Islamic scholars are of the view that the *Shari'a* provides exceptions to these conditions to enable deferred sale where needed (Shafi, 1997), meaning that some derivatives are allowed to be used in Islamic banks.

banks widely use *Shari'a* compliant risk mitigation approaches? Also which risk mitigation approaches used by conventional banks are not used by Islamic banks?

- How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors? Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?
- What is the perceived role of transparency in Islamic banks from a risk reporting point of view, with particular reference to Basel II?
- To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports perceived by supervisors of Islamic banks and other interested parties<sup>5</sup> to be adequate to provide sufficient transparency for Islamic banks?
- What are the implications of the above for the implementation of Basel II for the regulation of risk disclosures (Pillar 3) and for banking supervision (Pillar 2)?

#### 1.3 Overview of the Research Methodology

The theoretical framework of this research study was constructed through the literature review which is summarised in a series of chapters. The main literature sources were journals, conference proceedings, books, reports, theses and bank regulators' papers. The study's research instrument was a survey questionnaire which was designed to elicit the opinions of the Islamic bankers, the supervisors of Islamic banks, the representatives of IFSB and AAOIFI, external auditors and external rating agencies.

#### 1.4 The Main Conclusions of the Study

The main conclusions drawn from this study are:

• In Islamic banks, credit risk is perceived to be the most important risk, and there is no significant difference with regard to the perceptions of the respondents in Malaysia, Bahrain and other countries with all the risks. In addition, *Salam* and

<sup>&</sup>lt;sup>5</sup> Other interested parties include external auditors, external rating agencies and representatives from IFSB and AAOIFI.

*Istisna'a* are perceived to be riskier than *Murabaha* and *Ijarah*. However, the most risky contracts are *Musharaka* and *Mudaraba*.

- Islamic banks are perceived not to use the most advanced risk measurement techniques and the *Shari'a* compliant risk mitigation techniques are also not widely used due to problems raised by *Shari'a* interpretations concerning these techniques.
- Supervisors of Islamic banks require additional information in order to monitor the risk profile of Islamic banks (apart from the issue of frequency). In addition, a supervisory rating system (CAMELS) is perceived to be the most important assessment approach to supervise Islamic banks as compared to the statistically based approaches, with the exception of Bahrain, where they considered CAMELS to be only important and not very important.
- Transparency is perceived to be more important in Islamic banks than in conventional banks due to the existence of profit sharing investment account holders in the former.
- Market discipline is perceived to facilitate banking supervision in Islamic banks, similar to conventional banks.
- It is perceived that Basel II could apply to Islamic banks but with some adaptations, and then the IFSB could play an important role in this context.
- Islamic banks' external credit rating agencies are perceived to help the public to assess the banks' financial condition. However, not all Islamic banks are rated by external rating agencies. Islamic banks must find alternative ways to invest surplus liquidity as a means of securing better risk ratings.
- The level of qualitative risk information is not adequate in the existing Islamic banks' annual reports. This is consistent with the ongoing discussions on the current accounting standards that are relevant to the banks.

#### 1.4 The Significance of the Study

It is believed that this study could contribute some references to an ongoing debate over the issues regarding the transparency of risk reporting in Islamic banks' annual reports and the relevant accounting standards. The study could also help the policyholders, in particular the supervisors of Islamic banks, AAOIFI and IFSB, to come up with policies to improve transparency of risk reporting in Islamic banks. In addition, the findings of this study could add to the existing body of literature since there are not many empirical studies on Islamic banks that have been undertaken to date. In fact, this study is the first empirical study in the academic literature.

#### **1.5** The Structure of the Study

The structure of this thesis contains three main parts which are as follows:

#### Part I: Background and Review of Literature

This part provides a review of background literature associated with this research study. It includes five chapters. Chapter 2 discusses the importance of adequate risk disclosure by conventional banks and the roles of segment reporting in that context. It is argued that adequate risk disclosure could improve market discipline (Pillar 3, Basel II). Accounting standards on segment reporting (IAS 14, SFAS 131, SSAP 25, and the UK SORP on Segmental Reporting for Banks) and the role of segment reporting are also discussed in this chapter.

Chapter 3 identifies the gaps between the current accounting standards and the current best practice as advocated by regulators (BCBS). The chapter discusses the existing IASs that are relevant to banks, which include IAS 30 and IAS 32 and also the new ED 7. It then, provides example of the best current practices for conventional banks by reviewing three leading banks in Europe. In addition, this chapter explains the signalling theory (Watts and Zimmerman, 1986) with regard to the disclosure issues. Chapter 4 provides the link between transparency and market discipline and discusses some of the causes of the previous banking crisis. In addition, the role of bank supervisors in facilitating transparency is also discussed in this chapter.

Chapters 5 and 6 look at the case of Islamic banks. First, the differences between conventional banks and Islamic banks are discussed in Chapter 5. This leads to the recognition that different accounting standards need to be designed to cover the specificaties of Islamic bank's transactions and risks. Then, Chapter 6 explains the issue of transparency within the context of Islamic banks and the implications of transparency for Islamic banks.

#### Part II: Research Methodological Approach

This part includes Chapter 7, which discuss the methodological approach employed in this research study. This covers research objectives, research questions, development of research propositions, research instrument and the summary of the form of analysis used to analyse the collected data.

#### Part III: Findings, Discussion and Conclusions

In this part, research findings, discussion and conclusions are presented. This part comprises three chapters. Chapter 8 presents the first part of research findings. It provides a summary to answer research questions 1 and 2. Chapter 9 provides the second part of the research findings, which are mainly to answer research questions 3 and 4. Chapter 10 discusses the findings and presents the conclusions which were drawn from this research. It also points out limitations faced by the researcher and the future research directions.

#### Chapter 2

#### **Disclosure of Risks in Conventional Banks**

#### 2.1 Introduction

Comprehensive reporting on risk in banks' annual reports is of great importance for users of the annual reports, particularly for investors, analysts and depositors in today's volatile business and economic environment. Firstly, risk management is an integral element in enhancing and protecting shareholder value. Secondly, investors need to be able to observe and form opinions on the risks potentially affecting the bank and the way in which these risks are managed. In addition, disclosures about risk exposures also help investors form a view on the amount, timing and probability of the banks' future cash flows. Banks, as the institutions who receive deposits from the public and then invest them must be able to provide useful and meaningful information about their activities to the users of the information. The activities of the banks are now becoming more complex and dynamic which lead to greater risks being faced by the banks. The disclosure of the information on risks in the banks' annual reports enables the users to make a more accurate assessment of the financial condition of the banks.

The remainder of the chapter is structured as follows:

Section 2.2 explains the nature of risks in conventional banks, including risk measurement and management techniques. Section 2.3 discusses the importance of transparency in conventional banks. Section 2.4 looks into the empirical evidence on risk disclosure. Financial reporting standards on segment reporting and their role in relation to risk disclosure are discussed in Sections 2.5 and 2.6. Section 2.7 presents the appropriateness of the segment reporting standards for banks. Section 2.8 summarises the empirical evidence on segment reporting. Finally, Section 2.9 provides concluding remarks.

#### 2.2 Banking Risks

There is no single definition of risks. In this study, banking risks are defined as adverse impacts on profitability of several distinct sources of uncertainty (Bessis, 2004). Risk is usually estimated by the standard deviation of the distribution of historic outcomes. Risk measurement requires capturing the source of the uncertainty and the magnitude of its potential adverse effect on profitability. Profitability refers to both accounting and mark-to-market measures. In general, any bank faces two types of risk; business risk and inherent risks (UBS Annual Report, 2002). Business risks are the risks associated with a chosen business strategy, including business cycles, industry cycles, and technological change. They are the sole responsibility of the relevant business, and are not subject to an independent control process. They are, however, factored into the firm's planning and budgeting process.

Inherent risks are the risks inherent in the banking activities which are subject to independent risk control and can be divided into primary risks (credit risk, market risk and liquidity and funding risk) and consequential risks (also known as operational risks).

It is clear that risks exist in every transaction a bank undertakes and in every service it provides. Banks are at risk from shortcomings and failures in their own processes and procedures and from systems failures, all of which can cause loss of customers, loss of opportunities and perhaps, the need to pay compensation. Banks are at risk from fraud and theft from their own employees, as well as from customers and criminals. Banks are also at risk if they misprice their products and services. Banks therefore need a comprehensive understanding of the cost of delivering their products and services.

Profitability is at risk if the price they charge for a product or service is less than the direct and indirect cost of delivery (including interest costs) and, importantly, does not take account of the cost of any losses crystallising from the risks that arise from carrying out the transaction. Some of these risks are immediate, for example exchange rates affecting currency dealing positions change continuously, while others can take longer to crystallise, for example for as long as the economic cycle in the case of credit losses. It is therefore a fundamental responsibility of management to ensure that all the risks associated with each class of business, each product and each type of transaction are identified.

In general, banks are exposed to different types of risks, but in quantifying and disclosing risk, they focus primarily on these four types of risks (Hitchins, 2001), which is illustrated in Figure 2.1.





The nature of these risks is discussed below: -

#### 1. Credit risk

The risk of loss that arises when a counterparty or obligor fails to meet the terms of a financial contract or otherwise fails to fulfil an obligation. All transactions give rise to counterparty risk. The expectation is that the longer the claim on the counterparty exists, the greater the risk.

#### 2. Market risk

The uncertainty of cash flows because of changes in the value of financial instruments caused by movements in market parameters, which include market prices, interest rates and exchange rates. The more volatile are asset prices, the greater are the market risks faced by the banks that adopt open trading positions.

Fitch (1997) has noted that interest rate risks and foreign exchange risks arise primarily as a consequence of a mismatch between the assets and revenues denominated in one currency, and liabilities and costs denominated in another currency. The problem occurs mainly in cases of unhedged foreign expansion, when fluctuations of exchange rates cause assets and liabilities to move in opposite directions (Hitchins, 2001). This can have a significant impact on the income and profitability of financial institutions (Heffernan, 1996).

#### 3. Liquidity risk

The risk that a sudden surge in liability withdrawals may leave a bank in a position of having to liquidate assets in a very short period of time and at low prices. More generally, the risk arising from maturity mismatches where liabilities have a shorter tenor than assets. A sudden rise in the borrower's demands above the expected level can lead to shortages of cash or liquid marketable assets (Oldfield and Santamero, 1997). One aspect of asset and liability management in the banking business is to minimise the liquidity risk.

#### 4. Operational risk

A wide-ranging risk category relating to human error, management or deficiencies in operating systems. For financial services providers, operational risk can present a unique challenge insofar as the complexity of contractual arrangements is likely to result in a significant potential for errors (Hussain, 2000).

It is therefore appropriate that banks should disclose their overall risk management philosophy together with information about the origin of the risks, and the way in which they are measured, managed and controlled. Conventional banks use several risk measurement and mitigation techniques (Bessis, 2002). They include credit ratings, gap analysis, duration analysis, maturity matching, Earnings at risk, VaR, simulation techniques, stress tests, RAROC and internal based rating system. Risk management is seen as a key factor in assessing the future performance and financial position of a bank, as well as in evaluating the quality of its management. The BCBS (1999) for example, reports that weak credit risk management practices and poor credit quality continue to be a dominant cause of bank failures and banking crises world-wide. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organisation. Apart from credit risk issues, conventional banks have a variety of risk management techniques which include credit derivatives and financial derivatives to manage the exposure to market risks, for example, swaps, forwards, futures and options.

In an information environment that lacks transparency, a bank that discloses more information about its risks than others may fear that outsiders will erroneously perceive its riskiness to be greater than that of other banks. However, the regulations on enhancing disclosures and signalling theory (details in Section 3.7) could be seen as an indication of strength to the banks as these can provide more meaningful information to the users to assess the financial performance of the banks.

In September 2000, the BCBS, in a paper 'Best Practices for Credit Risk Disclosure' identifies the types of credit risks information market participants and supervisors need in order to make a meaningful assessment of a bank, and encourages banks in all countries to provide such information to the public. The paper provides disclosure recommendations in five broad areas: accounting policies and practices, credit risk management, credit exposures, credit quality and earnings. They recommend that banks should increase their level of public disclosure to comply with this guidance in line with the nature, size and complexity of their activities. The paper builds on concepts developed in the BCBS's report in 1998 on 'Enhancing Bank Transparency<sup>6</sup>', by providing more detailed guidance in the area of credit risk.

This is consistent with their publication in 2001 with the title, 'Public Disclosures by Banks: Results of the 1999 Disclosure Survey' where they conducted a survey to encourage banks to publicly disclose both quantitative and qualitative information that will allow bank counterparties and other financial market participants to make informed decisions regarding banks' risk management practices and financial strength. The survey results show varying disclosure levels in the areas surveyed. In a broad sense, banks commonly disclosed capital related items, credit risk allowances, diversification of credit risk and accounting policies. However, the survey results show that there is a lack of disclosure in areas related to credit risk modelling and the use of internal ratings. These disclosure areas are likely to be of increased importance in the future, as disclosure of key information regarding the use of internal ratings will be necessary for banks to qualify for the ratings based approach in Pillar 1 of Basel II (minimum capital requirement).

<sup>&</sup>lt;sup>6</sup> Details of this paper will be discussed in Section 2.3.

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#### 2.3 Importance of Transparency

Transparency in this context is defined as public disclosure of reliable and timely information that enables users of that information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices (BCBS, 1998). This definition recognises that disclosure alone does not necessarily result in transparency. To achieve transparency, a bank must provide timely, accurate, relevant and sufficient disclosures of qualitative and quantitative information that enables users to make proper assessment of the institution's activities and risks inherent in those activities. Greater transparency and disclosure keep corporate stakeholders better informed about the way a bank is being managed and governed. In addition, studies suggest that better disclosure has a positive impact on the efficient functioning of capital markets. In particular, Healy and Palepu (2001) review research on financial reporting and voluntary disclosure of information has increased the value of reliable information in capital markets.

According to Healy and Palepu (2001), in the presence of imperfect accounting regulations, managers can be stimulated to make voluntary disclosure for several reasons. First of all they can be driven by the expectation of reducing the cost of capital by reducing the information asymmetry and the uncertainty perceived by investors (Lang and Lundholm, 1993, 1996). Secondly, managers can voluntarily disclose in the case of poor share or earnings performance, when they are held accountable, in order to reduce the likelihood of under-evaluation of their performance and to explain away poor performance (Brennan, 1999). In this case, managers may disclose also in order to protect themselves from legal actions for inadequate or untimely disclosure (Skinner, 1994). Thirdly, talented managers may have an incentive to make voluntary earnings forecasts in order to enable the market to appreciate their capabilities (Trueman, 1986).

In addition, the literature suggest that it is in the firm's interest to provide more voluntary disclosures, thereby reducing the information asymmetry component of the firm's cost of capital and increasing the firm's stock liquidity (Diamond and Verrecchia, 1991; Verrecchia, 2001).

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Transparency reduces moral hazard and adverse selection and enhances efficiency and integrity of the markets and strengthens market discipline (details in Section 4.2). The issue of transparency for banks has been emphasised in recent years, particularly by the BCBS. In their article 'Enhancing Bank Transparency' which was published in September 1998, the definition of transparency is given as shown at the beginning of this section. In this article, the BCBS makes six recommendations about the information that should be included in public disclosures by banks in order to achieve a satisfactory level of bank transparency and to ensure effective market discipline as a complement to effective banking supervision. They include financial performance, financial position (including capital, solvency and liquidity), risk management strategies and practices, risk exposures (including credit risk, market risk, liquidity risk, and operational, legal and other risks), accounting policies and basic business, management and corporate governance information.

Transparency of banks and risks are considered to be a key element of an effectively supervised, safe and sound banking system. Meaningful and accurate information reported in a timely manner provides an important foundation for the decisions of market participants. Hence disclosure of information is effective only if it provides information about the banking risks and risk management processes.

Recommendations by BCBS (1998) on the disclosure of information on risk are divided into:

- Credit risk. Disclosure of information on credit risk should enable users to understand the size of a bank's credit exposures both on an aggregate basis and in significant areas. An understanding of those business lines that create credit risk and the nature and composition of the exposures can be acquired through qualitative disclosures. Among the quantitative disclosures, it is recommended that banks disclose the amount of the problem loans, an ageing schedule, and any concentrations of credit exposure.
- Market risk. The BCBS suggests that banks should disclose both qualitative and quantitative information on market risk, the risk that arises from changes in interest rates, foreign exchange rates and the market prices of equities and commodities. It is noted that for larger banks, measurement methods such as
Value at Risk<sup>7</sup> (VaR) provides summarised data on market risk exposures. Where such methods are used, it is recommended that there should be disclosure of the assumptions used in the calculations.

- Liquidity risk. As well as providing quantitative disclosures about its available liquid assets, it is recommended that a bank provides qualitative information about its funding options and its contingency plans.
- Operational risk. In addition to providing information about the main types of operational risk faced by a bank, it is recommended that it discloses any specific problems that are considered significant.

Disclosure and transparency are not a panacea but they can improve market discipline. This is explained in Pillar  $3^8$  of Basel II.

The role of the standard-setters in preparing disclosure standards will be important in order to improve financial reporting. Banks are encouraged to provide greater disclosure of risk, so that implications of the use of their complex financial instruments can be understood by financial statement users.

In most cases, investors have considerable difficulty in obtaining a complete and integrated view of a bank's risk profile. This leads to what has been defined as the risk information gap, one of the components of the information gap affecting corporate reporting (Eccles et al., 2001). This information gap has to be filled in order to avoid the permanent loss of importance of financial statements as one of the traditional instruments for communicating bank performance to investors. One way banks can fill this gap is by voluntary disclosure as discussed earlier in this section.

#### 2.4 Empirical Evidence on Risk Disclosure

There are no specific studies reported in the literature on the disclosure of risks by banks. However, several studies have been undertaken by academicians and bank regulators on loan loss provisions disclosure and the effect to banks' returns. Loan

<sup>&</sup>lt;sup>7</sup> Value at Risk (VaR) estimates the potential pre-tax loss resulting from any chosen adverse movement in interest or market rates over a defined holding period. It can be used for risks implicit in price movements for equities and commodities, exchange rate or interest rate exposures providing there is a sufficient base of historical data on past rate changes from which to calculate the probabilities of future rate changes. Future rate changes are assumed to follow past changes i.e. normally distributed. \* Market discipline imposes strong incentives on banks to conduct their business in a safe, sound and efficient manner, including

an incentive to maintain a strong capital base as a cushion against potential future losses arising from risk exposures.

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loss provisions reflect the current period increase in the level of expected loan losses, and are disclosed as accrued expenses in the income statement. There are two more disclosures of changing default risk by banks: non-performing loans and loan chargeoffs. Non-performing loans include all loans in the portfolio more than 90 days overdue on interest or principal payments, and are disclosed as supplemental financial statement information. Loan chargeoffs measure all loans deemed uncollectible during the period. Chargeoffs are assets write-offs that are reported separately in financial statement footnotes, and can also be derived from balance sheet and income statement data. Together, these three disclosures represent an integrated, contextual set of potentially value-relevant information spanning the income statement, balance sheet and footnotes.

Interestingly, recent empirical studies have obtained evidence consistent with a positive relation between stock returns and loan loss provisions (Beaver et. al., 1989; Griffin and Wallach, 1991; and Wahlen, 1994). This evidence is interesting because it contradicts the notion that loan loss provisions are interpreted as expenses that reflect expected loan losses. On the other hand, Griffin (1998) examines the loan loss disclosures made by seventeen New England banks during 1989 and 1990. The study hypothesises and provides evidence of a differential negative market reaction to bank loan loss announcements based on the timeliness of the announcement relative to the end of a fiscal quarter. In addition, the analysis reveals that bank stock prices responded as a function of the timing and the amount of unexpected change in the loan loss provision. His finding contradicts the earlier studies. However, this also depends on whether the disclosures provide "good" news or "bad" news in relation to market expectations.

McLeay and Diaz (1996) look at the inter bank transfer of information in the securities market at the time of the bad debt provision announcements, using a system of simultaneous equations. They compare the behaviour of commercial banks in the US (12 banks) and the UK (4 banks), which are the principal lenders to Latin America. They found that the reactions over successive announcements by banks (provision for bad debts by UK banks and the addition to loan loss reserves by US banks) followed a similar pattern of information transfer in two countries. The paper assesses the capital market reaction to the bad debt provision announcements resulting

from the Latin America debt crisis. It is shown that there were significant excess returns to the shares of announcing banks and to those of banks which had, at the time of any given announcement, not yet disclosed their own policy. On the other hand, once an announcement had been made, subsequent excess returns were not significantly different from zero or were negative.

However, the preceding results do not look into the issue of adequate risk disclosure by banks, but rather on the disclosure of loan loss provisions and the reaction from the market and whether the report on loan loss information should convey more information about loan impairment than similar banks that report on a less timely basis. Loan loss provisions are related to credit risk disclosures in that they are provisions for those risks known as credit risks. There may, however, be credit risks other than potential loan losses, for example counterparty risks or guarantor risks. The existing studies look into the loan loss disclosures, which exist on the income statement, balance sheet and footnotes to the financial statements. These may be useful to the users, but users obtain a better understanding if banks provide a commentary on the financial statements which describes the way it manages and controls the risks associated with the operations of the bank. As mentioned earlier, banks are exposed to credit risks, market risks, liquidity risks and operational risks. Therefore, disclosures in the financial statements of a bank need to be sufficiently comprehensive to meet the needs of users. The existence of segment reporting standards is hoped to assist financial statements' users in understanding risk exposure.

#### 2.5 Segment Reporting Standards

There are several accounting standards related to segment reporting, particularly IAS 14, SSAP 25 (UK) and SFAS 131 (US).

## 2.5.1 International Accounting Standard (IAS) 14 (Revised), 'Segment Reporting'

The current International Accounting Standard Committee Board (IASCB) rules are found in IAS 14, which came into force in 1983. The standard was revised in August 1997 and the new rules in IAS 14 (Revised), 'Segment Reporting' are applicable for accounting periods beginning on or after 1 July 1998. This standard is applicable to the financial statements of all enterprises that have issued, or are in the process of issuing, publicly traded securities (equity or debt). IAS 14 (Revised) provides that one basis of segmentation is *primary* and the other is *secondary*, with considerably less information to be disclosed for secondary segments. The primary segment can be either industry or geographical segments and the secondary segment is the segment on the alternative basis. If the company's risks and returns are strongly affected by differences in both geographical areas and industries, then both types of areas are under primary segments.

The objective of IAS 14 (Revised), 'Segment Reporting' is to assist the user of financial statements in making judgements about the risks and returns facing an enterprise by the disclosure of finer information than that provided in the primary financial statements. This standard adopts a consolidated statement approach due to the fact that it defines business segments by products or services grouped together on an industry basis according to a national or international industry or product classification system.

#### 2.5.2 SSAP 25, 'Segmental Reporting'

Although the original International Accounting Standard, IAS 14, 'Reporting Financial Information by Segment' was published in August 1981, it was not until 1986 that work commenced in the UK on developing an accounting standard on the subject. SSAP 25, 'Segmental Reporting' was issued in July 1990. SSAP 25 was effective for accounting periods beginning on or after July 1, 1990. This standard requires segmental reporting of information on turnover, results and net assets in respect of each class of business or geographical segment, if significant to the entity as a whole. A segment is regarded as significant if the turnover, results or net assets that it produces are greater than 10 per cent of the total for the company. SSAP 25 applies to all entities subject to the Companies Act 1985, which include banking and insurance companies and groups.

The emphasis of the standard is that for segmental reporting to be of real value to users of financial statements, the segmental information reported needs both to reflect the company's risk and return profile and to inform users of the nature of that profile. This indicates that this standard adopts a risk and return approach. The standard views reportable segments in terms of either class of *business* segments or *geographical* segments.

# 2.5.3 SFAS 131, 'Disclosures about Segments of an Enterprise and Related Information'

SFAS 131 was issued by Financial Accounting Standards Board (FASB) in United States in June 1997. Its primary benefit is the ability to see an enterprise through management's eyes, thereby making it easier for the users to predict management actions or reaction that can have a significant effect on the enterprise's prospects of future cash flows. This statement supersedes SFAS 14, 'Financial Reporting for Segments of a Business Enterprise'<sup>9</sup> which had led to several problems such as that segment disclosures did not correspond to the way management runs the business. SFAS 131 is effective for fiscal years beginning after December 15, 1997. It applies to all business enterprises which are traded in a public market and are required to file financial statements with the US Securities and Exchange Commission (SEC). This statement adopts a 'management approach' (FASB 1997, para.4), in requiring that the reportable business segments be based on the way that management organises segments for making operating decisions and assessing performance.

SFAS 131 requires disclosure of information by *operating* segment and by *geographical* segment. Reportable segments are operating segments where total operating segments' revenues, reported profit or loss and assets make up 10 per cent or more of the combined respective items.

For geographical segments, there are two items of information to be disclosed by geographic area: revenues from external customers or each group of similar products or services regardless of amount unless it is impracticable and long-lived assets. Revenue information is a critical disclosure for financial analysis.

<sup>&</sup>lt;sup>9</sup> SFAS 14 issued in 1976, requires companies to disclose revenues, a profitability measure, and identifiable assets for lines of business (LOB) and geographic areas with no specific link to the internal Organization of the company. The disclosure was limited to geographic regions and major customers.

SFAS 131 does not have a category of 'secondary' segments for which a lower level of disclosure is required, like IAS 14, but it has a category of 'enterprise-wide' information, in addition to disclosures by operating segment. This disclosure is about products and services, geographic areas, and major customers, which must be disclosed separately if this has not been done as part of segment reporting.

SFAS 131 requires disclosure of revenues from external customers to be made by individual country (paragraph 38), which FASB believes will provide more useful information than disclosures provided at an aggregated level. A study by Nichols et al. (2000) provides partial evidence that country level disclosures can be useful.

Figure 2.2 summarises all the standards related to segment reporting.

#### Figure 2.2: Accounting Standards on Segment Reporting



#### 2.6 The Role of Segment Reporting

The objective of segment reporting is to assist the user of financial statements in making judgements about the opportunities and risks facing an enterprise by the disclosure of finer information that provided in the primary financial statements (IAS 14). The finer information provides an analysis of the enterprise's financial performance in the various market areas in which it operates. Market areas will include product markets (business segments) and geographic markets (geographic segments). Disclosure of appropriate segment information enables the user of financial statements to observe the enterprise's performance by market area, for example return on assets (ROA) and return on sales.

For segment reporting to be truly useful, it must be relevant and comparable over time. However, the latter is very difficult to achieve in practice. Emmanuel and Garrod (2001) conduct a study to examine whether relevance and comparability can be achieved simultaneously in segmental disclosures for UK companies. The results of their tests reveal that for a significant portion of the sample the levels of both relevance and comparability are simultaneously low due to the segment identification choices made. These choices appear to match the possible outcomes of following the management approach to identification. By implication, the adoption of the management approach may lead to reduced comparability and relevance in some cases.

How can segment reporting help in the area of risk evaluation? Most industry segment information is aggregated on a worldwide basis, and the risk that a specific industry faces might differ from country to country. Countries within a geographic area also face different kinds of risk. It would appear that the reporting solution to the problems of risk is the same as it is for forecasting returns. The greater the degree of disaggregation, the better an analyst would be able to forecast the impact of events on the overall operations of the sector. Ideally, that disaggregation could reach down to the country level.

The study by Ajinkya (1980) shows that the uniformity and greater fineness of disclosure for multi product firms (as mandated by SEC), appear to have increased the consensus in the risk-return assessments of the securities of multi product firm at the aggregate level. This confirms that segment reporting can help in the area of risk evaluation.

In recent years, there has been an increasing interest in the provision of additional information, including disaggregated or segment information. Segment reporting involves breaking down the enterprise into its constituent parts or segments and reporting financial information on a disaggregated basis for each of the segments. A business can segment its operations in a number of ways, with the two most common being segmentation by industry or type of business and by geographical area (in accordance with the accounting standards mentioned earlier). If adequate segment information is disclosed, users should be able to combine business specific information with external information to help them to assess the future prospects of the business.

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Previous studies have shown the US standard (SFAS 131) has led to the US companies under study to improve their financial reporting in terms of number of segments reported and information shown in the segments, in particular studies by Herrmann and Thomas (2000) and Street et al. (2000). Both studies have compared the segment reporting disclosures under SFAS 131 with those reported the previous year under SFAS 14. They used the annual reports of US companies obtained from 1998 Fortune 500 Listing (Hermann and Thomas, 2000) and a list of the 480 US-domiciled Business Week Global 1000 companies (Street et. al, 2000). However, both of the studies were conducted on non-banking firms.

Advocates of segment reporting argue that the separate segments of an enterprise are usually subject to different economic conditions, different degrees of risk and exhibit different growth rates. A single, all-inclusive report tends to average out those differences, thereby obscuring them. Accordingly, they argue that segment reporting would enable users of financial reports to make better decisions.

It is clear that segment reporting can assist in the area of risk disclosure. When the banks report their activities based on segment (by business line or geographical segments), the users can assess the risk exposure of these banks in each of the segments. Evaluation of business activities involves analysis of risk and profitability associated with such activities. The rate of risk and profitability is influenced by the degree of uncertainty that is inherent with a firm's operations. Since uncertainty tends to change from country to country, disclosures based on geographic areas of operations are expected to provide useful information for the assessment of the bank's performance as a whole.

#### 2.7 Appropriateness of the Segment Reporting Standards for Banks

As financial conglomerates, which include high-street banking, investment banking and securities dealing, banks operate in a variety of classes of business and in a number of different geographical locations. Therefore, the availability of segmental information (also called 'disaggregated information') setting out meaningful analyses of turnover and profits is useful for good management as well as for investors and creditors. Such information is essential if management is to be able to detect trends in revenues and other aspects of performance within its specific businesses and

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geographical regions. At the same time, this could enable the different risks faced by the banks to be analysed by line of business and geographical area. However, there are problems with existing accounting standards on segment reporting. For example, there is lack of comparability in definitions of line of business.

As mentioned earlier, banks have a variety of operations and the availability of the segmental reporting can assist the users in understanding the different activities of the banks. However, in all of the above standards, they are applicable to banks but not really mandatory. For example, SSAP 25 applies to all banks, unless they avoid disclosure by taking advantage of the 'prejudicial override' exemption<sup>10</sup>. The bank supervisors, during the process of improving transparency, can make segment reporting mandatory so that this can give better picture of the risks and returns faced by the banks. Business and geographical segments are likely to have different risk characteristics which aggregate information does not reveal. Therefore, it is important for banks to be broken down into segments so that the decomposition of risks can be shown separately.

In discussing the issue of transparency that has been explained in the previous chapter, segment reporting can be seen as a tool to enhance transparency.

The existing standards on segment reporting of IASB, UK and US do explain in a great deal regarding the ways enterprises (which include banks) should report their segments either by a management approach (US), a risk and return approach (UK) or a consolidated approach (IASB). For example, IAS 14 (Revised) requires extensive disclosure for primary segments which include segment revenue, segment results, segment assets and liabilities the cost of property, plant, equipment and intangible assets acquired during the period.

For secondary segments, it requires disclosure of segment revenue, segment assets and the cost of property, plant, equipment and intangible assets acquired during the period. This indicates the appropriateness of the segment reporting in relation to the

<sup>&</sup>lt;sup>10</sup> This exemption mentions that disaggregated information need not to be disclosed where the directors have determined that such disclosure would be seriously prejudicial to the company's interest. For example, if a company or a group supplies customers in two countries and these two countries are politically opposed to each other. Then, to publish a geographical split of turnover could be considered to be prejudicial to the interests of the company or the group.

banks. For example, it is argued by Nichols et al. (2000) that enterprise-wide disclosures as required by SFAS 131 will provide information that is more useful in assessing the impact of concentrations of risk. Banks which operate internationally can make this type of disclosure so that different rates of growth and differences in economic conditions in different countries can be shown. However, additional requirements, for example the credit risk and market risk by country, should also be included, particularly due to the uniqueness of the banks' activities.

If banks provide segmental information in their financial reports, the users of accounting information can properly understand the concentration of the reporting organisation's activities in specific sectors of the economy. From such segmental information, the users of financial statements can judge whether or not a bank is exposed to a high degree of financial risk due to concentration in a particular sector.

#### 2.8 Empirical Evidence on Segment Reporting

Previous studies on segmental disclosure do not really highlight the application of segment reporting by banks, but rather the information content of segmental disclosure particularly geographic area disclosures (Nichols et al., 2000; Doupnik and Seese, 2001) in non-banks.

Nichols et al. (2000) examine the geographic segment disclosures of 158 US Global 1000 companies for both 1997 and 1998 to ascertain the impact and effectiveness of SFAS 131. However, again, they exclude financing firms from their sample. The main reason is for consistency. In summary, they found that SFAS 131 has resulted in the disclosure of more country specific geographic segment data and a closer alignment of reportable segment data with other parts of the annual report.

The recent study by Doupnik and Seese (2001) also looks at geographic area disclosures under SFAS 131, but their study goes beyond Nichols et al. (2000) by evaluating the issue of materiality and fineness. They used a sample of 254 largest US-based companies taken from Fortune and they found that there is considerable diversity among companies in the way that materiality is defined. For a large percentage of companies, the information provided under SFAS 131 appears to be

finer than the information provided under SFAS 14. This confirms the superiority of SFAS 131 over SFAS 14, which the FASB wanted to achieve.

Another important study on segment reporting and standard was made by Ahadiat and Stewart in 1992. They show that there is considerably diversity of practices and disclosure requirements for geographic segment reporting among the international standard-setting organisations. The international standard-setting organisations used are the United Nations (UN), Organization for Economic Cooperation and Development (OECD), European Economic Community (EEC) and International Accounting Standards Committee (IASC). This diversity is noticeable not only in the segment identification procedures, but also in the list of information to be reported. Each of the organisations described in their study has developed its own version of geographic segment reporting standards, seemingly with little regard for harmonisation. Harmonisation of accounting standards between all reporting components of enterprises not only improves comparability but it also can provide better communication, lower costs, and contribute to more efficient management.

The above argument is also true for banks. Banks, especially when they operate internationally, must be able to use the same financial reporting methods following the same standards so that their performance can be compared and measured efficiently. It is important for the market to be aware of the banks' exposure to risk and the basis on which these exposures are managed and calculated.

#### 2.9 Concluding Remarks

This chapter has discussed the inherent risks in conventional banks reporting and the importance of enhancing transparency with regard to risks, an issue which has been raised by the regulators, particularly the BCBS. Empirical evidence only focuses on one aspect of risks, which is the disclosure of loan loss provisions and the effect on bank stock returns. It is important to include the disclosure of all the other risks faced by the banks in the present study to provide a basis for an accounting standard (for Islamic banks) applying IASs or UK Standards, which can assist the users in understanding the risks faced by these banks.

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The role of segment reporting in the disclosure of risks by the banks has been very important in giving a better picture of the banks' performance. Disaggregation of the information will allow the users to make better use of the annual reports for decision-making. The users of financial information can achieve a better understanding of a bank's overall financial performance if the bank discloses the contribution of different activities and regions to overall financial performance. In particular, this information helps the users assess the extent of diversification in the bank's business and the contribution of specific business segments and regions that may be considered to be of a higher risk. It also facilitates awareness of the impact of significant changes, for example due to regional disturbances, on the bank as a whole. It is hoped that by having increased disclosure of risks, the likelihood of banking crises can be reduced in the future.

### Chapter 3

## Best Practices for Conventional Banks on Risk Disclosure

#### 3.1 Introduction

It is necessary for banks to operate in a safe and sound manner and to hold sufficient capital and reserves to support the risks that arise in their business. The main reason for this is that banks are responsible for maintaining the trust of the public. In general, financial globalisation and deregulation have increased the demand for better disclosure of risks in banking. Therefore, the reporting requirements will be greater for banks operating in the international capital markets. They have to follow the existing accounting standards and at the same time to be up-to-date with the recommendations of international and national regulators, such as the Bank for International Settlements, the UK Financial Services Authority and the US Securities and Exchange Commission.

The Bank for International Settlements (BIS)<sup>11</sup> is an international organisation which fosters cooperation among central banks and other agencies in pursuit of monetary and financial stability. It will give recommendations to central banks in order to enhance the transparency of the banking system. In United Kingdom (UK), there is the Financial Services Authority (FSA), an independent non-governmental body, which is the main regulator for investments firms, banks, building societies and insurance companies in UK. FSA's main objectives are to maintain confidence in the UK financial system and promote public understanding of the financial system. The US Securities and Exchange Commission (SEC) has as its objectives to protect investors and to maintain the integrity of the securities markets. SEC is also concerned primarily with promoting disclosure of important information enforcing the securities laws and protecting investors who interact with these various organisations and individuals.

Banks' activities are becoming more complex, which means that current accounting, reporting and disclosure standards do not really provide a sufficiently full picture of the banks' risk profile. Banks are exposed to a complex diversity of risks, which can

<sup>&</sup>lt;sup>11</sup> The BCBS's secretariat is provided by the BIS in Basel, Switzerland.

threaten a bank's future. One bank's failure can have a significant impact on other banks' viability (so-called 'systemic risk'). The Asian financial crisis in 1996 has highlighted the importance of risk management in preventing banks' failure (details in Section 4.3). It turned out that most financial institutions had a large amount of nonperforming loans which were the result of poor credit evaluation and risk management and excessive lending to some parts of the real estate sector.

The recommendations from the banking regulators especially by the BCBS were being targeted at setting global standards and guidelines that are in many cases derived from practices in developed countries. These standards were gathered in the 'Core Principles for Effective Banking Supervision'<sup>12</sup> and have recently been extended in some areas, such as bank transparency.

There seem to be some significant gaps between the accounting standards and current best practice as advocated by the regulators, in particular the BCBS's recommendations on disclosure of risks.

Section 3.2 identifies the gaps between the existing international accounting standards, the recommendations by UK FSA and BCBS, and examines the existing accounting standards that are relevant to banks. Furthermore, this section also discusses the improvements to the existing international accounting standards and the new exposure draft issued by IASB, ED 7. Section 3.3 reviews the current practice by three leading banks in Europe. Section 3.4 presents the best disclosure practice. Section 3.5 explains the signalling theory (Watts and Zimmerman, 1986) with regard to the disclosure issues. Finally, Section 3.6 provides concluding remarks.

## 3.2 Disclosure Recommendations: International Accounting Standards and Banks' Regulators

There is increasing interest in the international harmonisation of accounting standards and particularly in attempts to expand the international accounting standards framework to form a base for this. There is also mounting pressure from banking regulators for increased and harmonised disclosures by major banks as part of their

<sup>&</sup>lt;sup>12</sup> See BCBS (1997).

move to improve regulatory conduct through market discipline and peer pressure. A major concern of banking regulators is the stability of the banking industry.

#### 3.2.1 International Accounting Standards

Since 1977, the International Accounting Standards Committee (IASC), now the International Accounting Standards Board (IASB), has collaborated with the BCBS on the matter of the international harmonisation of the financial reporting of banks. At the European level, other harmonisation work took place during the1980s in order to produce the European Economic Community (EEC) Bank Accounts Directive, which was approved in December 1986. Two of the international accounting standards particularly relevant to banks on disclosure are IAS 30 and IAS 32.

IAS 30 'Disclosure in the Financial Statements of Banks and Similar Financial Institutions' was issued in June 1990. The standard was reformatted in 1994, and a few amendments were made in 1998 to reflect implications of IAS 39, "Financial Instruments<sup>13</sup>: Recognition and Measurement." IAS 30 is the only standard issued by the IASC specifically for banks, and states that "banks commonly act as trustees and in other fiduciary capacities that result in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans, and other institutions. Provided the trustee or similar relationship is legally supported, these assets are not the assets of the bank, and therefore, are not included in its balance sheet" (IASC 1990, paragraph 55).

In general, IAS 30 requires the banks to disclose a detailed profit and loss account and a balance sheet that groups assets and liabilities by nature and lists them in an order that reflects their relative liquidity. The standard also requires the disclosure of contingencies, commitments and other off-balance sheet items. In addition to that, the standard requires disclosures of significant risk concentrations and more detailed disclosure of loan loss provisions and non-accrual lending. This is also covered in IAS 14 'Segment Reporting' which has been explained in the section 2.5.1.

In June 1995, the IASC issued IAS 32 'Financial Instruments: Disclosure and Presentation', another standard of significance to banks. IAS 32 deals with the

<sup>&</sup>lt;sup>13</sup> A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity (IAS 32).

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presentation and disclosure of financial instruments in enterprises which include banks. Transactions in financial instruments may result in an enterprise's assuming or transferring to another party one or more of the financial risks, in particular to banks, banking risks described earlier. The required disclosures provide information that assists users of financial statements in assessing the extent of risk related to both recognised and unrecognised financial instruments. Enterprises, including banks, should describe their financial risk management objectives and policies, including the policy for hedging each major type of forecasted transaction for which hedge accounting is used.

IAS 32 is divided into sections on Presentation and Disclosure. To inform the users of the extent to which exposure to credit risk at a particular point in time has been reduced, the enterprise discloses the existence and effect of the right of set-off when the financial asset is expected to be collected in accordance with its terms. IAS 32, paragraph 94, encourages additional disclosures when they are likely to enhance financial statement users' understanding of financial instruments. Under Disclosure, IAS 32 requires the inclusion of information about the extent and nature of the financial instruments, the accounting policies adopted, exposure to interest rate risk, maximum credit risk and significant credit risk concentrations, fair values of each class of financial asset and liability, assets carried at value in excess of fair value and details of hedges and of anticipated future transactions. Much of this disclosure is now required in the UK by FRS 13 'Derivatives and Other Financial Instruments: Disclosures'.

FRS 13 focuses primarily on the risks that arise in connection with financial instruments and how they have been managed. The disclosures required by FRS 13 fall into two categories: narrative disclosures, which may be either included in the notes to the accounts or relegated, with an appropriate cross reference, to the Operating and Financial Review (or equivalent statement); and numerical disclosures to be included in the notes to the accounts. FRS 13 makes the narrative disclosures mandatory. The narrative disclosures will discuss the banks' objectives, policies and strategies in using financial instruments. It is emphasised that the primary focus of the narrative disclosures is the risks that arise in connection with financial instruments and how they have been managed. These risks include credit risk, liquidity risk, cash

flow risk, interest rate risk, currency risk and other types of market risk. The disclosure is intended to include a discussion of the nature of the main types of financial instruments and similar contracts and the purpose, for which they are held or issued, with separate disclosure of instruments used for financing, risk management and hedging, and trading or speculation.

The requirements for banks and similar institutions are contained within Part B of FRS 13. FRS 13 defines a bank or similar institution as 'an entity that:

- (a) is authorised under the Banking Act 1987 (in the UK) or the Central Bank
   Acts 1942-1989 (in the Republic of Ireland); or
- (b) whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account.

In 2004, IASB has proposed ED 7: Financial Instruments: Disclosures which aims to replace IAS 30 and IAS 32 (details in 3.2.6) in order to improve the disclosures in financial reporting as commented below.

#### 3.2.2 Comments on the Existing International Accounting Standards

In April 2000, BCBS has published the article "Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards". This report reviews of 15 International Accounting Standards (IASs) that have significant effects on banks. They are shown in Table 3.1 below.

No significant concerns were found in seven of the IASC standards (IAS 1, 8, 10, 18, 21, 22 and 28). The main comments related to banks arise in connections with IAS 30 and IAS 39. In this report, BCBS expressed concerns that IAS 30 was an old standard that had not been updated since 1991. As a consequence, it did not reflect the latest developments in banking and failed to encompass the current best practice (or even good) practice in terms of disclosure, particularly in relation to risk exposures and risk management policies. This issue is clearly related to this discussion, as the risk disclosure is important by banks to enhance transparency. The existing standard does not adequately address this issue. On the other hand, IAS 39 has led to a number of significant initial concerns, particularly on the issue of fair values. For IAS 32, the

issue arises on the implementation problem on how to differentiate between debt and equity where legal structures would not permit.

IAS	Title	Effective date
IAS 1	Presentation of Financial Statements	1.7.98
IAS 8	Profit or Loss for the Period, Fundamental Errors and	1.1.79
	Changes in Accounting Policies	
IAS 10	Events after the Balance Sheet Date	1.1.00
IAS 12	Taxes	1.1.98
IAS 17	Leases	1.1.84
IAS 18	Revenue	1.1.84
IAS 21	The Effects of Changes in Foreign Exchange Rates	1.1.85
IAS 22	Business Combinations	1.1.85
IAS 27	Consolidated Financial Statements and Accounting	1.1.90
	for Investments in Subsidiaries	
IAS 28	Accounting for Investments in Associates	1.1.90
IAS 30	Disclosures in the Financial Statements of Banks and	1.1.91
	Similar Financial Institutions	
IAS 31	Financial Reporting of Interests in Joint Ventures	1.1.92
IAS 32	Financial Instruments: Disclosures and Presentation	1.1.96
IAS 37	Provisions, Contingent Liabilities and Contingent	1.7.99
	Assets	
IAS 39	Financial Instruments: Recognition and Measurement	1.1.01

 Table 3.1: International Accounting Standards Used (BCBS, 2000)

#### 3.2.3 Financial Services Authority's Recommendations

In June 1998, the UK Financial Services Authority (FSA) issued a paper on 'Risk based Approach to Supervision of Banks'. This applies to banks incorporated both in UK and in non-EEA (non-European Economic Area) countries. This does not apply to branches in the UK of banks incorporated elsewhere in the EEA, since supervisory responsibility for these banks lies primarily with their home country supervisor. The paper merges the RATE and SCALE frameworks<sup>14</sup> into a single risk-based approach, as the two approaches were fundamentally the same. The merged risk based approach to supervision is known as the RATE framework.

<sup>&</sup>lt;sup>14</sup> RATE is Risk Assessment, Tools of Supervision and Evaluation whereas SCALE is Schedule 3 Compliance Assessment, Liaison and Evaluation. This framework was proposed by the Bank of England authorised under the Banking Act 1987 ('the Act').

The significance of the paper is its aim to increase understanding of how FSA will conduct its supervision of banks. In particular, the FSA's supervisors should gain a better understanding of the quality of management, the characteristics of the business and the risks a bank faces.

From the paper, the importance of the banking regulators' role in enhancing transparency can be seen. The banking supervisors are to assess and report the banking risks using several stages. The stages include identification of key units, onsite visit to the banks, risk assessment, supervisory programme and formal feedback to banks. Good and efficient supervisions can also lead to better performance of the banks.

#### **3.2.4** Basel II – Basel Committee on Banking Supervision (BCBS)

In January 2001, the BCBS published a revised and updated draft of its earlier proposals issued in June 1999, to reform the 1988 Basel Capital Accord<sup>15</sup>. The reform aims to introduce a less broad-brush approach to credit risk (for example all corporate customers currently being risk weighted at 100 per cent) as well as developing the Accord into a more rounded framework for use by national banking supervisors. The final version of this Basel II was published in June 2004. The most significant part of Basel II is that they move away from sole reliance on capital adequacy ratios and adopt a 'three-pillared' approach for ensuring bank solvency.

The first pillar (Pillar 1) would continue to be minimum capital ratios, which for credit risk would be calculated through new "risk bucketing" approaches. The second pillar (Pillar 2) would add supervisory review of banks' internal risk and capital management practices, and significantly, would require that major banks adopt comprehensive, internal economic capital models. The third pillar (Pillar 3) would be better market discipline through improved risk disclosure standards and practices. The purpose of Pillar 3 is to complement Pillar 1 and Pillar 2. Figure 2.1 summarises the structure of this New Accord.

<sup>&</sup>lt;sup>15</sup> The 1988 Accord established minimum levels of capital (8 % of risk-adjusted assets) that helped to strengthen the soundness and stability of the international banking systems and enhanced competitive equality among internationally active banks.

Pillar 1 sets out minimum capital requirements, which maintain both the current definition of capital and the minimum requirement of 8 per cent of capital to risk-weighted asset. The credit risk measurement methods are more elaborate than those in the current Accord. The risk weights are determined by the rating of the borrower, as defined for example by a rating agency. The new Accord proposes for the first time a measure for operational risk, while the market risk measures remain unchanged from the Market Risk Amendment to the original Accord, published in 1996.

#### Figure 3.1: Three Basic Pillars of Basel II



Pillar 2 requires supervisors to ensure that each bank has sound internal processes in place to assess the adequacy of its capital based on a thorough evaluation of its risks. The supervisors must ensure that other risks such as concentration risks and market risks in the banking books being managed.

The rationale of Pillar 3 is to warrant the introduction of disclosure requirements for banks, with clear remedial actions in the case on non-disclosure. In the context of market discipline, Pillar 3 is useful as it conveys clearly that the purpose of the disclosure is to allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution (see Appendix 7 for detailed Pillar 3). If the disclosures are not mandatory under accounting or other requirements, management may choose to provide the Pillar 3 information through other means such as a publicly accessible internet website or in public regulatory reports filed with bank supervisors.

However, it is important to determine the right level of detail for disclosure, in light of

the proprietary<sup>16</sup> and confidential nature<sup>17</sup> of information held by banks. There must be an appropriate balance between the need for meaningful disclosure and the protection of proprietary and confidential information. Pillar 3 disclosures will not be required to be audited by an external auditor, unless otherwise required by accounting standards setters, securities regulators or other authorities.

The aspiration level of Pillar 3 is related to disclosure about the amount, components, and features of capital to provide market participants with important information about a bank's ability to absorb financial losses. Information on the terms and conditions of capital instruments provides additional background on the lossabsorbing capacity of capital instruments and provides a context for the analysis of the capital adequacy of the institution. The qualitative and quantitative information can assist market participants in gaining a better understanding of the risks and rewards inherent in the bank's activities. The risks to which banks are exposed and the techniques that banks use to identify, measure, monitor and control these risks are important factors to be considered by market participants in their assessment of an institution.

In general, the risks to be disclosed include credit risk (the most significant risk for many banking institutions and therefore forming an important part of the disclosure regime), market risk (which includes commodity, interest rate, equity position and foreign exchange risks in the trading book), interest rate risk in the banking book<sup>18</sup> and operational risk.

#### 3.2.5 Gap between International Accounting Standards and Regulators'

#### Recommendations

There is a substantial gap between the disclosure requirements of the international accounting standards (IAS 30 and IAS 32) and the requirements by bank regulators in particular the BCBS and the UK FSA. The requirements of the international

<sup>&</sup>lt;sup>16</sup> Proprietary information is the information (for example on products or systems) that if shared with competitors would render a bank's investment in these products or systems less valuable and hence would undermine its competitive position (Verrecchia, 2001).

<sup>&</sup>lt;sup>17</sup> Information about customers is often confidential, in that it is provided under the terms of a legal agreement or counterparty relationship.

<sup>&</sup>lt;sup>18</sup> The trading book groups all market transactions tradable in the market whereas the banking book groups and records all commercial banking activities (Bessis, 2004). Interest rate risk appears in both trading book and banking book because in trading book it reflects the fair value risk and in banking book, it shows the cash flow risk.

accounting standards seem to fall substantially short when compared to the bank regulators' recommendations. In particular, it is argued by BCBS<sup>19</sup> that the existing standards do not really require disclosure of sufficient information by banks about their risk concentrations and risk exposures. Table 3.2 gives a summary of the gaps, which exist between the international accounting standards and the regulators' recommendations, in particular the BCBS.

Therefore, in order to bridge this gap, the accounting standard-setters need to revise their accounting standards. In response to that, the IASB has made some improvements in the existing accounting standards which is discussed in Sections 3.2.6 and 3.2.7. The standard-setters should make reform of accounting standards and increased disclosure of risks a high priority. At a minimum, they should insist on acceptable standards for loss provisioning to eliminate the 'fudge factors'<sup>20</sup> that often make reporting of credit losses a managed number. What the banks should do is to follow 'best practice' in order to be more transparent and to provide adequate disclosure. This has led to the improvements in the existing IASs as discussed in the next section.

#### 3.2.6 Improvements to International Accounting Standards

Based on the above discussion, IASB believes that there is a need to improve the existing IASs. Fifteen IASs were revised as a result of the IASB's Improvement projects. The objectives of the project were to reduce or eliminate alternatives, redundancies and conflicts within the Standards, to deal with some convergence issues and to make other improvements.

The revised IASs are:

- IAS 1: Presentation of Financial Statements
- IAS 2: Inventories
- IAS 8: Accounting Policies, Changes in Accounting Estimates and Errors
- IAS 10: Events after the Balance Sheet Date
- IAS 16: Property, Plant and Equipment

 <sup>&</sup>lt;sup>19</sup> See BCBS (2000). 'Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards'.
 <sup>20</sup> Fudge factors refer to the exposure to credit risk. Loan loss provisions have to be set up when a loss is both probable and measurable. Two kinds of provisions are mandated: the specific and the general loan loss provision.

	International Accounting Standards	Regulators'
		<b>Recommendations – BCBS</b>
Explanation and comments	IAS 30 – Disclosures in the Financial Statements of Banks and Similar Financial Institutions IAS 30 requires the banks to disclose detailed profit and loss account and a balance sheet that groups assets and liabilities by nature and lists them in an order that reflects their relative liquidity. The standard also requires the disclosure of contingencies, commitments and other off-balance sheet items.	Need to be updated by including additional disclosures, particularly in relation to risk exposures and risk management policies.
	IAS 32 – Financial Instruments: Disclosures and Presentation IAS 32 requires the inclusion of information about the extent and nature of the financial instruments, the accounting policies adopted, exposure to interest rate risk, maximum credit risk and significant credit risk concentrations, fair values of each class of financial asset and liability, assets carried at value in excess of fair value and details of hedges and of anticipated future transactions.	Pillar 3 of Basel II requires banks to disclose more information regarding the amount, components, and features of capital in the banks and also information on the terms and conditions of capital instruments, which provides additional background on the loss- absorbing capacity of capital instruments and provides a context for the analysis of the capital adequacy of the institution

## Table 3.2: Gaps between International Accounting Standards and Regulators' Recommendations

Source: Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards, BCBS (2000)

- IAS 17: Leases
- IAS 21: The Effects of Changes in Foreign Exchange Rates
- IAS 24: Related Party Disclosures
- IAS 27: Consolidated and Separate Financial Statements
- IAS 28: Investments in Associates
- IAS 31: Interests in Joint Ventures
- IAS 32: Financial Instruments: Disclosure and Presentation
- IAS 33: Earnings per Share
- IAS 39: Financial Instruments: Recognition and Measurement
- IAS 40: Investment Property

A further amendment was made to IAS 39 in March 2004. This related to Fair Value Hedge Accounting for a Portfolio Hedge of Interest Rate Risk. Application of these

revised IASs is required for annual periods beginning on or after 1 January 2005. Earlier application is encouraged. In addition, the IASB withdrew IAS 15: Information Reflecting the Effects of Changing Prices with effect for annual periods beginning on or after 1 January 2005.

#### 3.2.7 Exposure Draft - ED 7: Financial Instruments: Disclosures

Based on the above criticisms particularly by BCBS on IAS 30 and IAS 32, IASB has issued an Exposure Draft of an IFRS, ED 7: Financial Instruments: Disclosures in order to improve disclosures about financial instruments in financial statements. ED 7 is not a bank-specific standard but applies to all types of entities that use financial instruments. However, the extent of disclosure required depends on the extent of the entity's use of financial instruments and of its exposure to risk. ED 7 requires entities to provide disclosures in their financial statements that will enable users to evaluate the significance of financial instruments for the entity's financial position and performance; the nature and extent of risks arising from financial instruments to which the entity was exposed during the period and at the reporting date; and the entity's capital.

BCBS has been developing and publishing comprehensive guidance and policy papers on risk reporting by banks in recent years. In Basel II, Pillar 3 – Market Discipline represents an important outcome of the BCBS's effort to enhance capital adequacy transparency in financial markets. Pillar 3 as discussed earlier in Section 3.2.4 presents a set of disclosure requirements that will allow market participants to assess key pieces of information on the capital, risk exposures, risk assessment processes, and hence the capital adequacy of the banks.

The importance of standards of transparency in the private sector also has been recognised by the G7 Finance Ministers and Central Bank Governors who, in a 1998 Declaration requested the BCBS and other international regulatory organisations to review the international accounting standards including IAS 30 and IAS 32. The BCBS expressed concern that IAS 30 was an old standard that had not been updated since 1991. As a consequence, it did not reflect the latest developments in banking and failed to encompass the current best (or even good) practice in terms of disclosure, particularly in relation to risk exposures and risk management policies.

ED 7 could be seen as the outcome of all these criticisms to revise and replace IAS 30 with a standard that focuses on risk disclosures and applies to all types of entities that use financial instruments. As mentioned earlier, ED 7 has included more qualitative and quantitative information on risk exposures and risk management policies. Risk management techniques have advanced to a point where it is practical for all entities, including banks, to produce this information at a reasonable cost. The disclosure of the risk management techniques improves transparency and of an entity's financial position.

Consistent with these recommendations, IASB believes that ED 7 could provide information to the users of financial statements about an entity's exposure to risks and how these risks are managed, which are beyond the requirements in IAS 30 and IAS 32. For example, regarding risk management disclosures, ED 7 is more prescriptive than IAS 32 as it makes sensitivity analyses wider in scope than just interest rate risk and it makes sensitivity analyses a requirement. In contrast, Basel II only requires the disclosure of VaR analysis.

The information required by ED 7 can influence a user's assessment of the financial position and financial performance of an entity or the amount, timing and uncertainty of its future cash flows. Greater transparency regarding those risks allows users to make more informed judgements about risk and return.

ED 7 incorporates disclosures at present contained in IAS 32 so that all disclosures about financial instruments are located on one Standard. Furthermore, IASB proposes to remove unnecessarily onerous or duplicative disclosures. This includes simplifications to the disclosures about concentrations of risk, credit risk, liquidity risk and market risk in IAS 32 and the deletion of disclosures about contingencies and commitments and general banking risks in IAS 30.

ED 7 adds to the requirements previously in IAS 32 by requiring enhanced balance sheet and income statement disclosures and disclosures about an allowance account when one is used to reduce the carrying amount of impaired financial assets.

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ED 7 also requires both qualitative and quantitative disclosures about exposure to risks arising from financial instruments. The qualitative disclosures describe management's objectives, policies and processes for managing those risks and the methods used to measure risks (paragraph 34). In accordance with paragraph 34, entities, including banks disclose if there has been any change in the qualitative information from the previous period and explain the reasons for change. Such changes may result from changes in exposure to risk or from changes in the way those exposures are managed.

The quantitative disclosures provide information about:-

- a. the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel, for example the entity's board of directors and chief executive officers (paragraph 35 38);
- b. minimum disclosures for
  - i. credit risk (paragraph 39 41);

This includes the information about its exposure to credit risk by class of financial instrument, collateral and other credit enhancements obtained, credit quality of financial assets with credit risk that are neither past due nor impaired.

ii. liquidity risk (paragraph 42);

Paragraph 42(b) requires the entity to describe how it manages liquidity risk inherent in the maturity analysis of financial liabilities required in paragraph 42(a).

iii. market risk (paragraphs 43 – 45

There are various types of market risk, including currency risk, equity price risk, commodity price risk, interest rate risk, prepayment risk and residual value risk. Paragraph 43(a) requires a sensitivity analysis to be disclosed for each type of market risk to which the entity is exposed.

These quantitative disclosures provide a useful sight into how the entity views and manages risk and is consistent wit the approach used in IAS 14. Together, the qualitative and quantitative disclosures are intended to provide an overview of the entity's use of financial instruments and the exposures to risks they create.

The disclosures in ED 7 are consistent with the recommendations in the BCBS's (1998) paper on Enhancing Bank Transparency (as discussed in Section 2.3) and with the disclosure approach taken in Pillar 3 of Basel II, so that the banks can prepare, and users receive, a single coordinated set of disclosures about financial risk. However, as far as risks are concerned, ED 7 calls for additional disclosures which are not required in Pillar 3. For example, past due loans (paragraph 40) and fair value of collateral (paragraph 41). This would enable users to make better assessments of the financial position and performance of the entities, particularly banks.

The disclosure of risks arising from financial instruments proposed by ED 7 would be part of the financial statements prepared in accordance with IFRSs. UBS, one of the leading banks in Europe (see section 3.3) has currently prepared a substantial management discussion and analysis (MDA), which is similar to the items proposed by this ED 7 and included as part of their financial report, but it is outside the audited financial statements. Even the disclosures required by Pillar 3 of Basel II are not subjected to auditing by external auditors. Although the IASB framework does not currently define where this information should be disclosed, best practice hitherto has been to disclose this outside audited financial statements. If this ED 7 is approved, a significant quantity of information will be moved to the audited report, which can lead to additional time and resources required to produce the significantly increased level of information.

This ED 7 would supersede IAS 30, and the title for the amended IAS 32 would be Financial Instruments: Presentation. ED 7 could be seen as a risk-focused standard, consistent with Pillar 3 requirements.

In summary, ED 7 not only deals with disclosures regarding an entity's exposure to risks arising from financial instruments but also emphasises disclosures relating to how those risks are managed. The enhanced disclosures of risks arising from financial instruments will allow markets to improve their evaluations of risk profiles of banks and other financial institutions. In addition, such disclosures will enable banks to more comprehensively assess the risks of their debtors. However, it is also important to strike a balance in the information required in the financial statements and information provided by management that may accompany these statements but be

presented outside of the body of the audited financial statements, which require significant work and time.

#### 3.3 Review of the Banks' Annual Report

This section provides evidence on the current disclosure of risks by three leading banks in Europe. These banks were chosen because they represent the leading banks in Europe which have a wide range of different activities. American banks were not included in the review. The reason because in United States (US), the investment and commercial banks were separated until very recently (the Glass-Steagall Act<sup>21</sup>), which means that there are no universal banks as in Europe.

A review of the banks' annual reports for the year 2000 is undertaken to examine the adequacy of the disclosure of risks practised by these banks. Three banks' annual reports were chosen: UBS (Union Bank of Switzerland) Group, Barclays PLC and Deutsche Bank, since they are among the largest banks in Europe. It is expected that the disclosure by these larger banks would be better as compared to that by the smaller banks. Table 3.3 gives a summary of the review. For example, UBS publishes annually a 120 plus page Handbook, which over half is devoted to capital and risk management

It emerges clearly from this brief review that all these three leading banks in Europe have provided more information than was required by IAS 30 and IAS 32. They disclose in details their risk management practices and also the exposure to risks which include country exposure and product exposure, which is required by IAS 14. They also have gone into discussing other types of risks, which are not covered by IAS 32, for example compliance, legal and tax risk. This is consistent with the comments made by the BCBS earlier on these standards which need to be updated.

Looking at other important aspects of disclosure by these banks, the issue of segment reporting is very interesting. It is clear that the banks disclosed segment reporting information. For example, UBS disclosed the segment reporting by business groups which includes UBS Switzerland, UBS Warburg, UBS Asset Management and

<sup>&</sup>lt;sup>21</sup> The Glass-Steagall Act was one of the pillars of banking law since its passage in 1933 by erecting a wall between commercial banking and investment banking and was repealed in 2001.

	UBS Group	Barclays PLC	Deutsche Bank
Country	Switzerland	United Kingdom	Germany
Accounting standard	IAS	GAAP	IAS
Services provided	Advisory, underwriting, financing, market making, asset management, brokerage and retail banking	Banking, investment banking and asset management	Banking, asset management, real estate, technology and services
Type of risks disclosed	Credit risk Market risk - Interest rate risk - Currency risk Liquidity risk	Credit risk Market risk Liquidity risk Operational risk Compliance risk Legal risk Tax risk	Credit risk - Default risk - Country risk - Settlement risk Market risk Liquidity Operational
Risk management techniques	VaR Stress tests	VaR Stress tests	VaR Stress tests
Derivatives used	Swaps Forwards Futures Options	Swaps Forwards Futures Options	Swaps Forwards Futures Options
Segment reporting - Business	UBS Switzerland UBS Warburg UBS Asset Management Corporate Center	Retail Financial Services Barclaycard Corporate Banking Barclays Capital Barclays Global Investors Businesses in Transition Other operations	Retail and Private Banking Corporates and Real Estate Global Corporates and Institutions Asset Management Global Technology and Services Corporate Center Others
- Geographical	Switzerland Rest of Europe Americas Asia/ Pacific Africa/Middle East	UK Foreign UK-based Other European Union United States Rest of the World	Germany Europe (excluding Germany) Asia/Pacific/Africa North America South America
BIS Capital Ratio - Tier 1 (%) <sup>22</sup> - Total BIS (%)	11.7 15.7	7.2 11	7.4 12.6

Table 3.3: A Summary of the Annual Reports' Review

Corporate Centre. Segment reporting by geographic location is shown based on the analysis of total assets by customer domicile. Operating income and capital investment are based on the location of the office in which the transaction and assets are recorded. By having this information disclosed in the annual reports, UBS can

<sup>&</sup>lt;sup>22</sup> Tier 1 capital consists of permanent shareholders' equity, trust preferred securities and retained earnings less goodwill and investments in unconsolidated subsidiaries. Tier 2 capital includes the bank's subordinated long-term debt.

provide more information to the users about the concentrations of its activities, which is hoped to assist them in understanding the risk exposure.

This is consistent with the annual survey conducted by Trema Management Consulting (a management consulting firm specialized in strategic finance and risk management) on financial risk management information in the year 2000 annual reports of major European Banks, where they find that UBS presented the most comprehensive disclosure on risks.

The capital adequacy rules require a minimum amount of capital to cover credit and market risk exposures. Among other measures, the banks monitor the adequacy of their capital using ratios established by the BCBS. The BCBS ratio is required to be at least 8 per cent. All these three leading banks in Europe are well above the minimum ratio of 8 per cent required by BCBS for the year 2000.

These ratios measure capital adequacy by comparing a bank's eligible capital with its risk weighted positions which include balance sheet assets, net positions in securities not held in the trading book, off-balance sheet transactions converted into their credit equivalents and market risk positions at a weighted amount to reflect their relative risk.

Appendix 1 provides more information on disclosure of risks and segment reporting by all these three banks.

#### 3.4 Best Disclosure Practice

Public disclosure of accurate, timely and reliable information will help market participants make a more accurate assessment of an institution's financial performance and state of health, leading to better market discipline and increased investor confidence. This is consistent with Pillar 3 of Basel II.

Current examples of the best disclosure practice exemplified by three leading banks in Europe can be seen in Appendix 1 (as also summarised in Section 3.5 above). All these banks have made a comprehensive disclosure on risks and risk management techniques used by them. According to Pillar 3 of Basel II, banks should be required Noraini Mohd. Ariffin

to disclose to the public information regarding their activities and financial position that is comprehensive and not misleading. In addition, financial reports of banks should give greater qualitative (risk management and risk control practices) and quantitative (maturity structure for interest sensitive assets and liabilities) information on banks' activities in financial instruments, including derivatives, and on the objectives and methods of risk measurement and management systems. This will improve the transparency of financial information published by banks and other financial institutions. The financial statements allow users to discern the general risk profile and risk tolerance of the bank, highlighting the areas in which the bank is taking on exposures, particularly credit risk.

Banks are normally required to disclose information on credit risks, including risk concentrations by various broad categories, connected lending, and loans made under directed lending programme (IAS 30 and IAS 32). The user is able to obtain quantitative information on the relationships between loans and total assets, non-performing loans, and loan loss reserves. Definitions for loan categorisation, and criteria for classifying loans as non-performing, should also be disclosed to give a better picture of the banks' performance.

This information should be timely and sufficient for market participants to assess the risk inherent in any individual banking organisation. It should help market participants and other financial institutions to adequately assess and compare financial performance, and so tackle potential barriers to an integrated market in financial services arising from insufficient financial information.

More disclosure requires greater internal discipline and greater attention to internal accounting and management systems. More detailed disclosure also has the potential to reduce the risk of aggressive behaviour as banks have to disclose all the risk information to their users.

The more reliable and extensive the information that is disclosed by banks to the market, the more effective is market discipline. Banks that disclose more information will be subject to more market discipline and have a greater incentive to limit their risk of default. Baumann and Nier (2003) provide evidence on this. Based on a large

cross-country panel dataset, which consist observations on individual listed banks from 32 different countries for the 1993 to 2000 period, they empirically investigate the variables that are likely to affect the strength of market discipline. These include the strength of the safety net (insurance), the banks' funding structure (funding) and the transparency of the banks' risks (disclosure). Their findings indicate banks that disclose more information, measured by whether a bank has a US listing, whether it is rated or by the disclosure index – tend to have a higher capital buffer and thus more protection against unexpected losses than banks that disclose less. This is also consistent with Pillar 3 of Basel II.

Best practices for disclosure in some countries typically go beyond disclosing traditional financial statements to include providing other quantitative and qualitative information such as the structure of the banks' ownership, risk concentration, and details of policies and practices of risk management systems.

The importance of the best practices for disclosure is also supported by the study of Gerald and Gregory in 1995. They review the 1995 annual reports of the top ten US banks that deal in derivatives. Although disclosure requirements did not change during the intervening period, banks nonetheless improved their reporting of derivatives activities in 1995 compared to 1994. In particular, they expanded their discussions of derivatives activities and provided more quantitative information.

The Ernst & Young survey in 2000 included 77 banks in 16 European countries which highlights general information regarding risk management as well as the financial strategy and specific risks issues relating to credit and trading instruments (including derivatives) as laid out in the annual reports. Leading banks from countries such as Sweden, Switzerland and the United Kingdom provide the best information about their risks. However, one of the most obvious areas for improvement is the disclosure of the bank's strategy towards risk, for example which level of market, credit and operational risk is acceptable for the bank and the method in use to measure and manage risk.

The results of the PA Global Survey 2001 and 2004 demonstrate clearly that most banks have significantly improved their shareholder returns by using their basic risk management tools (for example credit risk grading, VaR and operational risk analysis) to make better business decisions. The survey was distributed to banks situated around the world. Responses were received from over 50 banks, ranging in size from regional banks with assets of US\$2 billion to world leaders with assets of over US\$500 billion.

The above studies have shown that conventional banks have been disclosing risk information in their annual reports and using the basic risk management tools for more effective risk management.

#### 3.5 Signalling Theory

The above discussion is relevant from a signalling theory perspective. Signalling theory considers problems of information asymmetry in the market. The theory shows how this asymmetry can be reduced by the party with more information signalling to others (Morris, 1987). It was originally developed to address problems of information asymmetry in labour markets and how information asymmetry can be reduced by the party with more information signalling to others (Spence, 1973). However, signalling is a common phenomenon applicable in any market with information asymmetry (Morris, 1987).

Signalling theory suggests that when banks' performance is good, banks will wish to signal their high quality information to the market. It is hoped that this information could assist the financial statement users in their decision making (Watts and Zimmerman; 1986).

The signalling theory has been tested for banks by examining the stock market's valuation of loan loss provisions. Loan loss provisions are a relatively large accrual for commercial banks, and therefore have a significant impact on banks' earnings and regulatory capital. The motive for loan loss provisions that has been put forward in the literature is to signal financial strength. Beaver et al. (1989) suggest that loan loss provisions can indicate that 'management perceives the earnings power of the bank to be sufficiently strong that it can withstand a "hit to earnings" in the form of additional loan loss provisions<sup>23</sup>. Wahlen (1994), Beaver and Engel (1996) and Liu et al. (1997)

<sup>&</sup>lt;sup>23</sup> Note that the signalling effects in the loan loss provisions studies are opposite to the signalling effects hypothesised in the studies on discretionary accruals more generally such as Subramanyam (1996) and Ahmed (1996).

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investigate this theory. Consistent with this signalling theory, Wahlen (1994) documents a positive relation between discretionary or unexpected loan loss provisions and bank stock returns. Beaver and Engel (1996) document a positive coefficient on the discretionary component of loan loss provisions in a regression of market value of equity on earnings (before provisions), loan loss provisions, discretionary component of loan loss provisions, and non-performing loans. Liu et al. (1997) find a positive relation between stock returns and unexpected loan-loss provisions for banks with low capital ratios, but a negative relation for banks with high ratios, which contradicts a signalling theory. Griffin (1998) provides evidence of a differential negative market reaction to bank loan loss announcements based on the timeliness of the announcement relative to the end of a fiscal quarter. His results are consistent with a stock market that obtains loan impairment information from timely sources of that information, for example, loss provisions reported in bank financial statements.

Gibson (2000) confirms these findings by developing a model in which banks use write-offs to signal private information about the credit quality of their loan portfolios in the Japanese banking sector. More recently, Kanagaretnam et al. (2003) find that managers of undervalued banks use loan loss provisions to signal their banks' future earnings prospects. In contrast the aforementioned empirical findings, Ahmed et al. (1999) find no support for the signalling theory. They do not find evidence of a positive relation between loan loss provisions and one-year ahead future change in earnings as in Wahlen (1994). Based on their argument, their findings suggest that Wahlen's (1994) and Beaver and Engel's (1996) results are likely to be specific to the time period examined in their study.

The empirical evidence indicates that the propensity to signal differs across banks based upon the degree of information asymmetry. Signalling is a reaction to informational asymmetry in markets. In this case, banks have information that the market does not. Asymmetries can be reduced if the party with more information signals to others. In this case, leading banks (for example UBS), will wish to distinguish themselves from non-leading banks through voluntary disclosures. The signalling theory suggests that when banks' performance is good, banks will wish to signal their high quality information to the market. It is hoped that this information

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could assist the financial statement users in their decision making on the assumption that market discipline exists (details in Section 4.2).

#### 3.6 Concluding Remarks

It is clear from the above discussion that banks are encouraged (BCBS) to disclose sufficient information on their activities, particularly given the risks inherent in banking activities. This will allow the market to assess the banks' performance and the state of health of the banks. Consequently, this can improve the investors' and depositors' confidence. The existence of the international accounting standards can be seen as a tool to harmonise the financial reporting so that the banks' reports are comparable even though, in some situations, this is not achieved. Accounting standards provide the foundation for credible and comparative public financial statements and supervisory reports.

The evidence from the regulators (BIS and FSA) proves that there is much more to be disclosed by the banks in order to be transparent. The existence of ED 7 could be seen as a good initiative from IASB to improve the risk disclosures in the entities including banks.

A review of the current 'best' practices by some of the leading banks in Europe has been made and it is clear that their reporting practices have gone beyond the requirements of the current international and national accounting standards, which are consistent with signalling theory.

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### Chapter 4

## Transparency and Market Discipline in Conventional Banks

#### 4.1 Introduction

Transparency means that market participants have the information they need to allocate their resources within the market as explained in Section 2.3. The use of market discipline as a complement to bank supervision and regulation has gained greater acceptance in the US and abroad. It is also widely recognized that effective market discipline depends on market participants' having information about the risks and financial condition of banking organizations.

As explained in the previous chapter, signalling is a reaction to informational asymmetry, where the management has information that the market does not. This signalling theory is also relevant for market discipline. If market discipline is weak, theoretically, the signalling theory would be less applicable and a more prescriptive set of risk disclosure standards together with a more intrusive style of supervision would be necessary in applying Basel II.

The structure of this chapter is outlined as follows:

Section 4.2 discusses the link between transparency and market discipline by looking at the studies in conventional banks. Some of the causes of the previous banking crisis are presented in Section 4.3. Section 4.4 looks into the role of bank supervisors in order to facilitate transparency. Finally, Section 4.5 provides concluding remarks.

#### 4.2 Market Discipline

In the context of banking, market discipline includes notably a market based incentive scheme in which investors in bank liabilities such as subordinated debt or uninsured deposits "punish" banks for greater risk-taking by demanding higher yields on those liabilities (Berger, 1991). Banks collect deposits and invest these funds in risky assets (loans). To safeguard against insolvency, banks hold a capital buffer against adverse outcomes in their investments in risky assets (loan default). But the bank's private solvency target may not take into account the interests of depositors, or of society as a whole. As a result, banks may engage in excessive risk-taking. Market discipline is a
mechanism that can potentially curb the incentive to take excessive risk, by making risk-taking more costly for banks.

There are a number of potential social benefits from enhancing market discipline in a country's banking sector. First, by punishing excessive bank risk-taking, increased market discipline may reduce the moral hazard problems, which government guarantees create for banks by providing incentives to undertake excessive risks. Second, market discipline may improve the efficiency of banks by pressuring some of the relatively inefficient banks to become more efficient or to exit the industry (Berger, 1991). Finally, the social cost of supervising banks may be lowered if regulators cede greater control to market forces that can tell "good" from "bad" banks. In particular, the market is an anonymous and constant overseer, which is hard to lobby for forbearance, and may react more quickly than regulators to increases in bank risk-taking.

In order for market discipline on banks to be fully effective in ensuring financial stability, Crockett (2001) suggests four pre-requisites. First, market participants need to have sufficient *information* to reach informed judgements. Second, they need to have the *ability* to process it correctly otherwise inaccurate signals are transmitted to banks. Third, they need to have the right *incentives* and finally, they need to have the right *mechanism* to exercise discipline. The first pre-requisite is in line with the requirements in Pillar 3 of Basel II (see Section 3.2.4 for details).

#### 4.2.1 Literature on Market Discipline

Most studies that have examined the usefulness of market discipline and signalling have focused on subordinated debt in the US commercial banking industry over the last two decades. Flannery (1998) provides an excellent survey of this literature. As argued by Flannery (1998), market assessments of bank conditions compare favourably with supervisory assessments and could improve with access to supervisory information. However, although supervisors could benefit from such improved public monitoring of banks, the costs to the current form of supervisory monitoring must also be considered.

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The empirical evidence shows that subordinated debt spreads generally increase as a bank's risk increases. Several of the papers that examine market discipline in US analyse whether banks pay a risk premium on their uninsured bank liabilities. Hannan and Hanweck (1988) and Ellis and Flannery (1992), among others, analyse how yields on uninsured deposits respond to bank risk-taking as captured by the balance sheet and by market measures of risk. Overall, these papers support the hypothesis that yields on uninsured deposits contain risk premia. This evidence means that uninsured depositors charge higher interest rates to riskier banks. Furthermore, Cook and Spellman (1994) provide evidence of risk pricing even among insured depositors.

Whereas the literature on market discipline is quite vast for the US, significantly fewer papers have been written for the developing countries. The main contributors to this market discipline literature are Schumacher (1996), D'Amato, Grubisic and Powell (1997), Sironi (2000), Martinez Peria and Schmukler (2001), and Bircler and Maechler (2002).

Valdes and Lomakin (1988) examine whether, during 1987, depositors in the Chilean financial system continued to act as if all claims were insured by the government, despite the fact that a law was passed in 1986 providing insurance only to small depositors. Throughout 1981-1986, the government guaranteed the deposits of practically all banks that failed during that period. Using panel data on implicit interest rates paid on deposits during 1987-1988, they fail to reject the null that depositors did not require riskier banks to pay higher interest rates. They conclude that depositors behaved as if they continued to enjoy the pre-1986 full deposit insurance guarantee, even though the 1986 law limited deposit insurance coverage.

Schumacher (1996) studies the 1994-95 Argentine banking crises. Using a bank-level data set, she first estimates probabilities of bank failure. Then, she examines whether these probabilities have an impact on deposit behaviour over the course of the 1995 Argentine banking crisis. Her findings show that the probability of failure is explained by the ratio of non-performing loans, the return on assets, and a number of variables measuring liquidity. She also finds that the probability of bank failure negatively affects the behaviour of deposits (i.e. depositors withdraw their deposits), in particular the peak of the crisis in March 1995.

D'Amato, Grubisic and Powell (1997) estimate a two-way random effects model using daily deposit data for a sample of 120 Argentine banks, over a four month period surrounding the 1995 banking crisis. The main objective of their paper is to test the presence of contagion in depositors' behaviour. Their findings provide the evidence of contagion in depositor behaviour in Argentine during the 1995 banking crisis.

Sironi (2001) tests for market discipline in the European banking industry and finds that holders of subordinated debt rationally discriminate between the risk profiles of private sector banks. He used credit ratings and published accounting data as a measure of bank riskiness.

Martinez Peria and Schmukler (2001) evaluate the interaction between market discipline and deposit insurance and the impact of banking crises on market discipline in Argentina, Chile and Mexico. Their findings show that depositors, both small and large, discipline banks by withdrawing deposits and by requiring higher interest rates even though deposit insurance schemes exist in these countries. The result suggests that even explicit depositor protection schemes may not always be fully credible.

The study by Birchler and Maechler (2002) finds a considerable amount of market discipline in Swiss banks. Depositors respond to bank-specific fundamentals, institutional differences across bank groups, and institutional changes in the Swiss depositor protection system.

However, as been emphasised by Berger (1991) and Bliss and Flannery (2002), the above studies do not reveal the degree to which market discipline is effective, i.e. how far such price signals actually influence bank behaviour. Blum (2002) and Cordella and Yeyati (1998) show analytically that in the absence of bankruptcy costs and corporate governance problems between bank shareholders and managers, if bank deposits are uninsured and the bank's risk choice is observable by depositors, the bank's risk choice will be efficient. The reason is that banks internalise the impact of their risk choice on depositors since these in turn will demand higher compensation if the bank incurs higher risk. In such a world, there is perfect market discipline and no moral hazard.

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Conversely, if deposits are insured or the bank's risk choice is not observable by depositors, then the bank will choose a higher return in response to a higher risk profile at the expense of depositors. The reason is that depositors will not demand a higher return in response to higher risk choices by the bank. In such a world, there is no market discipline and the bank's choice of its risk of default is subject to moral hazard. In the Cordella and Yeyati model disclosure enables banks to commit to low risk. There are two cases: (1) Under full disclosure the bank's risk choice is observable. Depositors demand a high interest rate if the bank chooses high risk. In equilibrium the bank chooses low risk and the interest rate is low. (2) Under no disclosure, depositors do not observe the bank's risk choice. Lower risk is not rewarded with a lower interest rate. In equilibrium, the bank chooses maximum risk and depositors, anticipating this choice, choose an interest rate commensurate with this anticipation.

Baumann and Nier (2003) investigate empirically the effectiveness of market discipline in limiting excessive risk-taking by banks, using a large cross-country panel data set (Bank Scope database) for 729 individual banks from 32 different countries over the years 1993 to 2000. Their results suggest that moral hazard exists and that market discipline plays a role in mitigating banks' risk of insolvency.

This theoretical framework suggests that the effectiveness of market discipline in containing excessive risk-taking hinges on three items: First, the extent of the government safety net, second, the degree to which the bank is financed by uninsured liabilities and third, the extent of observability of bank risk choices. Market discipline is likely to be effective, the lesser the degree of explicit or implicit government guarantees relating to bank liabilities, the greater the amount of uninsured liabilities in the bank's balance sheet and the greater the degree of bank disclosure. Deposit insurance is likely to weaken market discipline. Demirguc-Kunt and Sobaci (2001) provide a dataset on the existence and extent of deposit insurance schemes across countries. They find that explicit deposit insurance tends to increase the likelihood of banking crises in a sample of 61 countries over the years 1980-97.

Signals from the market through information in the external credit ratings are also a valuable source of information about the condition of a bank. There is reason to

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believe that investors have more information about a bank if the bank is rated by a major rating agency. Rating agencies act as intermediaries in the disclosure process. They gain access to information that is not publicly available to investors and feed this information into the rating. Kliger and Sarig (2000) suggest that this is the very reason why firms usually pay for the rating. It allows firms to incorporate inside information into the assigned ratings without disclosing specific details to the public at large. A number of studies provide evidence that ratings do indeed contain information over and above information that is publicly known. Kliger and Sarig (2000) show that Moody's change to a finer grading system in April 1982 moved bond market prices for individual rated securities in a way consistent with the information (good or bad) associated with the finer rating. From this, investors have more information on an individual bank if it is rated. Market discipline is likely to be stronger for rated banks.

As mentioned earlier, deposit insurance does affect banking crises. The next section provides the linkage between market discipline and banking crises.

#### 4.3 Banking Crises

For most banks, market risk accounts for only a small proportion of their overall risk profile. Despite changes in financial markets, the credit risk charge remains the most significant factor in determining the regulatory capital requirement for the majority of banks. Credit risk is the major risk faced by many banks, since loans are their major asset category. Experience from around the world (Rahman, 1999) indicates that poor credit quality coupled with weak credit risk management practices continues to be a dominant factor in bank failures and banking crises (Asia, Russia and Brazil). During such crises, it would appear that the risk during such periods was of a much greater magnitude than existing risk management techniques were able to capture. Therefore, it is clear that information on banks' credit risk management processes is crucial in market participants' and supervisors' assessments of their condition, performance and ability to survive in the long run.

Fons (1998) examines the role that poor transparency played in the East Asian financial crisis and argues that weak transparency increases funding costs, especially in times of financial distress. Transparency can only help prevent a financial crisis and

should not be seen as a cure for systems already under stress. According to him, the meltdown in currency, bond and equity markets, over the past year or more of his study has contributed to massive credit rationing for East Asia, particularly by foreign creditors.

Poor accounting standards enable banks to evade prudential and other restrictions on insider lending (Rahman, 1999). Furthermore, Rahman (1999) argued that inadequate disclosure contributed to the depth and breadth of the banking crisis. Since financial statements act as the most reliable and easily accessible vehicle for dissemination of banking information, lack of adequate accounting disclosures prevented investors and creditors from receiving necessary and timely information for choosing between successful and potentially unsuccessful banks. It is known that the very threat of disclosure influences behaviour and improves management, particularly risk management. It seems that the lack of appropriate disclosure requirements indirectly contributed to the deficient internal controls and imprudent risk management practices of the banks in the crisis-hit countries. The financial statements did not reflect the extent of risk exposures and clear indications of the magnitude of debt problems.

Llewellyn (2002) analyses the causes of the recent banking crises, which include weak monitoring and supervision by official agencies, the absence of effective market discipline on banks and structurally unsound corporate governance mechanisms within banks and their borrowing customers

A permanent solution to the East Asian financial crisis will require a restoration of interbank confidence in the region' s banks, which, in turn, will require credible transparency, massive restructuring and state-financed recapitalisation. Interbank creditors will demand solvency and transparency. The problem is that transparency could be seen as revealing insolvency, further shaking creditor confidence, wiping out existing shareholder claims and endangering nondepository creditors (e.g., subordinated debts in the case of conventional banks).

Regulators may not want transparency, to prevent public criticism arising from the failure to resolve or close a troubled bank. Certain banks would favour poor transparency, mainly because it costs money to institute timely, accurate and detailed

accounting systems. Resources that might be more profitably employed elsewhere are relegated to a reporting function. Statements must be formatted to international standards and "Big Four<sup>24</sup>" auditors must be hired to give opinion on the quality of reporting. Many banks in developing countries are small and the costs of complying with transparent reporting practices may be significant. Transparency also restricts management's ability to engage in self dealing. Fully transparent reporting may also reveal competitive strategies or vulnerabilities where a bank holds a large unhedged position in some asset or currency. These may affect the market discipline's ability to be effective in the banking system.

Cordella and Yeyati (1998) examine how public disclosure of banks' risk exposure affects banks' risk taking incentives, and assess the impact of the presence of informed depositors on the soundness of the banking system. They used the data from New Zealand banks. The results show that when banks have complete control over the volatility of their loan portfolio, public disclosure reduces the probability of banking crises. However, when banks do not control their risk exposures, the presence of informed depositors may increase the probability of bank failures. This indicates that banks must be able to have control over their risk exposure in order for public disclosure to be effective. This again shows the importance of enhancing the dissemination of financial information. However, their studies do not really look into the importance of risk disclosure by the banks, but rather at the relationship between public disclosure and banks' failures. The next section discusses the role of bank supervisors in enhancing the transparency in banks.

#### 4.4 Supervisory Information

Bank supervisors need timely and reliable information about the financial condition and risk profile of banks in order to conduct effective supervision. Although such information can be obtained in part from regulatory reports and public disclosure, a key source is on the on-site examination. Bank examinations enable supervisors to confirm the accuracy of information in regulatory reports. More important, the examinations allow supervisors to gather confidential information about bank's

<sup>&</sup>lt;sup>24</sup> "Big Four" accountancy firms include Pricewaterhouse Coopers, KPMG Peat Marwick, Ernst and Young and Delloitte and Touche.

financial conditions and to assess qualitative attributes, such as internal controls and risk management procedures that affect bank risk profiles.

Sijben (2002) argued that the strategy to enlarge market discipline refers to the availability of information and transparency for both supervisors and market participants aiming at an appropriate judgement of the soundness of the banks. Hoenig (2003) suggests that increased disclosure to the market of supervisory information could be of significant value to the market which could help to enhance the effectiveness of market discipline.

Effective supervision of banks, which include offsite and onsite supervision, ensures that banks function safely and soundly, so that financial system can attain the full confidence of savers and investors. These include the examination of bank's financial information to produce a wide array of financial ratios, comparison of the financial indicators of the bank to a peer group, risk based supervision, statistically based early warning systems and supervisory rating systems, mainly CAMELS<sup>25</sup> (BCBS, 2002).

Bank supervisors can play an important role by checking that the financial condition of the bank is as reported (De Young et al., 2001, Jordan et al., 2000; Berger et al., 2000; Flannery and Houston, 1998; Berger and Davies, 1998; Gilbert, 1993). Market participants, on the other hand, may not be able to uncover the deteriorating health of a bank in a timely manner, instead discovering it only when bank management, possibly at the investigation of bank supervisors, eventually makes financial disclosures that reveal the bank's problems (Gilbert, 1993). These could be announcements related to income and balance sheet statements such as lower earnings or increased non-performing loans.

In their assessment of banks, for instance, bank supervisors make use of proprietary and internal information in each bank, as well as confidential information on customers. As a result, bank supervisors have a detailed knowledge of individual bank conditions that could prove useful in several ways. Disclosure of financial position, risk concentrations and asset profiles, for instance, could provide a new and valuable

<sup>&</sup>lt;sup>25</sup> Refer to page 59 for details.

source of information to the market. In addition, bank supervisors would be in a good position to identify deficiencies in a bank's own public disclosures.

A growing line of research provides empirical support for the proposition that bank supervisors at times have an information advantage over other outside monitors. Flannery and Houston (1998) show that financial markets evaluate accounting data differently when an examination by a supervisor has occurred recently. For a sample of banks examined in the fourth quarter of 1988, they find that accounting statements of examined banks are more informative than those of non-examined banks; they also find that examined banks' market values are slightly better. These effects are stronger for smaller banks, banks with higher stock return variances, banks with harder-tovalue assets, and banks not rated by rating agencies. They argue that these findings provide evidence that bank supervisors (examiners) play a valuable role in the certification of banks' accounting data and that bank shareholders benefit from this activity.

A key outcome of an examination is a supervisory rating of the bank's overall financial condition. The focus here is on the supervisory ratings – known as CAMELS ratings – as a proxy for the information resulting from a bank examination. CAMELS ratings, which are assigned by examiners at the conclusion of an examination, are numerical ratings of the quality of a bank's financial condition, risk profile and overall performance. This acronym CAMELS refers to the six components of a bank's condition assessed by examiners: Capital adequacy, Asset quality, Management, Earnings, Liquidity and Sensitivity to market risk<sup>26</sup>. Ratings assigned for each component range from 1 to 5, with banks assigned lower ratings for better performance, and a composite rating is assigned for the overall condition and performance of the bank. CAMELS ratings reflect a combination of publicly available information (such as recent financial statements) and private information produced by bank examiners during their on-site investigation (such as the quality of individual loans). Research has shown that supervisors' ratings downgrades had a profound negative effect on stock prices. De Young et al. (2001) conclude that markets gather

<sup>&</sup>lt;sup>26</sup> A sixth component, S was added in 1997; hence the acronym was changed to CAMELS. The bulk of the academic literature is based on pre-1997 data and it is thus based on CAMEL ratings.

some information faster than supervisors while supervisors have an advantage for other types of information.

Berger and Davies (1998) examine the information content of CAMEL ratings by testing for stock price reactions when new ratings are assigned. Despite the fact that CAMEL ratings are confidential, they find that rating downgrades seem to lead to negative excess stock returns. They interpret this result as evidence that examinations generate valuable private information and that rating downgrades reveal unfavourable private information about bank conditions. Similarly, De Young et al. (2001) find that CAMEL ratings contain relevant information about bank conditions useful to the market for subordinated bank holding company debt.

Berger et al. (2000) find that BOPEC<sup>27</sup> ratings – the supervisory ratings given to bank holding companies – contain information about bank conditions that goes beyond the information in market data, such as bond-rating downgrades. In particular, they find that supervisory data and market information "Grangercause" (i.e. are useful in forecasting) one another, suggesting that both supervisors and the financial markets have some unique information. As noted in Berger et al. (2000), supervisory and market assessments may be concurrent, implying that each may be emphasising or finding different information. They used a sample of 184 bank holding companies over a period 1989 (Quarter 4) to 1992 (Quarter 2) and they found that regulators acquire information sooner than bond rating agencies and the equity markets, but the regulatory assessments are less accurate in predicting the future performance of bank holding companies than either stock or bond market indicators unless the regulatory ratings have been recently assigned.

These papers suggest that supervisory ratings contain information about the condition and performance of banks that is not available to the public. Thus, despite the confidentiality of supervisory information, market participants should be assessing the probability that supervisors will intervene at individual banks. The revelation that a bank has had a formal action imposed upon it, and thus that bank management is now subject to much closer oversight by bank supervisors, possibly reducing its value to shareholders (Gilbert and Vaughan, 1998), should surprise market participants only for those banks whose publicly disclosed financials had suggested that the bank would not be under close regulatory scrutiny.

Cole and Gunther (1995, 1998) find that the information contained in CAMEL ratings decays quickly with respect to predicting bank failure from 1986 to 1992. In particular, they find that a model using publicly available financial data is a better indicator of the likelihood of bank failure than the previous CAMEL rating is once the rating is more than one or two quarters old. These two studies address the issue of information decay directly; however, the primary purpose of CAMEL ratings is not to identify future bank failures, but to provide an assessment of banks' overall conditions at the time examinations.

However, Hirtle and Lopez (1999) suggest that CAMEL ratings cease to provide any useful information about the current condition of a bank much longer than the time obtained in Cole and Gunther (1995, 1998), which is after about six to twelve quarters. Thus, based on their findings, the examinations should take place at least at this frequency, since supervisors would probably want to examine a bank while the information from the previous examination continues to have some value.

Peek et al. (1999) provides evidence that the bank supervisor (Federal Reserve) has an informational advantage over the public that can be exploited to improve activist monetary policy. This informational advantage is generated by confidential supervisory knowledge about troubled, non-publicly traded banks. As a result, this information can remain confidential for an extended period of time because these banks do not have an incentive to fully disclose publicly the extent of their financial troubles, and since they are not publicly traded, are not required to be so.

The above studies show that bank supervisors have an information advantage over other parties, in particular the public. For example, in their assessments of the bank, bank supervisors make use of proprietary and internal information at each bank, as

<sup>&</sup>lt;sup>27</sup> This acronym BOPEC stands for the five key areas of supervisory concern: the condition of the bank holding companies' bank subsidiaries, Other non-bank subsidiaries, Parent company, Earnings and Capital adequacy. BOPEC ratings are assigned according to an absolute scale ranging from 1, indicating strong performance, to 5, indicating poor performance.

well as confidential information on customers, which is generally unavailable to market participants trying to track a bank's condition and performance. The analysis of such information and the steps bank takes to control and manage risk, when aggregated, form much of the basis needed to understand the risk exposures at the bank.

#### 4.5 Concluding Remarks

Disclosure not only provides useful information about the condition of the banks, it also can provide information that is useful for evaluation of competitor banks. Market participants including rating agencies, could therefore make a valuable contribution to improving the level of transparency in financial reporting by rewarding comprehensive, full disclosure and penalising inadequate disclosure i.e. market discipline exists. They could also demonstrate a direct link between investor confidence and transparent disclosure. Therefore, disclosure does enhance transparency, as users could use the information to distinguish the financial condition of the bank with other banks. As mentioned earlier in the literature (i.e. Fons, 1998; Rahman, 1999 and Llewellyn, 2002) by having sufficient disclosure and more transparency in risk reporting, bank failures can be reduced in the future. Financial statements of banks have failed to provide timely and reliable information regarding various important factors that appear to have contributed to triggering the recent banking crises. If such information had been available, banks would have had an incentive to avoid the excessive risk exposures and the market participants and the bank supervisors could have taken preventive action.

In addition, bank supervisors need timely and reliable information about the financial condition and risk profile of banks in order to conduct effective supervision. Effective supervision of banks ensures that banks function safely and soundly, so that financial system can attain the full confidence of savers and investors. Even though, bank supervisors have additional information than what is required by financial reporting standards to perform their supervision, they should have discretion to balance the amount of information they release to the market against proprietary information that should remain undisclosed to the public in certain circumstances where its release

might induce a financial panic or bank run, or otherwise provide some banks with an unfair competitive advantage.

## Chapter 5

# Islamic Banks versus Conventional Banks: Risk Disclosure and Management

## 5.1 Introduction

The importance of Islamic banks has increased dramatically throughout recent years. Islamic banks have grown in size and number around the world. The main objective for Islamic banking to develop is to satisfy the financial needs of devout Muslims who observe the avoidance, among other things, of interest whether paid or received, which is prohibited in Islam, unlike the conventional banks<sup>28</sup> where interest is an integral part of the business.

It is worth investigating how these Islamic banks report their activities. This is because under the *Shari'a<sup>29</sup>*, Islamic banks are responsible for ensuring that the investors' and depositors' money is invested in viable projects. The profit-sharing scheme is in fact the main characteristic of the Islamic banks, which distinguishes them from the conventional banks.

Section 5.2 looks into the differences between the Islamic banks and the conventional banks, particularly in the area of risk reporting. Section 5.3 discusses the risk management in Islamic banks. Section 5.4 provides the discussion on the availability of derivatives in Islamic banks. The accounting standards related to Islamic banks are analysed in terms of their adequacy in reporting the risks for Islamic banks in Section 5.5. Finally, Section 5.6 provides concluding remarks.

#### 5.2 Islamic Banks versus Conventional Banks

In assessing risk reporting for Islamic banks, it is important to recognise the differences between Islamic banks and their counterparts, conventional banks. Due to the nature of their operation, there are many differences between them. These are mainly in the *Shari'a* requirements and the resulting economic substance of the Islamic banks' activities. The essential feature of Islamic banking is that it is interest-

<sup>&</sup>lt;sup>28</sup> "Conventional banks" as used in this chapter refers to all interest-based banks.

free. Islam prohibits Muslims from taking or giving riba (interest) regardless of the purpose for which such loans are made and regardless of the rates at which interest is charged.

The Our 'an uses the strongest terms for its prohibition. It challenges those who are not prepared to leave dealing in interest to prepare for war with Allah and His Messenger<sup>30</sup>. (Al-Our'an, 2:279). It is worth noting that the Qur'an condemns and prohibits riba (interest/usury) in the most powerful of terms and makes a very clear distinction between interest and trade. It urges Muslims to take only the principal sum and to forgo even this sum if the borrower is unable to pay (Al-Qur'an, 2: 275-81).

The prohibition of interest in Islamic banks generally leads on the funding side, to the use of profit sharing arrangements (Mudaraba). The Islamic bank, in its capacity as fund manager or a Mudarib, manages the funds of the investors to generate profits subject to the rules of Mudaraba. Profits will be shared according to the agreed sharing ratio and losses will be borne wholly by the *rabbul-mal* (owner of the capital) except in cases of misconduct and negligence.

The bank may also enter into Musharaka or Mudaraba contracts with the users of the funds, sharing profits and losses according to some agreed formula.

With respect to Mudaraba, holders of profit-sharing investment accounts (which take the place of conventional interest-bearing bank deposit accounts) are essentially stakeholders with a type of limited term equity interest. The return on their investment in the bank is uncertain, since they share in the profit (asset returns net of operating expenses) generated by the bank, alongside the shareholders. This also exposes the investment account holders to the risk of losing part or all of their initial investment.

Table 5.1 and 5.2 show the main sources and uses of funds for Islamic banks, which in some respect differ from conventional banks.

<sup>&</sup>lt;sup>29</sup> Shari'a is the sacred law of Islam. It is derived from the Qur'an (The Muslim Holy book), the Sunna (the sayings and deeds of Prophet Mohammed), ljma (consensus), Qiyas (reasoning by analogy), and Maslaha (consideration of the public good or common need). <sup>30</sup> Prophet Mohammed (Peace Be Upon Him).

Table 5.1: Sources	of	Funds	for	Islamic	Banks
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SOURCES OF FUNDS	DESCRIPTION	COMMENTS
1. Current accounts	Based on the principle of <i>al-wadiah</i> (trust) or loan, whereby depositors are guaranteed repayment of their funds.	No profit and loss to be shared because the guaranteed funds can only be used to balance the liquidity needs of the bank and for short-term transactions on the banks' responsibility.
2. Savings accounts	Based also on the <i>al-wadiah</i> principle, whereby the holders earn <i>hiba</i> (premium), at the banks' discretion depending upon financial results. In Gulf countries, it is based on <i>Mudaraba</i> .	
3. Unrestricted investment accounts	Based on <i>mudaraba</i> principle, whereby the <i>mudarib</i> (active partner) has absolute freedom in the management of the investment of the subscribed capital.	Differs from those of the savings accounts by virtues of: a) a higher fixed minimum amount, b) a longer duration of deposits, and c) most importantly, the investor may lose some of or all his funds in the event of the bank making losses.
4. Restricted investment accounts	Based also on <i>mudaraba</i> principle, and usually are directed towards larger investors and institutions.	Differs from those of unrestricted investment account because the restricted investment account is related to a specified project according to the restriction dictated by investment account holders, and the investor has the choice to invest directly in a preferred project carried out by the bank.

From Table 5.1, it can be seen that the banking services provided by Islamic banks to providers of funds include current, savings and profit-sharing investment accounts. In fact, investment management is the main service provided by almost all Islamic banks. In general, profit-sharing investment accounts may be divided into unrestricted investment accounts, over the investment of which the Islamic banks as *Mudarib* has complete discretion, and restricted investment accounts to be invested in a contractually specified category of assets (although the *Mudarib* may be left some discretion over this). Normally, unrestricted investment accounts are commingled with the banks own funds in a so-called bilateral *Mudaraba*. This is not normal in the case of restricted investment.

AAOIFI<sup>31</sup> upholds that unrestricted investment accounts, the largest funding source for most Islamic banks, are part of the financial position (balance sheet) to be classified between liabilities and equity capital. It is maintained that these investment

<sup>&</sup>lt;sup>31</sup> Accounting and Auditing Organization for Islamic Financial Institutions (refer to Section 5 in this Chapter for details).

accounts are not a liability for an Islamic bank because the bank is not obligated in case of loss to return the original amount of funds received from the account holders unless the loss is due to negligence or breach of contract. At the same time, however, unrestricted investment account holders, despite being partners in profit sharing with the Islamic bank, are not treated similarly to the shareholders of the Islamic bank. This is because holders of investment accounts do not enjoy the same governance rights (voting rights and election of directors and external auditors).

According to AAOIFI, funds provided by restricted investment accounts holders are not reflected as part of an Islamic bank's financial position. The relevant information about such accounts is provided in the statement of changes in restricted investments and their equivalent or as a footnote to the statement of financial position (balance sheet), a treatment similar to that for funds under management. (Refer to FAS 1, para. 61-64).

In Table 5.2, the uses of funds are presented. It can be seen that as an alternative to borrowing funds and paying interest on them, Islamic banks use a version of the *Mudaraba* contract. In addition, as an alternative to lending funds and charging interest on them, Islamic banks use various contracts, for example, *Musharaka*, *Murabaha*, *Bai' muajjal*, *Bai' Salam*, *Istisna'a*, *Ijarah* and *Qard' hasan*, including the *Mudaraba* contract to invest funds under management as well as their shareholders' funds. Details of these contracts have been explained in Table 5.2.

Al-Omar and Iqbal (2000) found that *Murabaha* accounts for 66 per cent of total financing assets of Islamic banks and *Ijarah* accounts for another 4 per cent. Thus, the fixed-return (non profit and loss sharing) modes account for 70 per cent of total financing. The profit and loss sharing modes account for only 18 per cent of financing. Another 12 per cent go to 'Others' category, of which most also comprise fixed-return modes. They used the 10 largest Islamic banks<sup>32</sup> total financing in US Dollars for the period 1994-96.

<sup>&</sup>lt;sup>32</sup> Albaraka Islamic Investment Bank, Bahrain Islamic Bank, Faysal Islamic Bank of Bahrain, Islami Bank Bangladesh Ltd, Dubai Islamic Bank, Faisal Islamic Bank of Egypt, Jordan Islamic Bank, Kuwait Finance House, Bank Islam Malaysia Berhad, and Qatar Islamic Bank.

USES OF FUNDS	DESCRIPTION	COMMENTS
Profit and loss sharing mode		At the core of Islamic banking
1. <i>Mudaraba</i> (profit-sharing)	The bank contributes entire funds, and the entrepreneur contributes expertise and works to execute a potentially successful project. Profits are shared in percentage agreed beforehand. Financial losses are borne exclusively by the bank if the entrepreneur is not negligent or in violation of the terms. The liability of the entrepreneur is limited only to his time and efforts. It is usually employed in investment projects with short gestation periods and in trade and commerce.	Differs from speculation, which includes an element of gambling in buying and selling transactions.
2. Musharaka (partnership)	The bank is not the sole provider of funds to finance a project. Two or more partners contribute to the joint capital of an investment in equal or varying degrees. Profits are shared according to what the partners agree and the losses are shared strictly according to respective capital contributions. It is usually employed to finance long-term investment projects.	Banks can exercise the voting rights corresponding to their share of the firms' equity capital. Their representatives can sit on the firm's board of directors. All parties invest in varying proportions, and have the right to participate in the management of the enterprise.
Non profit and loss sharing mode		
3. <i>Murabaha</i> (mark up)	The bank finances the purchase of a good or assets by buying it on behalf of its client and adding a mark-up on the cost before reselling it to the client on a 'cost-plus' basis profit contract.	Two types of <i>murabaha</i> sale exist. In the first type, Islamic bank does not have a specific customer. In the second type, Islamic bank purchases the goods after a customer has made a promise to purchase them from the bank.

Table 5.2: Uses of Funds for Islamic Banks

## Table 5.2 (continued)

4. Bai' muajjal (deferred payment)	Islamic banks have also been resorting to purchase and resale of properties on a deferred payment basis.	It is considered lawful in <i>fiqh</i> (jurisprudence) to charge a higher price for a good if payments are to be made at a later date. According to <i>fiqh</i> this does not amount to charging interest, since it is not a lending transaction but a trading one.
5. Bai' Salam (prepaid purchase)	Bank pays the money first for a product that the seller promises to deliver at a future date. This applies normally to finance agricultural products.	Opposite of the murabaha,
6. Istisna 'a (manufacturing or construction)	This is a contract to acquire goods on behalf of a third party where the price is paid to the manufacturer in advance and the goods produced and delivered at a later date. This applies to manufactured products.	
7. Ijarah and ijarah wa iqtina – muntiahia biltamleek (leasing)	The banks buy the equipment or machinery and lease it out to their clients who may opt to buy the items eventually ( <i>ijarah wa iqtina</i> ), in which case the monthly payments will consist of two components, i.e. rental for the use of the equipment and instalment towards the purchases price.	
8. Qard hasan (benevolent loan)	This is the zero-return loan that the Qur'an urges Muslims to make available to those who need them. The borrower is obliged to repay only the principal amount of the loan, but is permitted to add a margin at his own discretion.	Banks are allowed to charge the borrowers a service fee to cover the administrative expenses of handling the loan, provided that the fee is not related to the amount or maturity of the loan.
9. Islamic securities	An international Islamic equity portfolio where the underlying assets comprise ordinary shares in well run businesses, the productive activities of which exclude those on the prohibited list (alcohol, pork, armaments) and financial service based on interest income.	

The above discussion indicates that the profit and loss sharing modes of financing (application of funds) are not much used by Islamic banks, although such modes are used for mobilising funds. The reason is that the credit risk of profit and loss sharing modes, for example *Mudaraba* and *Musharaka*, is expected to be high due to the problems of adverse selection and moral hazard with asymmetric information. This occurs when the banks do not have sufficient information on the actual profit of the

entrepreneur. The bank ought to provide capital to the entrepreneur relying completely on its integrity, ability and good management.

A comparative analysis of the financial statements of an Islamic bank and a conventional bank reveals that there are similarities in some areas while in others there are differences. Both have an identical component of shareholders' equity. Both have cash and liquid assets; in Islamic banks, however, these are mainly cash assets contrary to the practice of conventional banks, which maintain such interest-bearing instruments as treasury bills. Both also have fixed assets and other liabilities; their components differ, however.

To illustrate these differences, a comparative analysis of an Islamic bank and a conventional bank is shown in Table  $5.3^{33}$ . From Table 5.3, it can be seen that Islamic banks are allowed to invest in leasing transactions (Ijarah). In contrast, conventional banks must have separate specialised subsidiaries to handle leasing transactions.

Islamic Bank	Conventional Bank
Assets	Assets
Liquid assets (cash and cash equivalents) <sup>34</sup>	Liquid assets (including treasury notes and
	bills)
Sales Receivables (Murabaha and others)	Investments and deposit
Islamic financing assets, including	Loan portfolio
Mudaraba, Musharaka, Ijarah, Istisna'a	
and Salam	
Fixed and other assets	Fixed and other assets
Liabilities and equity	Liabilities and equity
Current and saving accounts	Deposits – Current accounts
Salam and Istisna'a payables	Saving accounts
Other liabilities (Zakah [Islamic tax] and	Promissory notes
tax payable)	
Depositors share of profit	Minority interest
	Borrowing
Equity of unrestricted investment accounts	Other liabilities
Minority interests	
Shareholders' equity	Shareholders' equity

## Table 5.3: Components of Financial Statements in one Islamic Bank compared to a Conventional Bank.

<sup>&</sup>lt;sup>33</sup> A comparison has been undertaken following AAOIFI's requirements (Islamic banks) and the International Accounting Standards requirements (conventional banks). <sup>34</sup> Some Islamic banks include 3-month commodity *Murabaha* as cash equivalents.

In the income statements of conventional banks, interest income/expenses represent a substantial part of the statement. In Islamic banks, such components do not exist. The management fees in the form of the *Mudarib* percentage of profits on *Mudaraba* investments are a major source of income for Islamic banks. If there is a gain generated from operations prohibited by *Shari'a*, such income will not be recognised in the statement as income. Furthermore, the profits of the conventional banks are declared after deducting interest expense payable to depositors, and in most Islamic banks profits declared will be profits after deducting the return payable to unrestricted investment account holders and adding the bank's share as a *Mudarib*. This results from the fact that in Islamic banks, the returns on the assets held by the bank are shared between the banks and the investment account holders, which is not the case in conventional banks.

#### 5.3 Risk Management in Islamic Banks

The concept of 'risk' in an Islamic financial system can best be understood when viewed from two dimensions – prohibition of *gharar* and freedom of contract. *Gharar* is, according to *Shari'a*, any element of chance involving asymmetric information, uncertainty, risk or even speculation leading to illicit profits, and as such is excluded by the religious, and consequently by the moral, precepts of Islam. *Gharar* needs to be explained in a contracting context and concerns uncertainty of the subject matter. The supplier's obligation, for example, is to deliver the subject matter of the sale; if he is not in a position to do so, this amounts to *gharar*, which is prohibited in Islam.

However, even if the subject matter is non-existent in its essence at the time of the contract, the contract is deemed valid under certain circumstances, for example in the case of *Istisna'a* (manufacturing or construction) and *Bai' Salam* (sale of commodities), as long the delivery of the subject matter is certain. *Bai' Salam* relates to tangible commodities (e.g. agricultural products), which can be defined at the time of the contract, and *Istisna'a* refers to manufacturing or construction where the goods do not exist yet at the time of the contract but detail specifications from engineers do exist. Therefore, these contracts are not considered as *gharar* because the subject-matters are not subject to uncertainty.

Undertaking a business transaction or an investment decision also involves some degree of risk-taking regarding the future performance or outcome of the activity. However in such cases, risk taking is based on educated analysis and understanding of the risks that are necessarily present and understood, whereas speculation creates a risk that would otherwise be non-existent.

The main difference between *gharar* and risk-taking is related to the nature of risk and its potential contribution to the social good. Gambling (speculation) involves the creation of risk for the sake of risk in the hope of very high gains, whereas risk taking that is a part of some real economic activity that creates economic value in the market as desirable and permissible.

Islam offers full freedom of contracts to economic agents as long as the resulting contract is within the boundaries defined by *Shari'a*, which mainly exclude *riba*, *gharar* and *maysir* (speculation). Given the freedom of contracts and the understanding of *gharar*, Islam fully recognises risk generated by financial and commercial factors and elements intrinsic to the formation of the business transaction.

In conventional banks, depositors have a fixed claim on the bank's assets, according to a predetermined rate of return plus the return of their capital. A conventional bank must therefore service its obligations to depositors irrespective of its actual profitability, or else become insolvent. Consequently, any uncertainty in the income streams generated by, and change in the value, of the bank's assets is borne by shareholders alone.

Islamic banks, in contrast, are structured upon the principle of risk sharing. This applies to the sources of funds and may also apply to the deployment (uses) of funds (as shown in Tables 5.1 and 5.2).

One difference that warrants consideration is that Islamic banks do face a risk not faced by their conventional counterparts. Though conventional banks and Islamic banks are exposed to credit risk, liquidity risk and currency risk, the risk for the Islamic banks is higher, due to their extensive trade and investment activities in *Mudaraba* and *Musharaka*. Nevertheless, some risks to which conventional banks are

exposed do not exist in Islamic banks, for example, interest rate risk, since interest is prohibited in their operations. However, this is still debatable. For example, Islamic banks face "rate of return risk", a type of market risk, on *Ijarah* and longer-term *Murabaha*. Table 5.4 summarises the different kind of risks that any bank may face.

Table 5.4: Risks faced by Conventional Banks and Islamic Banks

<b>Conventional Commercial Bank</b>	Islamic Bank
A	A (high)
A	A (high)
A	A
Α	N/A
N/A	A
	Conventional Commercial Bank A A A A N/A

A: Applicable

N/A: Not Applicable

Source: Al-Omar and Abdel Haq (1996).

Credit risk is expected to be high under *Mudaraba* and *Musharaka* (profit and loss sharing mode) due to the asymmetric information problem in which the entrepreneur (obligor) does not provide sufficient information to the financier on the actual profit of the bank (Khan and Ahmed, 2001). This form of credit risk is referred to as 'capital impairment risk' (e.g. in IFSB, 2005); as the obligor has no contractual obligation to return the financier's capital intact.

As shown in Table 5.4, the liquidity risk for the Islamic banks is higher because they generally cannot hold cash equivalents<sup>35</sup> (liquid assets) like conventional banks. Islamic banks are not leveraged by deposits as conventional banks are. *Murabaha* and *Ijarah* constitute a large percentage of the Islamic banks' assets. As mentioned earlier in Table 5.1, *Murabaha* will create debt obligations against buyer firms; in other words, it creates a fixed liability for the purchase. However, if the buyer defaults on his payment, it is generally agreed by Islamic jurists that Islamic banks could charge penalties but the bank could not get any benefit out of these penalties. These penalties could be transferred to charity rather than used by the bank, otherwise that would mean taking *riba* (interest). In addition, Islamic banks can have *Murabaha* 

<sup>&</sup>lt;sup>35</sup> There are now some *Shari'a*-compliant cash equivalents available, such as Bahraini *Salam Sukuk* with a 90-day maturity (details in p. 74)

collateralisation using  $Rahn^{36}$ , whereby collateral may be disposed of in the event of default.

The liquidity risks in Islamic banks arise from the lack of sufficient *Shari'a* based liquid instruments. It is not possible to transform financial assets into negotiable financial instruments. Once a debt has been created, it cannot be transferred to anyone else except at par value. Depositor funds are either callable on demand or require very short withdrawal notice periods.

There is currently no Islamic inter-bank money market, except in Malaysia. In Malaysia, for example, an Islamic inter-bank money market was introduced in January 1994 as a short-term intermediary to provide a ready source of short term investment outlets based on *Shari'a* principles. This market is considered to be the first Islamic money market in the world. Inter-bank trading in Islamic financial instruments such as Islamic banker's acceptances, Islamic inter-bank investments where a bank with surplus funds can make an investment with another bank in deficit on the basis of *Mudaraba*, and an inter-bank cheque clearing system are the key activities of this market. Through this the Islamic banks and banks participating in Interest-free Banking Scheme<sup>37</sup> should be able to match their funding requirements effectively and efficiently.

In Bahrain, the Central Bank of Bahrain, Bahrain Monetary Agency (details in Section 6.5) sets up the Liquidity Management Centre in 2002 to sell *Shari'a* compliant securities which Islamic banks can hold as liquid assets. The short term securities (i.e. 3-month) known as *Sukuk Al-Salam* are issued monthly and to be hold until maturity and non-tradeable. In addition, *Ijarah Sukuk*, which is tradeable but is exposed to rate of return risk are issued for longer periods (i.e. between four to six years). The main objective of issuing *Ijarah* securities is to address the requirements and needs of Islamic financial institutions and investors for attractive investment opportunities.

<sup>&</sup>lt;sup>36</sup> Rahn refers to an arrangement whereby a valuable asset is placed as collateral for debt.

<sup>&</sup>lt;sup>37</sup> In March 1993, Bank Negara Malaysia (the Central Bank of Malaysia) has allowed the conventional banks to offer Islamic banking services using their existing infrastructure and branches to increase the number of players in Islamic banking under a scheme known as Skim Perbankan Tanpa Faedah (Interest-free Banking Scheme).

Islamic banks are prohibited by *Shari'a* from borrowing at short notice by discounting debt obligation receivables (for example through a central bank discount window). There is also no *Shari'a* compliant lender of the last resort facility offered by central banks. This means that Islamic banks are particularly exposed to liquidity risk tie up their investment account holders funds in illiquid long term assets, such as *Ijarah* (lease) assets, or *Mudaraba* (venture capital)/*Musharaka* (partnership) profit sharing arrangements.

However, Al-Sadah (1999) found in his studies that some Islamic banks (for example "Mohammed Bank", "Ahmed Bank" and "Khalifa Bank"<sup>38</sup> in Bahrain) take into consideration the level of liquidity on each type of account (investment, saving and current accounts) to meet investors' withdrawals. The level of liquidity is influenced by the liquidity requirements imposed by the regulatory agencies on Islamic banks. Each Islamic bank will use different liquidity management systems in order to achieve the same aim; there is some portion in the accounts that acts as the liquidity cushion for satisfying unexpected withdrawals. This enables the Islamic banks to meet the unexpected liquidity demands of current and investment account holders and prevents possibility of a run on the bank.

In addition to those risks commonly faced by conventional banks, Islamic banks face other unique risks as a result of different characteristics of the assets and the liabilities structure. They are fiduciary risk and displaced commercial risk (AAOIFI, 1999<sup>39</sup>). Fiduciary risk is a category of operational risk, namely the risk of breach of the *Mudaraba* contract, or misconduct or negligence, on the part of the bank as *Mudarib*, with the result that the *Mudaraba* fund becomes a liability of the bank.

Displaced commercial risk is a category of market (rate of return) risk, resulting in the transfer of the risk associated with investment accounts to shareholders. This arises when, under commercial pressure banks forgo a part of the *Mudarib*'s share of profit

<sup>&</sup>lt;sup>38</sup> These names are fictitious for confidential reasons.

<sup>&</sup>lt;sup>39</sup> In March 1999, the AAOIFI Capital Adequacy Committee issued a Statement on the Purpose and Calculation of the Capital Adequacy Ratio for Islamic Banks.

and transfer it to the investment account holders in order to prevent withdrawals due to a non-competitive return. Displaced commercial risk arises because the bank may not be able to pay competitive rates of return to its investment account holders as compared to its peer group of Islamic banks and other competitors. Investment account holders will again have the incentive to seek withdrawal. To prevent withdrawal, the bank will need to apportion part of its own share of profits to the investment account holders.

Khan and Ahmed (2001) examine risk management issues in 17 Islamic financial institutions from 10 different countries using questionnaires and field-level interviews with Islamic bankers. They find that Islamic bankers rank the rate of return risk as the most critical risk they face due to the fact that, for example, a *Murabaha* contract cannot be repriced and they cannot use swaps to hedge this risk. The results also point out that the lack of some instruments (like short term financial assets and derivatives) and a money market (except in Malaysia and to some extent in Bahrain) hampers risk management in Islamic financial institutions.

#### 5.4 Islamic Derivatives

In order to hedge the risks arising in their activities, similar to conventional banks, Islamic banks could consider using derivative instruments. A derivative instrument is one whose value depends on the values of other more basic underlying variables. However, these derivative instruments are not accepted by most *fiqh* scholars because they argue that all derivatives are not *Shari'a* compliant (due to *gharar*, *maysir* or *riba*), and therefore should be prohibited.

A number of contracts exist in Islamic banking that could be considered a basis for derivative instruments within an Islamic framework. These are *Bai' Salam*, *Urboun* and *Khiyar al-Shart. Bai' Salam* is a sale contract in which the buyer pays immediately against the deferred delivery of a specified amount of fungible (not uniquely identifiable) goods of a given quality at a predetermined future date. This is similar to the conventional forward contract. However, the big difference is that in a *Bai' Salam* contract, the buyer pays the entire amount in full at the time the contract is initiated. The contract also stipulates that this payment must be in the form of cash. The buyer in a contract therefore is an Islamic bank. Since there is full prepayment,

this potential contract is beneficial to the seller. As such, the predetermined price is normally lower than the potential price. The price behaviour is certainly different from that of conventional forward contracts, where the forward price is typically higher than the spot price by the amount of the carrying cost. Credit or counterparty risks of forward and *Bai' Salam* contracts are therefore different. In a *Bai' Salam* contract, the risk however would be one-sided, in that since the buyer has fully paid, it is only the buyer who faces the seller's default risk and not both ways as in a forward contract. In order to overcome the potential for default on the part of the seller, the *Shari'a* allows the buyer to require security which may be in the form of a guarantee or pledge.

An *Urboun* contract is an agreement whereby a buyer of goods makes an immediate down payment of part of the price against future delivery. The buyer has the option to pay the balance, being the purchase price less the down payment, at any time until a specified final purchase date. However, should the buyer choose not to buy the goods by the final purchasing date, the down payment will be forfeited. It is very similar to the call option in conventional finance. The main difference is that a call option is purchased by paying a premium which is not offset against the purchase price should the option be exercised.

The *Khiyar al-Shart* contract is a contract in which one or both parties to a contract (or even a third party) holds an option (embedded within the contract) to confirm or rescind the contract within a specified time contingent upon the fulfilment of a stipulated condition. The contract has embedded options that could be triggered if the underlying asset's price exceeds certain bounds. The exercise features of this contract are similar to a conventional put option. What differentiates the *Khiyar al-Shart* option from conventional options is that there can be no separate fee paid at the start of the contract in respect of granting the option right. Therefore, it is the delivery price of the underlying asset which includes an element that recognises the economic value awarded to the option holder in the contract.

It is argued by many *fiqh* scholars that these derivatives (except *Bai' Salam*<sup>40</sup>) are unlawful because they can lead to speculation. For example, the argument is often put forward that the huge trading volume of derivative markets is indicative of extensive speculation, that the market attracts and accentuates speculative behaviour. A second issue that cause uneasiness among *fiqh* scholars is the fact that a large portion of those trading in derivative markets have no intention of either making or taking delivery of the underlying asset, therefore they must be speculators and this amounts to *gharar*.

Hence, there is an urgent need to clarify these issues so that a number of derivative instruments can be accepted by the *fiqh* scholars and used in hedging the banking risks in ways which are *Shari'a* compliant. In an increasingly competitive and sophisticated business environment, denying the use of a flexible and powerful array of instruments for risk management would place the Islamic banks at a disadvantage. Thus, in evaluating the permissibility of derivatives yet another dimension of *fiqh* may be needed, that is the social welfare (*Maslaha*) dimension.

#### 5.5 Accounting Disclosure for Islamic Banks

This section will briefly discuss the accounting standards which are relevant to Islamic banks in general and then review the situation on risk disclosure in the standards.

The financial statements of any bank represent in numerical form its assets and liabilities at a certain date. They also state, again in numerical form, the revenues and expenditures of the banks, that is, its income. The presentation of such information is essential to rational investment decisions and therefore needs to provide an acceptable level of transparency. The way in which financial statements are presented is becoming standardised and the standard form is well recognised all over the world. The Islamic banks are no exception.

In order to standardise the presentation of the financial statements of Islamic banks and to inspire confidence in their users, a non-profit making self-regulating organisation was established in 1991 by a number of Islamic banks and other

<sup>&</sup>lt;sup>40</sup> Fiqh scholars allow *Bai' Salam* but reject conventional futures contracts. Conventional forward contracts may be permissible, but some scholars argue that either delivery or settlement may be deferred but not both.

interested parties, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI). Representatives of the "Big Four" accountancy firms (refer to footnote 23) sit on the member board<sup>41</sup>. The organisation is funded by subscriptions ranging from US\$2,000 per year to US\$40,000 for the larger institutions, and an endowment fund.

The AAOIFI, which is based in Bahrain, has to date issued 19 accounting standards five auditing standards, four governance standards, two on ethics plus a statement on capital adequacy, and 18 *Shari'a* standards. The standards are implemented in various Islamic banking jurisdictions, including Bahrain, Sudan, Jordan, Qatar, UAE and Lebanon and also used as guidelines in other countries such as Malaysia and Saudi Arabia. The existence of these standards has significantly improved transparency and disclosures, and also resulted in greater harmonisation of *Shari'a* practices. In part, the Islamic accounting standards are adaptations of International Accounting Standards (IASs) concentrating on added disclosure due to the uniqueness of the Islamic banks. However, they also fill a number of major gaps in IASs when applied to Islamic banks.

Karim (1990) claims that Islamic banks have taken the initiative to self-regulate their financial reporting for fear that the regulatory bodies in the countries in which they operate might otherwise intervene and mandate the accounting policies of Islamic banks.

Financial Accounting Standard No. 1, 'General Presentation and Disclosure in the Financial Statements of Islamic Banks and Financial Institutions' (FAS 1) is applicable to the financial statements published by Islamic banks to meet the common information needs of the main users of such statements. This standard is applicable to all Islamic banks regardless of their legal form, countries of incorporation, or size.

This standard defines the financial statements (refer to Appendix 2) that should be periodically published by Islamic banks to satisfy the common information needs of

<sup>&</sup>lt;sup>41</sup> Members of AAOIFI come from several countries which include Bahrain, Cayman Islands, Egypt, Indonesia, Jordan, Kuwait, Malaysia, Palestine, Qatar, Russia, Saudi Arabia, Sri Langka, Sudan, Switzerland, Tunisia, Turkey and United Arab Emirates (by alphabetical country order).

users of financial reports set forth in the Statement of Financial Accounting No. 1, 'Objectives of Financial Accounting for Islamic Banks and Financial Institutions. The standard also establishes the general principles for the presentation of information and defines certain information that should be disclosed the financial statements of Islamic banks in order to achieve the objectives of accounting and financial reports within the limitations of financial accounting.

This standard has been effective for financial statements for fiscal periods beginning 1 Muharram 1417H or 1 January 1996.

With regard to risks, general disclosure in FAS 1 covers concentrations of asset risks, which refers to the magnitude of assets invested or deposited in an economic sector, a customer or a geographical area with unique economic characteristics. In addition, disclosure should be made in the financial statements of the risk associated with net assets (net liabilities) which are denominated in foreign currency.

In terms of market risk disclosure, FAS 1 limits itself to the statement that 'disclosure should be made of the net realisable value of an asset if such value is less than the asset's recorded amount. However, all expected losses should be recognised when reasonably measurable'. FAS 1 demands that disclosure be made of any amount an Islamic bank is obligated to deposit with others as compensating balances, for disclosure with regard to liquidity risk. Islamic banks should also disclose the distribution of unrestricted investment accounts and their equivalent and other accounts (assets), by type, in accordance with their respective periods to maturity or expected periods to cash conversion (for assets). This can disclose liquidity requirements during the next period and liquidity requirements during the following periods.

Conventional banks, as mentioned in Chapter 3, may follow International Accounting Standard, IAS 1, 'Presentation of Financial Statements' and IAS 30, 'Disclosure in the Financial Statements of Banks and Similar Financial Institutions' in preparing their financial statements, which also as argued earlier do not have sufficient disclosure on risk information. In fact, the recommendations by the regulators, in particular the BCBS require better information on risk reporting<sup>42</sup>.

Considering both sets of standards, in general, IASs and AAOIFI's FASs have much in common in terms of being international standards, the aim is to promote comparability and transparency and the issuance which follows a 'due process'. IASs and AAOIFI's FASs have helped to standardise accounting practices of enterprises, thereby making the financial information of these institutions comparable and transparent thus allowing investors to make better informed decisions. The main difference between these two standards, in particular IAS 30 and FAS 1, is that IAS 30 does not cover the results of *Shari'a* compliant transactions as found in FAS 1.

Therefore, the same set of financial statements can largely comply with FASs and IASs. A good example is found in a large Islamic bank (Shamil Bank, former Faysal Islamic Bank). In their 1998 financial statements, they prepared two sets of financial statements, one according to AAOIFI's standards and another one in accordance with IAS. The differences can be seen similar to Table 5.3 in this chapter, except that there is no interest item in Islamic banks. The income mainly comes from investments.

However there are some doubts about FAS 2 '*Murabaha* and *Murabaha* to the Purchase Orderer' and IAS 18 'Revenue Recognition'. FAS 2 covers Islamic creditsale transactions. There may be problems of compatibility with the requirements of IAS 18 for such transactions. IAS 18 requires the identification of a trading profit margin and a separate charge for credit which is interest-based. The former is recognised when the asset is made available to the buyer (IAS 18 pars. 14-19), while the latter is recognised on a time proportion basis over the credit period (IAS 18 par. 30 (a)). Such a treatment is not *Shari'a* compliant. In a *Murabaha* contract, the seller's mark-up is not divisible into a trading profit and a separate charge for credit, since the latter would be a form of *riba*.

Based on the above, the financial statements and related notes provided by AAOIFI standards could give better disclosure and more meaningful information to the users,

<sup>&</sup>lt;sup>42</sup> Refer to Chapter 2.

particularly with respect to unrestricted and restricted investments which are totally ignored by IAS. These investments are the main sources of funds of most Islamic banks. In addition, when both standards are not compatible, FAS will give a 'truer and fairer' view than IAS because FAS properly reflect the substance of the results of a *Shari'a* compliant transaction when applied to Islamic banks.

Errico and Farahbaksh (1998) mention that the issue of what standards are used for conventional banks has received little attention, even in countries where all banks follow Islamic principles. Furthermore, they argue that a number of standards and best practices established by the BCBS are not always applicable (as they stand) to Islamic banking. An appropriate regulatory framework governing Islamic banks needs to place greater emphasis on the management of operational risk and information disclosure issues than is normally the case in conventional banking.

Ismail and Abdul Latiff (2000) look into the financial reporting of Islamic banks in Malaysia, Bahrain, Turkey and Pakistan and make some comparisons using survey methods (questionnaire and interview). In addition, they study the use of AAOIFI standards and IASs by these banks. They found that the regulatory reporting frameworks of Malaysia and Pakistan either explicitly or implicitly adopt the International Accounting Standard Committees' conceptual framework. The results also indicate that AAOIFI does not particularly endorse the concept of substance over form. They argue that there should be improvement in regulation and practice as regards the disclosure and treatment that reflect the obligation and rights of banks and clients.

Karim (2001) suggests that the perspective adopted by the supervisory authorities to regulate Islamic banking has tended to influence the accounting treatment of investment accounts adapted by Islamic banks, although most of the countries in which these banks operate either look directly to IASs as their national standards or develop national standards based primarily on IASs. This has rendered the financial statements of Islamic banks non-comparable, thereby departing from the concept of comparability which is considered in the IASC (1989) Framework for the Preparation and Presentation of Financial Statements as one of the four principal qualitative characteristics that make the information provided in the financial statements useful

for users. This implies that the calls for worldwide adherence to IASs to achieve harmonisation in financial reporting regardless of cultural differences should not go unchallenged. Rather, Islamic banks should be asked to implement AAOIFI's standards, as is currently the case in some countries. This would render the financial statements of these banks comparable because AAOIFI's standards are specifically developed to cater for the unique characteristics of the *Shari'a* contracts that govern the Islamic banks' financial instruments (Karim, 2001).

The issuance of ED 7 which aims to provide more detailed disclosure of banking risks will help the banks to be more transparent and the market participants to get more information from the financial statements, for example, detailed disclosure on concentration of risks faced by banks. However, again this ED 7 still does not cover the results of *Shari'a* compliant transactions that are more relevant in the case of Islamic banks. For example, Islamic banks are still not making use of derivatives to hedge the risks as practised by conventional banks.

In this case, it is important for the standard setters, particularly AAOIFI and IFSB, to design their own risk disclosure standard which is more applicable to Islamic banks. However, they could adapt the requirements for risk disclosure as in ED 7, and tailor them to suit the nature and specificaties of Islamic banks. In particular, Islamic banks have different financial instruments compared to conventional banks, which give rise to different risk exposures. These risk exposures need to be disclosed to the users, particularly the investment account holders as they require more transparency to monitor their investments. Therefore, it is important for paragraph 7 in this ED 7 to be expanded to address which types of disclosure are likely to be more relevant for which class of financial instrument.

#### 5.6 Concluding Remarks

The successful banks will be those, which are able to retain customer loyalty and current profitability by developing new financial products, which meet customers' needs for the future. There is no reason why Islamic banks cannot be successful in this brave new world of banking. Indeed, the exceptional position which they command within the Islamic *Ummah* (nation) gives them many advantages which are denied to

conventional banks. The Islamic banks have been established on the basis of *Shari'a* and Islamic socio-economic principles, in which faith and trust are basic.

For that reason, Islamic banks have an obligation to be transparent by making adequate disclosures to their investment account holders, not only with regard to their own financial condition as is the case with conventional banks but also in respect of the management of trust money. This can assist the users in understanding the banks' activities and hence to maintain their trust in the banks.

In order to provide a competitive range of alternative financing vehicles, Islamic banks will need to work together to develop and adopt the standards of disclosure and risk management, that are expected in the international markets. The purpose of Islamic banks is not simply to provide banking services; it is also to enable the Muslim community to conduct its financial affairs in accordance with the *Shari'a*. The accounting standards must be credible and of high quality to cater to the needs of market players.

## Chapter 6

# Transparency in Islamic Banks: Issues and Implications

### 6.1 Introduction

Islamic banks face great challenges to successfully serve the Islamic Ummah in which they operate. They have to seek the most appropriate means through which accounting standards could be developed and implemented in order to present adequate, reliable and relevant information to financial statement users. The establishment of Islamic banks is intended to cater for the needs of Muslims in order to follow the principles of *Shari'a*. Such ways and means are characterised by many features, including the prohibition of interest, the use of profit sharing and other investment vehicles, which have been explained in a previous chapter. Since Islamic banks mobilise funds on a profit sharing basis, it becomes essential that all parties to their transactions should have full access to information covered by agreements. Adequate disclosure and transparency provide an assessment of the degree of risk associated with participation. Accordingly, the attractiveness of Islamic banks to Muslims stems mainly from their compliance with *Shari'a* in their dealings, whether with shareholders, current and investment account holders or others for whom such banks invest their funds.

On the other hand, the Muslim's choice of investing or depositing funds in or dealing with one Islamic bank versus another, is based on his/her evaluation of and confidence in the bank's ability to maintain its capital at a level sufficient for solvency purposes. In addition, the bank's ability to realise rates of returns commensurate with the assumed investment risk for both its shareholders and the investment account holders is also important in decision making. Lack of such confidence might cause Muslims to stop dealing with an Islamic bank. Among the important sources of such information are the financial reports of Islamic banks which are prepared in accordance with standards that are applicable to Islamic banks.

This chapter aims to look into the issues that arise in Islamic banks in order to satisfy the needs of their users for making investment decisions and to enhance transparency in Islamic banks' financial reporting. Section 6.2 presents the financial reporting by institutions that comply with *Shari'a* principles. Section 6.3 discusses the capital adequacy requirement for Islamic banks by looking specifically at Basel II. Section 6.4 provides the challenges faced by Islamic banks' transparency in financial reporting. The roles of the Bahrain Monetary Agency and the Islamic Financial Services Board are discussed in Sections 6.5 and 6.6. Finally, Section 6.7 provides concluding remarks.

## 6.2 Financial Reporting by Institutions that Comply with *Shari'a* Principles

In order to achieve transparency, financial reports in the form of financial statements play an important role for any organisation to assist users in making decisions, by providing information on the activities conducted by that organisation. Financial reporting by Islamic banks should logically be focused on the fair reporting of the entity's financial position and results of its operations, in a manner that would reveal what is *halal* (permissible) and *haram* (forbidden). This is in compliance with Allah's instructions to co-operate in performing good deeds<sup>43</sup>. This means that financial reporting by Islamic banks has objectives which Muslim financial accountants should be aware of and comply with. They should not enter this field without a conscious and clear understanding of the objectives of financial reporting.

Muslim accountants could follow the professional code of ethics<sup>44</sup> issued by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), which depends primarily on the principles and rules of the Islamic faith and *Shari'a*. These ethical principles stem from the presentation and constant religious incentives that surpass in their purposes all other incentives. More generally, the *Shari'a* emphasises transparency and avoidance of *gharar*, for example the Prophet's injunction to Muslims to write down their contracts and also the stress in the *Qur'an* on the importance of writing down faithfully for each transaction (*Al-Qur'an* 2:282).

Muslims who deal with Islamic banks are concerned, in the first place, with obeying and satisfying Allah in their financial and other dealings (principles and rules of *Shari'a*).

<sup>&</sup>lt;sup>43</sup> Refer to Al-Qur 'an, 5:2.

<sup>&</sup>lt;sup>44</sup> AAOIFI (1991): Code of Ethics for Accountants and Auditors of Islamic Financial Institutions
Islamic banks as mentioned earlier have unique characteristics as compared to conventional banks. The relationship between Islamic banks and the parties that deal with them differs from the relationship of those who deal with conventional banks. Unlike conventional banks, Islamic banks do not use interest in their mobilisation and uses of funds, whereas conventional banks borrow and lend money on the basis of interest.

Furthermore, the characteristics of Islamic banks tend to raise a set of issues concerning corporate governance and agency problems (Archer and Karim, 1997; Archer et al., 1998) that have no parallels in either commercial banks or investment banks.

The existence of AAOIFI as a standard-setting body for Islamic financial institutions can assist the preparation of financial statements by Islamic banks by providing accounting, auditing and *Shari'a* standards for Islamic banks. Statement of Financial Accounting No. 1, 'Objectives of Financial Accounting for Islamic Banks and Financial Institutions' (Statement of Objectives) and Statement of Financial Accounting No. 2, 'Concepts of Financial Accounting for Islamic Banks and Financial Institutions' (Statement of Concepts), issued by AAOIFI constitute the framework to which it refers in developing financial accounting standards to assure consistency and to enhance users' confidence.

The Statement of Objectives also highlights the common information needs of users of the financial statement of Islamic banks. These include information about the Islamic bank's compliance with the principles of *Shari'a* in all of its financial and other dealings; and information disclosing the income earned and expenditure incurred by the Islamic banks from prohibited transactions or sources, if any, and the manner in which these were disposed of. In addition, the information about the Islamic bank's economic resources and related obligations, and the effect of transactions, other events and circumstances on the entity's economic resources and related obligations are also important. The information to assist in the determination of *Zakah* on the Islamic bank's funds and the purpose for which it will be disbursed, and to estimate cash flows that might be realised from dealing with the Islamic bank, are also included in this statement. Furthermore, the statement also mentions the

information to assist in evaluating the Islamic bank's discharge of its fiduciary responsibility to safeguard funds and to invest at reasonable rates of return, and finally information about the Islamic bank's discharge of its social responsibilities.

The Statement of Concepts was prepared by AAOIFI to express basic principles of financial accounting. These concepts or basic principles are consistent with the broader view of Islamic principles. Islamic thought accommodates principles, not specifically stated in the *Shari'a*, provided that such principles are beneficial or harmless to society and do not violate any precept of *Shari'a*.

The information should be directed principally at assisting the users in evaluating the adequacy of the Islamic bank's capital to absorb losses and business risks; assessing the risk inherent in its investments; and evaluating the degree of liquidity of its assets and the liquidity requirements for meeting its other obligations. This relates to the issue of capital adequacy and the basis of its calculation, which is discussed in the following section. In addition, the investment account holders also need information about profits earned from their investments in Islamic banks.

# 6.3 Capital Adequacy Requirement – Basel II

The Capital Adequacy Ratio (CAR) is one of the measures which bank regulators use to measure the adequacy of a bank's equity capital and as a buffer against credit risk to which banks are exposed. It is also a measure of a bank's overall risk exposure. There was evidence that, in the absence of an authoritative guideline for the treatment of unrestricted and restricted investments, the Basel capital adequacy formula was being incorrectly and inconsistently applied to Islamic banks. For example, unrestricted investment account holders could either be treated as liabilities (resulting in an overstatement of capital requirements and hence an understatement of capital adequacy) or ignored (with the opposite effect).

Basel II was proposed by the BCBS in June 1999<sup>45</sup>. Like the 1988 Accord, this Basel II's first pillar maintains both the current definition of capital and minimum capital ratio of 8 per cent of capital to risk weighted assets. Since the Islamic banks have

<sup>&</sup>lt;sup>45</sup> This Basel II has been explained in detail in Section 3.2.4.

equity of unrestricted investment accounts in their capital structure, this can cause some problems in measuring their minimum capital requirements. There is also the issue of whether restricted investment accounts have capital adequacy implications.

Karim (1996) argued that the application of a CAR framework based on the BIS's requirement does not cater for the unique characteristics of one of the major instruments – profit sharing investment accounts - through which Islamic banks mobilise funds. He proposed four scenarios for the calculation of CAR and examined their implications on the financial and marketing strategies of Islamic banks. He argues that both the financial and marketing strategies of an Islamic bank are contingent on the scenario to be adopted by regulatory authorities for the treatment of profit sharing investment account financing. This in turn would determine whether shareholders of Islamic banks would be able to avail themselves of the benefits of high investment accounts financing while keeping their equity capital at a minimum to increase their rate of return at no extra risk.

In 1999, AAOIFI issued the 'Statement on the Purpose and Calculation of the Capital Adequacy Ratio (CAR) for Islamic banks' which sets out a standard method of calculating the CAR for Islamic banks. For the purpose of calculating its CAR, the Islamic bank's own capital is calculated according to the Basel methodology and comprises two tiers. Tier 1 consists of the Islamic bank's permanent share capital and reserves (as shown in its balance sheet) but excluding revaluation reserves and prudential reserves (profit equalisation reserves and investment risk reserves<sup>46</sup> as defined in the AAOIFI's Financial Accounting Standard (FAS) No. 11, 'Provisions and Reserves').

Tier 2 consists of revaluation reserves together with the profit equalisation reserve and investment risk reserve mentioned above, but not general provisions<sup>47</sup> as defined in

<sup>&</sup>lt;sup>46</sup> Profit equalisation reserve is the amount appropriated by the Islamic bank out of the *Mudaraba* income, before allocating the *Mudarib* share, in order to maintain a certain level of return on investment for investment account holders and increase owner's equity. (para 16), whereas investment risk reserve is the amount appropriated by the Islamic bank out of the income of investment account holders, after allocating the *Mudarib* share, in order to cater against future losses for investment account holders. (para 17).

<sup>&</sup>lt;sup>47</sup> A general provision is an amount set aside to reflect a potential loss that may occur as a result of currently unidentifiable risks in relation to receivables, financing or investment assets. The amount reflects estimated losses affecting these assets attributable to events that have already occurred at the date of the statement of financial position, and not estimated losses attributable to future events.

the FAS 11. In the numerator of the Islamic bank's CAR, Tier 2 items may be included only up to a total equal to 50 per cent of the total of Tier 1 items.

For the purpose of calculating its CAR, the risk-weighted assets of an Islamic bank consist of the risk-weighted assets financed by the Islamic bank's own capital and its liabilities, together with 50 per cent of the risk-weighted assets financed by the Islamic bank's profit-sharing investment accounts. This applies to both unrestricted investment accounts that are accounted for on the Islamic bank's balance sheet, and restricted investment accounts that are accounted for off the balance sheet. The risk weightings to be used in calculating the Islamic bank's risk-weighted assets are the same as those set out in the Basel Agreements. The 50 per cent of the risk-weighted assets financed by investment accounts is a guideline. A banking supervisor could set a lower (or even higher) one for Islamic banks. This statement was effective beginning 1 Muharram 1412H or 1 January 2000.

The original Basel Accord ('1988 Accord') adopted a 'risk bucket' approach for calculating regulatory capital, treating all banks alike, and thus not giving safer banks the incentive to distinguish themselves from riskier ones in order to save on capital requirements. The major novelty of Basel II is the replacement of the existing risk weighting scheme by a system where the risk weights for financial assets are determined by the credit rating of the borrower, as defined for example by a rating agency. According to Basel II, for each given class of borrowers or obligors, those with high ratings have a risk weight smaller than 100 per cent but those with the lowest ratings have a risk weight larger than 100 per cent. Unrated borrowers or obligors have a risk weight of 100 per cent.

The reliance on external ratings in determining capital charges proposed under the new Accord could result in a substantial increase in demand for additional capital during periods of economic downturn and high non-performing loans. It is also seen that the new proposals tend to discriminate against banks incorporated in developing countries and to favour the largest institutions in the Group of Ten (G10) countries. Greater risk-sensitivity contains pro-cyclical elements. During prosperous times, ratings will improve, encouraging banks to lend more, whereas during a downturn, ratings will be lowered, potentially leading to sharp withdrawals of funds or a credit

crunch<sup>48</sup>. This could be hard on developing countries, increasing their vulnerability to contagion and currency crises. Furthermore, most of the Islamic banks are located in developing countries so this may have a significant impact on them.

Basel II does not cater for the specificities of Islamic banks any more than the original 1988 Accord. However, the existence of this Basel II can aid Islamic banks to improve their disclosure requirements in order to be transparent (Pillar 3<sup>49</sup>). Disclosure can trigger a 'dynamic competitive process' in which disclosure of information by a bank with a good risk management system invites other institutions to follow suit.

Another important aspect of this Basel II for Islamic banks is the introduction of operational risk, which is expected to represent on average 20 per cent of the minimum regulatory capital charge. Given the newness of Islamic banks, this risk in terms of personnel risk and system risk can be considerable in these institutions. Operational risk in this respect particularly arises as the banks may not have enough qualified professionals (in capacity and capability) to conduct the Islamic financial operations safely. On the other hand, given the different nature of their business, the computer software available in the market for conventional banks may also not be appropriate for Islamic banks. This gives rise to system risks of developing and using information technologies in Islamic banks. These have been taken up by IFSB where it has issued an exposure draft (Exposure Draft No. 2) on Capital Adequacy in March 2005 based on Basel II with the necessary modifications and adaptations to cater for the specificaties and characteristics of Islamic banks (IFSB, 2005b).

# 6.4 Challenges faced by Islamic Banks' Transparency in Financial Reporting

Islamic banks are facing many challenges that are likely to affect their ability to grow and operate within a more competitive environment. They are still faced with a slow pace of innovation. Islamic banks differ from conventional banks in many respects, in

<sup>&</sup>lt;sup>48</sup> According to the Council of Economic Advisors (1991), credit crunch is 'a situation in which the supply of credit is restricted below the range usually identified with prevailing market interest rates and the profitability of investment projects'.

<sup>&</sup>lt;sup>49</sup> Pillar 3 of Basel II is intended to provide banking institution specific guidance in the important area of capital; in addition to promoting safety and soundness in banks and financial systems that will support and enhance both Pillars 1 and 2 of the framework by enabling the market to make an informed assessment of a bank's overall capital adequacy position.

particular their unique profit sharing characteristics. They have to compete with the existing conventional banks as well as other Islamic banks to attract funds from current and investment account holders. New instruments are needed; a uniform regulatory environment and legal framework have yet to be developed.

As mentioned in the previous chapter, Islamic banks are still not making use of derivatives to hedge the risks as practised by conventional banks. Derivatives are not accepted by *fiqh* scholars because according to them this leads to *maysir* which consequently leads to *gharar*. Derivatives are being used by conventional banks not only for hedging and arbitrage, but also as a competitive tool in marketing their products. Therefore, it is important for Islamic banks to give consideration to some of these derivatives because there are ways in which a derivative can be created, for example 'synthetic options' in the form of *Urboun* (over-the-counter Islamic derivatives). Furthermore, there is a wide array of benefits to be reaped from derivatives. For example, in the case of futures contracts some *fiqh* scholars have objected stating that deferred sale is not allowed<sup>50</sup> while yet others cite precedents to futures on other grounds, mostly because they encourage speculation.

In order for derivatives to be used by Islamic banks, they must have these necessary features (Billah, 1997). All derivatives in general must be free of at least the following five items: *Riba*, *rishwah* (corruption), *maysir*, *gharar* and *jahl* (ignorance). So, what is being intended is fair play and justice to all parties to a transaction.

In addition to these requirements for derivatives, the *Shari'a* has some basic conditions with regard to the sale of an asset (in this case a real asset as opposed to financial assets). Since a derivative instrument is a financial asset dependent on the value of its underlying asset, the *Shari'a* conditions for the validity of a sale would also be relevant. Aside from the fact that the underlying asset must be *halal* at least two conditions have to be met. Firstly, the underlying asset or commodity must

<sup>&</sup>lt;sup>50</sup> Mufti Taqi Usmani (1996) objected to futures contracts for two reasons: It is a well recognised principle of the *Shari'a* that sale or purchase cannot be effected for a future date and in most futures transactions, delivery of the commodities or their possession is not intended. However, fiqh scholars allow *Bai' Salam* but reject conventional futures contracts. Conventional forward contracts may be permissible, but all scholars argue that either delivery or settlement may be deferred but not both. In Bai' Salam, payment is made in advance, but delivery is deferred.

currently exist in its physical, sellable form<sup>51</sup>, and secondly, the seller should have legal ownership of the asset in its final form. These conditions of the validity of a sale would obviously render impossible the trading of derivatives. However, most scholars are of the view that the *Shari'a* provides exceptions to these conditions to enable deferred sale where needed (Shafi, 1997).

Asymmetric information in financial markets exposes investors to many risks and hazards. It can also lead to 'financial panic', for example widespread collapse of financial intermediaries. Because investment account holders cannot assess the quality of the assets in which their funds are invested, they are likely, if they have doubts about the overall health of the banks, to withdraw funds from both sound and unsound banks. This leads to Islamic banks facing displaced commercial risk i.e. withdrawal risk (AAOIFI, 1999).

Asymmetric information also leads to the problem of moral hazard and adverse selection in financial markets. To minimise asymmetric information, there is thus a need to make the activities of banks as transparent as possible. For an Islamic bank, due to its unique characteristics of profit sharing arrangements, it is particularly important to be transparent (Sundararajan and Errico, 2001). Furthermore, in an Islamic banking framework, as argued by Sundararajan and Errico (2001), investment account holders have more incentives to monitor bank performance than conventional depositors because neither capital value nor returns on investment deposits are fixed and guaranteed by banks, but depend on bank performance in investing the funds. More transparency would increase the confidence of clients of Islamic banks and would help in avoiding panics.

Table 6.1 shows the type of risks in the Islamic financial products and the ways to mitigate these risks. Due to the particularities of the Islamic banks, these risks should be disclosed to users of the financial statements. However, there is no standard yet, requiring the Islamic banks to disclose these risks. Even AAOIFI's standards seem not to be entirely adequate, particularly in terms of risk reporting. For example, FAS 1, as explained in Chapter 5, does cover the presentation of items in Islamic banks'

<sup>&</sup>lt;sup>51</sup> General principles for not accepting derivatives may apply but there is an exception if certain conditions are met. For example the use of generic items in *Salam and* items defined by specification in *Istisna'a*.

financial statements but fails to cover the disclosure of qualitative information on risk and possible risk mitigation, which can give more useful and relevant information to the users. The exposure draft issued by IFSB in March 2005 (Exposure Draft No. 1) on Risk Management, similar to the BCBS's publications on sound practices and principles pertaining to market, credit and operational of banks, but catering for the specificities of Islamic banks, could provide Islamic banks with the guidelines for risk management.

Islamic Products	Type of Risks	Possible Risk Mitigation
Murabaha	<ul> <li>Change in price before resale</li> <li>Default risk (failure to pay in time.</li> <li>Rate of return risk (fixed mark-up)</li> </ul>	<ul> <li>Transfer of the ownership at the outset <sup>52</sup></li> <li>Use of charity account to impose penalty charge for delayed payment</li> </ul>
Istisna'a	<ul><li>Credit risk</li><li>Performance risk</li></ul>	<ul> <li>Performance bond from the manufacturer's or contractor's bank</li> <li>Letter of guarantee during construction or warranties after delivery</li> </ul>
Ijarah	<ul><li>Credit risk</li><li>Ownership risk</li></ul>	<ul> <li>Guarantee from the lessee</li> <li>Repossession of asset</li> </ul>
<i>Mudaraba</i> (asset side)	<ul> <li>No control over funds</li> <li>High degree of moral hazard – bank relies on obligor's capability and integrity</li> </ul>	<ul> <li>Dealing with highly reputed companies</li> <li>Securities and guarantees against loss due to negligence or mismanagement – Collateral</li> </ul>
Musharaka	Equity risk	Management participation
Bai' Salam	<ul> <li>Credit risk (seller's default)</li> <li>Price risk (market may fluctuate)</li> </ul>	• Parallel Salam used (collateral) - Hedges price risk

Table 6.1: Possible Risk Mitigation in Islamic Products

Source: Husain Yusof, G (2002)

Another challenge faced by Islamic banks with respect to the transparency issue is the reluctance of certain Islamic banks to follow the AAOIFI's standards, for example the banks in Kuwait, the UAE and Egypt, which makes their financial statements non-

<sup>&</sup>lt;sup>52</sup> The purpose is to ensure simultaneous purchase and resale so that there is no delay or gap between the two actions and ownership is transferred at the very outset.

comparable. They are obliged to follow the standards required by their own central banks, which are IAS or based on IAS. This will lead to difficulties in comparing and understanding the financial statements of different Islamic banks. There is also a lack of consistency in the accounting treatment of various Islamic banking operations. For example, a study by Ismail and Abdul Latiff (2000) revealed that all the banks in Bahrain adhered to AAOIFI's treatment for restricted investments and unrestricted investments<sup>53</sup>.

Pakistan keeps investment accounts (*Mudaraba* deposits) as an off the balance sheet item. In contrast, Albaraka (Turkey) keeps all *Mudaraba* deposits, even restricted funds, on the balance sheet separate from liabilities with disclosure of a bank's obligations. The majority of the rest of the banks disclose *Mudaraba* investments as liabilities. Even the presentation of the Islamic banks' financial statements differs, making it hard for the users to relate the results of one bank to another's. Accounting standards are crucial for information disclosure, building and monitoring users' confidence, and also for surveillance. Proper standards will also help the integration of Islamic financial markets with international markets.

Furthermore, different *Shari'a* interpretations also exist in different countries in which Islamic banks are located. For example, Islamic banks in Malaysia have different interpretations of *Shari'a* rulings and product permissibility from the Gulf countries, Sudan and others, particularly in the sale of debt which is allowed in Malaysia but not in the other countries. In Malaysia, there is a centralised *Shari'a* Supervisory Board Committee. In Gulf, it is not allowed for the Islamic banks to trade securities based on debt except for those created under *Ijarah*. Nevertheless, there is already an acceptance on the trading of securities that are based on combination of debt assets (BBA and others) and *Ijarah* assets, subject to *Ijarah* assets must be at least 51 per cent of the total assets used for the securities. In Sudan, banks are not allowed to use Parallel *Salam* or *Istisna'a* and in Kuwait, Kuwait Finance House does not use binding *Murabaha*.

<sup>&</sup>lt;sup>53</sup> Restricted investments are kept off the balance sheet, while the unrestricted investments are treated as quasi-capital (limited-term equity) in between liabilities and shareholders' equity (FAS 1).

The ability of Islamic banks to meet the above challenges depends on the support from the regulators and the standard-setting bodies, particularly AAOIFI and IFSB in suggesting sufficient regulations and standards.

In addition to that, central banks play an important role in ensuring that the banks follow the guidelines set by them and recommending some measures to improve the performance of these banks. An example is the Bahrain Monetary Agency in Bahrain, which is discussed in the following section.

# 6.5 The Role of the Bahrain Monetary Agency

The Bahrain Monetary Agency (BMA) is the central bank in Bahrain and its supervisory requirements for Islamic banks are similar to those for conventional banks, which include appropriately qualified and experienced management, adequate capital, liquidity and internal monitoring systems, and the proper assessment and control of risk.

On 12 January 2002, BMA issued new Islamic banking regulations under the title 'Prudential Information and Regulatory Framework for Islamic Banks (PIRI)'. The regulations follow guidelines from the (Bahrain-based) AAOIFI and the BCBS and were developed in conjunction with the accounting firm, Ernst & Young, following consultation with many of the country's banks.

The objective of the regulations (which cover six main areas, including capital adequacy, asset quality, management of investment accounts, earnings quality, liquidity and corporate governance), which are similar to CAMEL (refer to Section 4.4) but cover additional areas such as corporate governance, is not simply to provide a regulatory framework, but to also access information that can be used to monitor banks' operations and identify any sign of deterioration in their performance.

The BMA has set its capital adequacy ratio requirement at a figure of 12 per cent<sup>54</sup>, which is derived from the capital adequacy formula stipulated by Basel and adopted by AAOIFI. To cater for fiduciary risk and displaced commercial risk, the two unique

<sup>&</sup>lt;sup>54</sup> The figure of 12 per cent includes 8 per cent recommended by the BCBS for conventional banks and another 4 per cent to cater for additional risks faced by Bahrami banks, for example market and operational risks.

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risks faced by Islamic banks, the BMA has accepted AAOIFI recommendations and requires 50 per cent of the risk-weighted assets of the profit sharing investment accounts to be included in the denominator of the capital adequacy ratio. The risk-weighted assets of an Islamic bank consist of 100 per cent of the risk-weighted assets financed by the Islamic bank's own funds and 50 per cent of the risk-weighted assets financed by the bank's investment accounts (both unrestricted investment and restricted investment accounts). BMA notes that as the numerator of the capital adequacy ratio, tier capital (Tier 1 and 2) is the cornerstone of a bank's strength and should represent a permanent and unrestricted commitment of funds, be freely available to absorb losses and thereby enable a bank to keep operating whilst any problems are resolved and not impose any unavoidable charge on the earnings.

It is important for Islamic banks to maintain sound quality assets and the Agency must be notified where exposure to a single counterparty will be equal to or exceed 10 per cent of the eligible capital base. For management of investment accounts, banks need to ensure that there are adequate policies in place that safeguard the interests of not only the shareholders of the bank but also those of profit sharing investment account holders. The banks are not permitted to transfer funds between restricted investment accounts and corporate books (carrying self-financed assets and those financed by unrestricted investment accounts) without the BMA's prior approval.

In order to determine earnings quality, the BMA requires disclosure to itself of earnings based on amounts received with a breakdown of the ageing of the amounts receivable, with additional breakdowns of earnings from the bank's 10 largest customers, related parties and geographical segments. This information is to assist the BMA in assessing the soundness of the bank through monitoring the trend of its earnings quality and risk concentration.

BMA notes that monitoring and controlling liquidity is one of the most critical responsibilities of a bank's management, pointing out that it is of even greater importance in Islamic banks due to the interpretation of some *fiqh* scholars that *Mudaraba* contracts<sup>55</sup> are non-binding in terms of maturity, implying that investment

<sup>55</sup> AAOIFI Shari'a Standard on Mudaraba states that it is non-binding.

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account holders can withdraw their funds at any time, subject to foregoing their share of profit (but not of loss) for the most recent period. The BMA stipulates that banks should monitor their maturity mismatch position for both corporate books (carrying self-financed assets and those financed by unrestricted investment accounts) and restricted investment account holders. It has laid down criteria for reporting inflows and outflows from 0-6 months on a cash basis and from 6 months to 5 years on maturity basis. The agency has set mismatch limits for the unrestricted investment accounts of 10 per cent of the eligible capital base for the 0-8 day time band and 20 per cent for the 8 days to 1 month band. However, on a consolidated basis for both corporate books (carrying self-financed assets and those financed by unrestricted account holders) and restricted investment accounts, the BMA has set a ceiling of 15 per cent for the 0-8 days time band and 25 per cent for the 8 days to 1 month time band.

On corporate governance, the BMA said that in addition to compliance with all AAOIFI's accounting standards, governance standards and pronouncements issued by AAOIFI's *Shari'a* board, banks are also required to submit a statement of strategy and objectives for a minimum period of 3 years, outline their organisational structure, and note responsibilities of key management personnel. New recruitment of key management will require prior approval of the BMA and needs to be reported immediately. The bank must also have an independent *Shari'a* supervision committee complying with the AAOIFI's governance standard for Islamic institutions and an audit committee which must be composed solely of non-executive directors. This is a requirement of AAOIFI's Governance Standard on Audit and Governance Committee<sup>56</sup>.

These regulations will, assuming a reasonable degree of market discipline, give the Bahrain banks a competitive edge in the Islamic banking industry, taking into account both the investment and commercial banking aspects of Islamic banking, and it is hoped that other countries will adopt similar regulations in order to be competitive. The BMA is indeed among the authorities which established the Islamic Financial Services Board (IFSB), which is explained in the next section.

<sup>&</sup>lt;sup>56</sup> See AAOIFI's Governance Standard for Islamic Financial Institutions No. 4, 'Audit and Governance Committee for Islamic Financial Institutions'.

## 6.6 The Role of the Islamic Financial Services Board

The setting up of the Islamic Financial Services Board (IFSB) is the culmination of an extensive two-year consultative process initiated by Professor Rifaat Ahmed Abdel Karim, when he was a Secretary General of AAOIFI at a breakfast meeting in Bahrain in January 1999. The idea was subsequently forwarded to a group of governors and senior officials of the central banks and monetary authorities of several Islamic countries. They have been helped by AAOIFI, the Islamic Development Bank, and the International Monetary Fund (IMF) to set up the Board. The aim of the Board is to promote, disseminate and harmonise best practices in the regulation and supervision of the Islamic financial services industry. It was officially established on 3 November 2002 in Kuala Lumpur, Malaysia, in the presence of the Prime Minister of Malaysia at that time, Datuk Seri Dr Mahathir Mohamad.

The Board will serve as an association of central banks and monetary authorities, and other institutions that are responsible for the regulation and supervision of the Islamic financial services industry.

The Board is expected to play a key role in guiding authorities who have limited experience of regulating Islamic financial institutions. One of the expressed aims of the Board will be to set and disseminate standards and core principles, as well as to adapt existing international standards for the supervision and regulation of the Islamic financial services industry consistent with the *Shari'a* compliance. The activities of the Board include liasing and co-operating with other standard setters in the areas of monetary and financial stability around the world. In addition, the Board will promote good practices in risk management in the industry through research, training and technical assistance.

The IFSB is intended to play a role broader than that of the BCBS, since it also will address the whole range good practice issues facing the Islamic financial services industry. There are huge challenges for the IFSB. The main ones apart from the capital ratios, reserves and risk management standards are corporate governance, transparency and investor protection. There are two exposure drafts issued by IFSB in March 2005 on Risk Management (Exposure Draft No. 1) and Capital Adequacy (Exposure Draft No. 2).

# 6.7 Concluding Remarks

Islamic banks' regulators have the responsibility to ensure that the banks are regulated and supervised so as to maintain and enhance the confidence of the participants in the financial services industry and investors towards Islamic banks. The accounting and the reporting system of Islamic banks should reflect the risks faced by them and the ways to mitigate these risks in order for users to properly assess the position of the banks. In this regard, the guidelines in Basel II could be used by Islamic banks with necessary modifications and adaptations to cater for the specificaties and characteristics of Islamic banks.

Despite many challenges, Islamic banks have proved themselves by their viable operational existence in the past two decades. However, Islamic banks do need a comprehensive and uniform set of standards to address the issue of transparency with respect to risk. The role of IFSB in providing guidelines on risk reporting to Islamic banks could be seen as a good initiative to solve the above issue. Islamic banks have a moral obligation, which makes their role unique in order to alleviate some of the problems that face the Islamic *Ummah* today.

# Chapter 7 Research Methodology

### 7.1 Introduction

This chapter discusses the research methodology used in this study and the methods used to answer the research questions outlined in section 1.2 of the thesis. As already mentioned in the earlier chapters, the transparency of the banks' annual reports (in this case, Islamic banks) with regard to risk reporting is very important to the soundness and the stability of the whole banking system. The public usually expects more risk information in order to evaluate a bank. This study aims to elicit the opinions of several respondents who deal directly with Islamic banks, including Islamic banks themselves, on several issues pertaining to risk reporting, transparency and market discipline in Islamic banks.

Most research textbooks represent research as a multi-stage process to follow in order to undertake methodology and complete the research project (e.g. Saunders et. al, 2001 and Sekaran, 2000). This process include formulating and clarifying a topic, reviewing the literature, choosing a strategy, collecting data, analysing data and writing up (Saunders et. al, 2001). Figure 7.1 illustrates the overall description of research process used in this study.

Section 7.2 summarises the literature review in the study. Section 7.3 describes the research objectives and questions for this research project. The research propositions are formulated in section 7.4. Type of data and the method to collect the data are discussed in sections 7.5 and 7.6. Section 7.7 explains the criteria used in selecting the respondents. Section 7.8 and 7.9 discuss the pilot study and the data acquisition methods. Statistical methods used to test the propositions are discussed in section 7.10. A summary is provided in section 7.11.

### 7.2 Review of Related Literature

According to Sekaran (2000); 'the critical literature review will form the foundation on which the research is built'. A thorough literature review was carried out to summarise the existing body of knowledge in the areas of specific interest to this study. The main sources of the literature review were journals, conference proceedings, books, reports, theses and bank regulators' papers.





Source: Author (2005)

The literature review should be a description and critical analysis of what other authors have written (Jankowicz, 1995). This is done to ensure that no important variable is ignored that has in the past been found to have had an impact on the problem.

The literature review could be either in: (Saunders et. al, 2001):

- a single chapter; or
- a series of chapters.

For this study, the literature review was summarised in a series of chapters (Chapters 2 to 6) discussing the following:

- 1. Disclosure of risks in conventional banks (Chapter 2)
- 2. Best practices for conventional banks on risk disclosure (Chapter 3)
- 3. Transparency and market discipline in conventional banks (Chapter 4)
- 4. Islamic banks versus conventional banks: Risk management and disclosure (Chapter 5)
- 5. Transparency in Islamic banks: Issues and implications (Chapter 6)

Chapter 2 discusses the importance of adequate risk disclosure by conventional banks and the roles of segment reporting in that context. It is argued that adequate risk disclosure could improve market discipline (Pillar 3, Basel II). Accounting standards on segment reporting (IAS 14, SFAS 131, SSAP 25, and the UK SORP on Segmental Reporting for Banks) and the role of segment reporting are also discussed in this chapter.

Chapter 3 identifies the gaps between the current accounting standards and the current best practice as advocated by regulators (BCBS). The chapter discusses the existing international accounting standards that are relevant to banks, which include IAS 30 and IAS 32 and also the new ED 7. It then, provides example of the best current practices for conventional banks by reviewing three leading banks in Europe. In addition, this chapter explains the signalling theory (Watts and Zimmerman, 1986) with regard to the disclosure issues. Chapter 4 provides the link between transparency and market discipline and discusses some of the causes of the previous banking crisis.

In addition, the role of bank supervisors in facilitating transparency is also discussed in this chapter.

Chapters 5 and 6 look at the case of Islamic banks. First, the differences between conventional banks and Islamic banks are discussed in Chapter 5. This leads to the recognition that different accounting standards need to be designed to cover the specificaties of Islamic bank's transactions and risks. Then, Chapter 6 explains the issue of transparency within the context of Islamic banks and the implications of transparency for Islamic banks.

# 7.3 The Research Objectives and Questions

This study investigates the transparency of Islamic banks with respect to risk reporting in the annual reports. After reviewing the literature, the researcher is in a position to narrow down the problem from its original broad base and define more clearly the issues of concern.

Based on a thorough literature review, two sets of **research issues** are identified in this study:-

**First**: Islamic banks are required to adhere to *Shari'a* rules in their dealings and transactions, and therefore their risks are also influenced by the *Shari'a* limitations on risk mitigation. Furthermore, most Islamic banks are located in emerging market countries, in which the market is not efficient yet. It is important to get the perceptions of the respondents on this issue in comparison to those currently disclosed in conventional banks.

Second: Current financial reporting standards do not require enough disclosure on risks and risk management, as can be seen from a comparison between on one hand IAS 32, ED 7 and FAS 1 and the best practice of several leading banks in Europe on the other hand. Therefore, it is interesting to evaluate the extent of risk disclosure within the context of Islamic banks and what information is required by bank supervisors to supervise Islamic banks. Basel II has also included market discipline in its Pillar 3, which requires the banks to increase disclosure in order to improve market discipline.

#### 7.3.1 The Research Objectives

Having discussed the two research issues, what follows defines the research objectives of this study, which can be summarised as follows:

- To ascertain the perceptions of Islamic bankers<sup>57</sup> on nature of risks, risk measurement and risk management approaches of Islamic banks in comparison to those of conventional banks and with reference to the market environment in which Islamic banks typically operate.
- 2. To ascertain the information that the supervisors of Islamic banks require most to monitor the risk profile of Islamic banks, but which is not required by existing financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) ), and also the most important supervisory tool to monitor the risk profile of Islamic banks.
- To examine the implications of transparency with particular reference to market discipline for Islamic banks and disclosure of risk and risk management.
- 4. To evaluate the adequacy of risk reporting in existing Islamic banks' annual reports.
- 5. To explore policy implications from the above for the Islamic banks' regulators (central banks) and standard setters (IFSB and AAOIFI), with reference to Pillar 2 and Pillar 3 of Basel II.

#### 7.3.2 The Research Questions

As mentioned earlier, the topic of the present study is concerned with the opinions of several groups of respondents on the issue of transparency with regard to risk reporting in Islamic banks. Therefore, the following research questions need to be addressed and investigated (see Table 7.1 below).

RQ1 How does the risk perception of Islamic bankers differ from conventional bankers with respect to the market in which Islamic banks typically operate? Do Islamic banks use the more technically advanced risk measurement techniques? Apart from using similar risk mitigation approaches as in conventional banks, do Islamic banks widely use *Shari'a* compliant risk mitigation approaches? Also

<sup>&</sup>lt;sup>57</sup> The term 'Islamic bankers' used in this thesis refers to CFOs/CEOs and risk managers of Islamic banks in the study.

# which risk mitigation approaches used by conventional banks are not used by Islamic banks?

Research Objectives	Research Questions	
<ol> <li>To ascertain the perceptions of Islamic bankers on nature of risks, risk measurement and risk management approaches of Islamic banks in comparison to those of conventional banks and with reference to the market environment in which Islamic banks typically operate.</li> <li>1-a To identify what risks are perceived as important in Islamic banks and whether there are differences among countries surveyed.</li> <li>1-b To identify the risk measurement and risk management techniques which are widely used in Islamic banks and whether <i>Shari'a</i> compliant risk mitigation approaches are used by Islamic banks.</li> </ol>	<ul> <li>1-a. How does the risk perception of Islamic bankers differ from conventional bankers with respect to the market in which Islamic banks typically operate?</li> <li>1-b. Do Islamic banks use the more technically advanced risk measurement techniques?</li> <li>1-c. Apart from using similar risk mitigation approaches as in conventional banks, do Islamic banks widely use <i>Shari'a</i> compliant risk mitigation approaches?</li> <li>1-d. Also which risk mitigation approaches used by conventional banks are not used by Islamic banks?</li> </ul>	
<ul> <li>2-a. To ascertain the information that the supervisors of Islamic banks require most to monitor the risk profile of Islamic banks, but which is not required by financial reporting standards (with reference to IAS 32, ED 7 and FAS 1)</li> <li>2-b. To identify the supervisory tool which is perceived to be the most important to supervise the risk profile and risk</li> </ul>	<ul> <li>2-a. How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors?</li> <li>2-b. Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?</li> </ul>	

# Table 7.1: Phrasing Research Objectives as Research Questions

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# Table 7.1 (continued)

<ul> <li>3. To examine the perceived role of transparency in Islamic banks from a risk reporting point of view with particular reference to Basel II.</li> <li>3-a To evaluate how much the respondents agree or disagree in their opinions on the importance of transparency in Islamic banks.</li> </ul>	3. What is the perceived role of transparency in Islamic banks from a risk reporting point of view with particular reference to Basel II?
3-b To evaluate how much the respondents agree or disagree in their opinions on the importance of market discipline in Islamic banks.	
3-c To evaluate how much the respondents agree or disagree in their opinions on the role of the supervisors of Islamic banks in supervising Islamic banks from a risk point of view.	
3-d To evaluate how much the respondents agree or disagree in their opinions on the implications of Basel II to Islamic banks on risk profile and risk management.	
3-e To evaluate how much the respondents agree or disagree in their opinions on the role of external rating agencies in enhancing the transparency of Islamic banks.	

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# Table 7.1 (continued)

<ul> <li>4. To evaluate the adequacy of risk reporting in existing Islamic banks' annual reports.</li> <li>4-a To identify variables which are perceived to be most inadequately reported in existing Islamic banks' annual reports.</li> <li>4-b To identify variables which are perceived to be most adequately reported in existing Islamic banks' annual reports.</li> </ul>	4. To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports perceived by the supervisors of Islamic banks and other interested parties to be adequate to provide sufficient transparency for Islamic banks?
5. To explore policy implications from the above to the Islamic banks' regulators (central banks) and standard setters (IFSB and AAOIFI), with reference to Pillar 2 and Pillar 3 of Basel II.	5. What are the implications of the above for the implementation of Basel II, for banking supervision (Pillar 2) and for regulation of risk disclosures (Pillar 3)?

RQ2 How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors? Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?

RQ3 What is the perceived role of transparency in Islamic banks from a risk reporting point of view, with particular reference to Basel II?

RQ4 To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports perceived by the supervisors of

Islamic banks and other interested parties<sup>58</sup> to be adequate to provide sufficient transparency for Islamic banks?

RQ5 What are the implications of the above for the implementation of Basel II, for the regulation of risk disclosures (Pillar 3) and for banking supervision (Pillar 2)?

### 7.4 Development of Research Propositions

Having reviewed the related literature, identified research issues and formulated research objectives and questions, what follows is the formulation of the research propositions relating to the transparency of risk reporting in Islamic banks.

The research propositions are thus developed based on the main findings of prior research literature as well as by referring to IASs (IAS 1, IAS 32<sup>59</sup> and ED 7) and AAOIFI's accounting standard (FAS 1) and also the unique characteristics of Islamic banks as compared to conventional banks. The propositions relate to opinions of several groups of respondents<sup>60</sup> about the transparency of risk reporting in Islamic banks. These are as follows:

- Propositions 1 5 concern Islamic bankers' (CFOs/CEOs/General Managers and Risk Managers) opinions about the nature of risks, risk measurement and risk management techniques in Islamic banks and relate to Section A (Questions 1, 2 and 3) in Version 1<sup>61</sup>.
- Propositions 6 7 concern supervisors of Islamic banks' (central banks) opinions about the information which they require, but is not required by financial reporting standards to monitor risk profile in Islamic banks. These propositions relate to
- Section A (Questions 1, 2 and 3) in Version 2 and Question 9 (Section B) in Version 1.

<sup>&</sup>lt;sup>58</sup> Other interested parties include external auditors, external rating agencies and representatives from IFSB and AAOIFI.

 <sup>&</sup>lt;sup>59</sup> This study covers a period prior to the more recent (December 2003) revision of IAS 32 which is applicable for annual periods beginning on or after 1 January 2005.
 <sup>60</sup> The respondents used in this study include Islamic banks' management (Chief Financial Officers - CFOs/Chief Executive

<sup>&</sup>lt;sup>60</sup> The respondents used in this study include Islamic banks' management (Chief Financial Officers - CFOs/Chief Executive Officers -CEOs/ General Managers and Risk Managers), central banks, external auditors, external rating agencies, IFSB and AAOIFI. See Section 7.7 for details.

<sup>&</sup>lt;sup>61</sup> There are three versions of the main questionnaire. Version 1 is directed to the Islamic bankers (CFOs/CEOs/General Managers/Risk Managers). Version 2 is given to the supervisors of Islamic banks (central banks), and Version 3 is designed for other groups which include external auditors, external rating agencies, IFSB and AAOIFI. See Section 7.9.1 for details.

- Propositions 8 12 deal with the perceptions of the survey respondents on the issues of transparency, risk disclosure, market discipline, role of supervisors of Islamic banks, role of external rating agencies and signalling hypothesis, and relate to Question 10 (Section B) in Version 1 and Question 4 (Section B) in Version 2 and 3.
- Proposition 13 deals with the perceived level of adequacy of risk reporting in existing Islamic banks' annual reports, and relates to Question 5 (Section C) in Version 2 and 3.

# 7.4.1 Islamic bankers' opinions about the nature of risks, risk measurement and risk management techniques in Islamic banks

# Propositions 1 and 2

As mentioned in Chapter 2, a number of risks are inherent in the conventional banks. These include credit risk, market risk, liquidity risk and operational risk. Banks, therefore, need to be extremely cautious about their exposure to these risks and to develop systems for their identification, control and management.

There is no exception for Islamic banks. As can be realised from Chapter 5, there are basically six financing techniques which are used as alternatives to interest-based financing by most Islamic banks. These are *Murabaha*, *Mudaraba*, *Musharaka*, *Ijarah*, *Istisna'a* and *Salam*.

However, the various instruments used by Islamic banks are exposed to similar risks as in conventional banks, but apparently to different degrees because of *Shari'a* requirements. For example, interest rate risk is one of the most important market risks faced by conventional banks. Since Islamic banks do not deal in interest-based instruments, some may argue that Islamic banks do not face this risk. However, Islamic banks face "rate of return risk", a type of market risk, such as in *Ijarah* and longer-term *Murabaha*. Both contracts are also exposed to credit risk.

*Istisna'a* is a contract of exchange with deferred delivery, applied to specified madeto-order items, whereas *Salam* is a contract for deferred delivery of a commodity or fungible goods. It was originally sanctioned during the time of the Prophet Mohammed (Peace Be Upon Him) to facilitate the trading activities of farmers who were awaiting the harvest of crops. Both contracts are exposed to several risks, which include credit risk and price risk.

Apart from the credit risk of the client of the bank, the latter, in *Istisna'a*, will be carrying a performance risk. Since the bank's client has neither recourse nor any contractual relationship with the actual manufacturer or contractor, the bank will always be liable for any failure.

In addition to the credit risk (seller's default) which exists for *Salam*, the bank will be facing market risk. While spot prices at the time of delivery are expected to be higher than that of the *Salam* price, the market may fluctuate in any direction.

Table 7.2 presents the type of risks in *Murabaha*, *Ijarah*, *Salam* and *Istisna'a* and possible risk mitigation techniques.

Islamic Products	Type of Risks	Possible Risk Mitigation
Murabaha	Change in price before resale Default risk (failure to pay in time. Rate of return risk (fixed mark- up)	Transfer of the ownership at the outset Use of charity account to impose penalty charge for delayed payment
Ijarah	Credit risk Ownership risk	Guarantee from the lessee Repossession of asset
Salam	Credit risk (seller's default) Price risk (market may fluctuate)	Parallel Salam used (collateral) - Hedges price risk
Istisna'a	Credit risk Performance risk	Performance bond from the manufacturer's or contractor's bank Letter of guarantee during construction or warranties after delivery

Table 7.2: Risks in Murabaha, Ijarah, Salam and Istisna'a contracts

Table 7.2 shows that Islamic financial instruments are exposed to similar types of risks to which conventional banks are exposed, namely credit and market risks.

*Murabaha* and *Ijarah* constitute a large percentage of the Islamic banks' assets (Al-Omar and Iqbal, 2000). Their popularity in Islamic banks could be due to the fact that banks can predict the returns from these two instruments fairly well, in addition to which they provide the banks with regular cash flows which help the banks to partially meet their liquidity requirements. Hence banks may view these two instruments less risky than the other instruments, particularly *Istisna'a* and *Salam*.

Therefore, it is proposed that:

**Proposition 1**: Salam and Istisna'a are perceived as more risky than Murabaha and Ijarah.

Profit sharing contracts (*Musharaka* and *Mudaraba*) are considered to be more risky than mark-up based contracts (*Murabaha, Salam, Istisna'a* and *Ijarah*) (Khan and Ahmed, 2002). This is because they are exposed to the risk of capital impairment as a result of operating losses. In addition, in both instruments, the banks are exposed to credit risks. This is where the *Mudarib* or the partner in *Musharaka* fails to pay the bank its due share of profits. It is permissible to create risk mitigating structures for *Mudaraba* (or *Musharaka*), but these do not seem to be widely used<sup>62</sup>.

Therefore, it is proposed that:

**Proposition 2**: Profit sharing contracts (*Musharaka* and *Mudaraba*) are perceived as more risky than mark-up based contracts (*Murabaha*, *Salam*, *Istisna'a* and *Ijarah*).

# **Proposition 3**

Even though Islamic banks have to conform to two types of laws; *Shari'a* (religious) law and positive (secular) law, there is no uniformity in the *fatwas* followed by them around the world.

Another challenge faced by Islamic banking industry is different interpretations by *fiqh* scholars in different countries on *Shari'a*, which has served only to confuse and slow down the development of the industry. For example, Islamic banks in Malaysia have different interpretations of *Shari'a* rulings and product permissibility from the

<sup>&</sup>lt;sup>62</sup> The creation of the "repayment account" as reported by Qatar Central Bank operates by transferring credit risk from the *Mudarib* to the ultimate customer when *Mudaraba* is used for project finance, and this is particularly important when the ultimate customer is a sovereign or equivalent.

Gulf countries, Sudan and others, particularly in the sale of debt which is allowed in Malaysia but not in the other countries.

In Malaysia, there is centralised *Shari'a* Board Committee. In Gulf, it is not allowed for the Islamic banks to trade securities based on debt except for those created under *Ijarah*. Nevertheless, there is already an acceptance on the trading of securities that are based on combination of debt assets (BBA and others) and *Ijarah* assets, subject to *Ijarah* assets must be at least 51 per cent of the total assets used for the securities. In Sudan, banks are not allowed to use parallel *Salam* or parallel *Istisna'a* and in Kuwait, Kuwait Finance House does not use binding *Murabaha*. These different interpretations of *Shari'a* may have an impact also on the perceptions of risk in these countries.

#### Therefore, it is proposed that:

**Proposition 3**: Differences in *Shari'a* interpretation may lead to different perceptions of risk by Islamic bankers in different countries in the study.

#### **Proposition 4**

As mentioned in the literature review (Chapter 2) and a review of leading banks in Europe, conventional banks use several risk measurement and mitigation techniques. They include credit ratings, gap analysis, duration analysis, VaR, RAROC and others.

Islamic banks are still developing and serious challenges face them. Some Islamic banks are small in size. The lack of ratings or external source of credit assessment for the clients of most Islamic banks is also a serious limitation for using these approaches. Hence, it would not be expected that Islamic banks use the same techniques used by their conventional counterparts, in particular the more technically advanced risk measurement approaches (for example, Value at Risk, Simulation techniques, Estimates of Worst Case – Stress Tests, RAROC and Internal Rating Based System).

#### Therefore, it is proposed that:

**Proposition 4**: Not many Islamic banks use the more technically advanced risk measurement approaches.

# **Proposition 5**

The proposition in this section was developed from the unique characteristics of Islamic banks. As mentioned earlier, Islamic banks are still not using derivatives to hedge risks as currently practiced by conventional banks. Conventional banks have a variety of risk management techniques, which include credit derivatives and financial derivatives to manage the exposure to market risks, for example swaps, forwards, futures and options. Derivatives in their present form are not accepted by *fiqh* scholars because according to them, this leads to *maysir*, which consequently leads to *gharar*.

The results from Khan and Ahmed (2001), as discussed in Chapter 5, point out that the lack of some instruments (like short-term financial assets and derivatives) and a money market (except in Malaysia and to some extent in Bahrain) hampers risk management in Islamic financial institutions. Islamic banks which invest the funds of profit sharing investment accounts (PSIA) in longer maturity *Murabaha* or *Ijarah* assets cannot similarly mitigate the risk of being squeezed if market expectations of returns subsequently increase before the assets mature. This is particularly true of *Murabaha* assets, for which (unlike floating rate *Ijarah*) no re-pricing is permitted by *Shari'a*.

However, it is important for Islamic banks to make serious attempts to develop *Shari'a* compliant derivatives. For example 'synthetic options' in the form of *Urboun*, parallel *Salam* (similar to conventional *future contract*) and parallel *Istisna'a*, which have been accepted by some *fiqh* scholars. Other example includes the creation of the "repayment account" as reported by Qatar Central Bank. It operates by transferring credit risk from the *Mudarib* to the ultimate customer when *Mudaraba* is used for project finance, and this is particularly important when the ultimate customer is a sovereign or equivalent.

Therefore, it is proposed that:

**Proposition 5**: Islamic banks use a number of risk mitigation methods that are intended to be *Shari'a* compliant and are different from methods used by conventional banks.

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# 7.4.2 Supervisors of Islamic banks' opinions about the information required most to monitor risk profile in Islamic banks

# Propositions 6 and 7

A growing line of research, as discussed in Chapter 4, provides empirical support for the proposition that bank supervisors at times have an information advantage over other outside monitors (Flannery and Houston, 1999; Berger et al, 2000 De Young et al, 1998; Jordan et al, 1999; Cole and Gunter, 1998; and Berger and Davis, 1998). These studies indicate that bank supervisors have more information than the public. For example, Cole and Gunter (1998) predict bank failure using public information and supervisor's CAMEL ratings and the findings show CAMEL ratings provide better prediction. This information is in addition to that which is required by current financial reporting standards (IASs). IAS 30, IAS 32, ED 7 and FAS 1, as described earlier in Chapters 3 and 5, require the items to be disclosed in the financial statements of the banks. However, in order to perform effective supervision, bank supervisors may require additional information including proprietary and confidential information (apart from the issue of frequency).

Islamic banks, being part of the financial system, are also subject to the supervision of the central banks of their respective countries. As the supervisors of Islamic banks, the information required is similar to conventional banks with the exception of *Shari'a* requirements. Supervisors of Islamic banks require the information from the *Shari'a* Supervisory Committee to ensure that the operations of Islamic banks are not in violation of *Shari'a* principles. In addition, supervisors of Islamic banks have a responsibility to ensure that Islamic banks are adequately regulated and supervised so as to maintain and enhance the confidence of the participants in the financial services industry, in their dealings with Islamic banks.

Therefore, it is proposed that:

**Proposition 6**: Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks.

Effective supervision of banks, which includes offsite and onsite supervision, ensures that banks function safely and soundly, so that the financial system can attain the confidence of savers and investors. Bank examinations enable supervisors to confirm the accuracy of information in regulatory reports

Different countries use different methods and approaches to assess bank risks. These approaches, as discussed in Chapter 4, include supervisory ratings, financial ratios, peer group analysis, risk based supervision and statistical methods shall gradually be adopted in order to make supervision effective. However, as mentioned above, many supervisors use a rating system to draw together assessments of the various components of a bank's condition (De Young et al., 2001)

The supervisory ratings, for example CAMELS ratings (refer to footnote 26 on page 59 to distinguish between CAMEL and CAMELS) allow supervisors to gather confidential information about bank's financial conditions and to assess qualitative attributes, such as internal controls and risk management procedures that affect bank risk profiles. CAMELS ratings, which are assigned by examiners at the conclusion of an examination, are numerical ratings of the quality of a bank's financial condition, risk profile and overall performance. CAMELS ratings reflect a combination of publicly available information (such as recent financial statements) and private information produced by bank examiners during their on-site investigation (such as the quality of individual loans).

Most Islamic banks are supervised by central banks in the countries they are located. These central banks also have similar supervision methods, for example CAMELS, as used in conventional banking supervision but according to *Shari'a* requirements. For example, in determining an adequate level of capital, some central banks follow the guidelines issued by AAOIFI, which require 50% of the risk-weighted assets of the profit sharing investment accounts to be included in the denominator of the capital adequacy ratio in order to cater for the fiduciary and displaced commercial risk associated with Islamic banking. In addition, corporate governance structure for Islamic banks is unique as it has a *Shari'a* Supervisory Committee.

The nature of risks and *Shari'a* compliant risk mitigants in Islamic banks are different from conventional banks that may affect the supervision of Islamic banks.

Therefore, it is proposed that:

**Proposition 7:** Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks as compared to other approaches (e.g. statistically based).

# 7.4.3 Transparency and market discipline

# **Proposition 8**

As mentioned in Chapter 4, Flannery (1998) suggests that market information may improve the overall process for regulators by enabling them to identify incipient problems more promptly. In addition, market information may provide bank regulators with an incentive and justification to take action more quickly, once problems have been identified. As discussed in Chapter 4, market information does add value to supervisory information. A number of studies show that equity market and debt market indicators can marginally increase the explanatory power of BOPEC or CAMEL forecasting models (Gunther et al., 2001, Berger et al., 2000). Indeed, as suggested by Pillar 3 of Basel II, market discipline is to supplement Pillar 1 (minimum capital requirement) and Pillar 2 (supervisory review).

Since there are differences between the nature of Islamic and conventional banking, it is interesting to ascertain whether it is perceived that market discipline could also enhance banking supervision in Islamic banks. Unlike a conventional bank which is basically a borrower and lender of funds, an Islamic bank is essentially a partner with its investment account holders, on the one side, and also a partner with entrepreneurs, on the other side, when employing investment account holders' funds in productive direct investment.

These financial arrangements imply quite different stockholder relationships from the conventional model since investment account holders have a direct financial stake in the bank's investment and equity participation. These may have an impact towards the banking supervision, because the investment account holders could assist the

supervisors of Islamic banks in their supervision by ensuring that their funds are invested in productive investment.

Therefore, it is proposed that:

**Proposition 8**: Market discipline could facilitate banking supervision in Islamic banks, similarly to conventional banks.

# **Proposition 9**

The following proposition is intended to point out the importance of transparency in Islamic banks. As discussed earlier in Chapter 4, it is widely recognised that effective market discipline depends on market participants having information about the risks and financial condition of banking firms (Crockett, 2001; Nier and Baumann, 2003). Therefore, attention is being focused increasingly on ways to improve transparency in conventional banks, particularly by international organisations, for example the BCBS and the World Bank.

Islamic banks have unrestricted profit sharing investment account holders that require more transparency than depositors in conventional banks, in order to monitor their investment in Islamic banks. Unlike depositors in conventional banks, the return on investment account holders' investment in the bank is uncertain, since they share in the profit (asset returns net of operating expenses) generated by the bank. The unrestricted investment account holders are also exposed to the risk of losing any or all of their initial investment.

Collective investment schemes (CIS) are funds which pool investors' money and invest on their behalf, which has similarity with investment accounts in Islamic banks. However, CIS are different from investment accounts due to the fact that each fund is separate legal entity and investment accounts in Islamic banks are not separate legal entities from the Islamic bank which manages them. This exposes the investment account holders to higher risks than CIS holders.

Therefore, it is proposed that:

**Proposition 9**: Transparency with regard to risk reporting is perceived to be more important for unrestricted profit sharing investment account holders in Islamic banks than for depositors in conventional banks.

#### **Proposition 10**

As mentioned in Chapter 2, disclosure alone does not necessarily result in transparency. In order to achieve transparency, effective disclosure is required, which means that a bank must provide timely, accurate, relevant and sufficient disclosures of qualitative and quantitative information that enables users to make proper assessment of the institution's activities and risks inherent in those activities. Islamic banks are no exception. In addition, due to profit sharing arrangements as proposed in Proposition 9, it is more important to have more transparency and more effective risk disclosure as compared to conventional banks.

Therefore, it is proposed that:

**Proposition 10**: In the countries in which Islamic banks are surveyed, it is perceived that effective disclosure helps market participants to assess the investment account holders' performance.

#### **Proposition 11**

Basel II contains three pillars. The first pillar (Pillar 1) addresses minimum capital ratios, which for credit risk is calculated through new "risk bucketing" approaches. The second pillar (Pillar 2) adds supervisory review of banks' internal risk and capital management practices, and significantly, requires that major banks adopt comprehensive, internal economic capital models. The third pillar (Pillar 3) concerns better market discipline through improved standards and practices of disclosure, including risk disclosure

The riskiness of banks' assets can hence be assessed only on an ongoing and case-bycase basis by the supervisory authorities. It is therefore, prudent to make Basel II as the basis for capital determination and to raise the standard adequacy for taking into account, for example the ratio of demand deposits in total bank resources and the degree of risk involved in different Islamic modes of finance. In view of the special nature of investments and the risks faced by the assets of Islamic banks, application of Basel II has become a challenging task. Therefore, there is a need to modify Basel II to in order to cater for the specificities of Islamic banks.

In Islamic banking, it is even more important to disclose accurate financial results, since mobilisation of funds is mainly based on profit and loss sharing and thus information on financial results is very essential.

Therefore, it is proposed that:

Proposition 11: Basel II is applicable to Islamic banks with modifications.

# **Proposition 12**

As mentioned in Chapter 4, credit rating agencies could act as intermediaries in the disclosure process. The objective of credit analysis is to determine the relative likelihood of a future loss arising on a particular obligation. Ratings are intended to serve as indicators or forecasts of the potential for credit loss because of failure to pay, a delay in payment, or partial payment (Moody's, 1997).

There is no difference in this respect between Islamic banks and conventional banks. Both are subject to credit rating analysis but in the case of Islamic banks, certain factors take on greater importance. This is generally because of the lack of appropriate regulation, agreed principles of accounting, accepted standards for capital adequacy and tools for managing liquidity (Moody's, 1997). However, the main problem for credit risk under Pillar 1 of Basel II is that few of the Islamic banks' credit risks (i.e. recipients of financing) have external credit rating.

Therefore, it is proposed that:

**Proposition 12**: External credit ratings of Islamic banks are perceived to help the public to assess the banks' financial condition.

# 7.4.4 The level of risk information adequacy in existing Islamic banks' annual reports

#### **Proposition 13**

The Signalling Theory as discussed in Chapter 2 suggests that when banks' performance is good, banks will wish to signal their high quality information to the market. It is hoped that this information could assist the financial statement users in their decision-making (Watts and Zimmerman; 1986). The benefits of signalling are expected to motivate corporate disclosure. Asymmetric information between the bank and the financial markets may result in agency costs. Such agency costs arise when the bank's actions, for example with respect to risks taken by the bank, are only imperfectly observable by investors and when there are conflicts of interest as to which action should be taken by the bank. Enhanced disclosure may reduce asymmetric information about the actions taken by the bank and therefore reduce the associated agency costs (Cordella and Yeyati, 1998; Nier and Baumann, 2003).

The literature in Chapter 4 shows that the financial crises, particularly in the East Asian countries, that took place in the mid 1990s were due, among other things, to inadequate risk disclosure in the financial reports (Fons, 1998; Rahman, 1999; and Llewellyn, 2001). If adequate information on risk exposure had been provided or required periodically, banks might have exercised better risk management, or allowed international investors and creditors to register their concern over time, and thus avoided the sudden withdrawal of capital from the region. For an Islamic bank, due to its unique characteristics of profit and risk sharing arrangements, it is even more important to be transparent (Sundararajan and Errico, 2001). Therefore, it is hoped that by being transparent, Islamic banks could mitigate future banking crisis.

Segment reporting as discussed in Chapter 2 can assist the user of financial statements in making judgements about the opportunities and risks facing an enterprise by the disclosure of finer information that provided in the primary financial statements (IAS 14). This, in turn can enhance the transparency of the enterprise. Users need as much information as is compatible with confidentiality, delivered on time, clear and comprehensible to assess the banks' solvency, liquidity and profitability. As suggested in Pillar 3 of Basel II, in order to strengthen market discipline, banks must disclose both qualitative and quantitative information on their risks and risk management policies. This is a highly challenging area for Islamic banks. Islamic banking is still in its initial phase of development and it is expected that its risk reporting, particularly qualitative risk information may not be adequate to provide sufficient transparency for market discipline.

Therefore, it is proposed that:

**Proposition 13**: The existing disclosure about the qualitative information on risks and risk management techniques in Islamic banks' annual reports in the countries surveyed is not adequate to provide sufficient transparency that can enhance market discipline.

Table 7.3 summarises all the propositions used in this study.

# 7.5 Type of Data

This study is mainly concerned with the analysis of opinions about the transparency of risk reporting in Islamic banks. Thus, the information needs in this research are the perceptions of the Islamic bankers, supervisors of Islamic banks, external auditors, external rating agencies, IFSB and AAOIFI on the above issues.

# 7.6 Data Collection Method

How can a researcher measure something that is in a person's mind? The simple answer is to ask people.

Figure 7.2 summarises a range of research strategies for doing social science research, which include case studies, surveys and experiments (de Vaus, 2002). Each strategy involves a different way of collecting and analysing empirical evidence (Yin, 1994). The use of each strategy depends upon three conditions: (1) the type of research question, (2) whether an investigation has control over actual behaviour events, and (3) whether the focus is on contemporary as compared to historical phenomena.

For the current study, since it is exploratory in nature and is quantitative, a questionnaire survey is chosen in order to answer the research questions. Furthermore,
# Table 7.3: Propositions used in this study

Proposition 1	Salam and Istisna'a are perceived as more risky than Murabaha and Ijarah.
Proposition 2	Profit sharing contracts (Musharaka and Mudaraba) are perceived as more risky than mark-up based contracts (Murabaha, Salam, Istisna'a and Ijarah).
Proposition 3	Differences in <i>Shari'a</i> interpretation may lead to different perceptions of risk by Islamic bankers in different countries in the study.
Proposition 4	Not many Islamic banks use the more technically advanced risk measurement approaches.
Proposition 5	Islamic banks use a number of risk mitigation methods that are intended to be <i>Shari'a</i> compliant and are different from methods used by conventional banks.
Proposition 6	Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks.
Proposition 7	Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks as compared to other approaches (e.g. statistically based).
Proposition 8	Market discipline could facilitate banking supervision in Islamic banks, similarly to conventional banks.
Proposition 9	Transparency with regard to risk reporting is perceived to be more important for unrestricted profit sharing investment account holders in Islamic banks than for depositors in conventional banks.
Proposition 10	In the countries in which Islamic banks are surveyed, it is perceived that effective disclosure helps market participants to assess the investment account holders' performance.
Proposition 11	Basel II is applicable to Islamic banks with modifications.
Proposition 12	External credit ratings of Islamic banks are perceived to help the public to assess the banks' financial condition.
Proposition 13	The existing disclosure about the qualitative information on risks and risk management techniques in Islamic banks' annual reports in the countries surveyed is not adequate to provide sufficient transparency that can enhance market discipline.

there is not much secondary data available for forming an opinion on the research area. Questionnaires are considered an efficient data collection method when the researcher knows exactly what is required and how to measure the variables of interest (Sekaran, 2000).





Source: de Vaus (2002)

Questionnaires are printed lists of questions used to find out what people think or feel about an issue, product or service. They can be filled in away from the researcher in the form of a self-administered, group-administered or postal questionnaire. The term 'questionnaire' is also often used to describe a set of questions administered face-to-face or by telephone in the form of a structured interview (Oppenheim, 2001; Sekaran, 2000).

The reasons for choosing a survey questionnaire method are as follows (Oppenheim, 2001; Sekaran, 2000):

- low cost of data processing
- low cost of data collection
- ability to reach respondents who live at widely dispersed addresses or abroad

However, the use of questionnaires has limitations. They include:

• low response rate

• consequent biases

The limitations can be minimised by careful thinking and pilot tests (de Vaus, 2002).

In this questionnaire, the survey respondents will be given a set of statements on a Likert scale of 1 to 5. According to de Vaus (2002), the choice between open-ended (attitude questions) or close-ended (opinion questions) depends on many factors such as the question content, the respondents' motivation, method of administration, type of respondent, and the amount of time available to develop a good set of unbiased responses. Likert scale questions are necessarily close-ended questions, i.e., asking respondents' opinions on a set of statements. A copy of the questionnaires is given in Appendix 4.

Another important aspect to consider prior to deciding on methods of analysis is that variables may be measured by using different level of scales. According to de Vaus (2002), there are three main levels of measurement scales. These are:

- a) Nominal scale, in which a distinction between categories of a variable can be made, but one cannot rank the categories in any order (e.g., the gender).
- b) Ordinal scale, in which it is meaningful to rank the answers by categories, but it is not possible to quantify precisely how much difference there is between categories.
- c) Interval/ratio scale, in which ranking of categories can be made and it is also possible to quantify the differences between the categories precisely.

### 7.7 The Selection of Respondents

Chief Financial Officers, Chief Executive Officers or General Managers and Risk Managers in Islamic Banks are used as respondents. This is because the information required is about the opinions of those responsible for financial and risk reporting in Islamic banks. The Islamic banks in Malaysia and Bahrain particularly, and other countries (Saudi Arabia, Jordan, Sudan, Kuwait, United Arab Emirates, Indonesia, Egypt, Qatar, Turkey, Iran, Bangladesh and Pakistan) were included in the sampling frame. The lists were taken from the International Directory of Islamic Financial Institutions issued by Institute of Islamic Banking and Insurance in London, and by contacting the banks directly either by e-mails or postal mails. The total number of Islamic banks was selected from 14 different countries, which include Malaysia, Sudan, Bangladesh, Pakistan and Middle East countries. The final sample consists of 28 Islamic banks, which are considered to be sufficient for this study since they represent the most established Islamic banks in these 14 countries.

The supervisors of Islamic banks, which mainly come from central banks in these 14 countries are also used as respondents in this study. This is because they are responsible for the supervision of Islamic banks in their countries, therefore their views are important in this research. Appendix 3 provides the list of Islamic banks and central banks used in this study.

External auditors who audit Islamic banks in the above countries are included because they involve directly in the financial and risk reporting in Islamic banks.

External rating agencies are also included because they were considered to be influential and knowledgeable users who provide ratings to Islamic banks.

Other respondents include the representatives from IFSB and AAOIFI because they involved in the process of presenting financial statements to the public.

# 7.8 The Conduct of Pilot Study

Each question and the questionnaire as a whole must be evaluated rigorously before final administration of the questionnaire (de Vaus, 2002). A pilot test is important to assess the adequacy of the research design and the instruments to be used for data collection.

The drafted questionnaires were first pilot tested on a group of eight PhD students in Islamic banking during the Islamic Finance Seminar in August 2003. The respondents were asked about the following questions:

- 1- How long did it take them to complete the questionnaire?
- 2- Were the instructions clear?
- 3- Were any of the statements (items) unclear or ambiguous?
- 4- Did they object to answering any of the questions?
- 5- If they have any comments and suggestions.

In general, the respondents confirmed that the average time taken to complete the questionnaire was 20 minutes, the instructions were clear, the statements were clear and not ambiguous and they did not object to answering any question. The comments and suggestions include reducing the number of pages were received and were taken into account and are included in the updated questionnaires.

The second pilot test was conducted during the International Islamic Banking Conference at Monash Prato Center, Italy in September 2003. Ten questionnaires were distributed. The groups included the representatives from central banks and Islamic banks and could be similar to the final population of the sample. Five (50%) usable responses were received, which include two from central banks, two from external auditors and one from Islamic banks. Based on the results of this pretesting, the questionnaire was amended and finalised for the main surveys as follows:

- 1- Headings were added for each section for easy reference during the analysis process, and also so that the respondents can easily answer the questionnaire.
- 2- Section B: 'Market discipline issues' originally contained 28 statements and additional 3 statements were added in order to collect more data, which could help in answering the research questions.

### 7.9 Methods of Data Acquisitions

Having discussed the pre-testing of the questions and questionnaires, the discussion moves to cast light on the administration of the questionnaires, face-to-face interviews and examination of the Islamic banks' annual reports.

### 7.9.1 Questionnaire Administration

For the aim of this research study, structured questionnaires were designed in order to elicit the opinions on the selected respondents on the transparency and risk reporting in Islamic banks. The reliability of the data obtained and the response rate achieved will depend greatly on the sound design of the questions and the structure of the questionnaire (Saunders et al., 2000). The construction and validation of the questionnaire for this research was based on an extensive review of the literature and previous similar questionnaire survey. In particular, the survey by Khan and Ahmed (2001) was found to be quite useful in developing the questions. The administration of the questionnaires was conducted from December 2003 to February 2004. For

Islamic banks, two key persons working in selected Islamic banks were chosen and the questionnaires were sent to them either by e-mail, by hand or by post. The questionnaires were sent also to the representatives of central banks, external auditors, external rating agencies, IFSB and AAOIFI.

There are three versions of the finalised questionnaire. The first version of the questionnaire (for CFOs/CEOs/General Managers and Risk Managers of Islamic banks) consists of nine pages and three sections and required approximately 30 minutes to complete. The second version of the questionnaire (for central banks) consists of seven pages and four sections and required approximately 30 minutes to complete. The final version of the questionnaire (for IFSB, AAOIFI, external auditors and external rating agencies) consists of seven pages and four sections and required approximately 30 minutes to be complete. Table 7.4 presents the main contents of the questionnaire:

	VERSION 1 (Islamic bankers - CFOs/CEOs/General Manager and Risk Managers)	VERSION 2 (Supervisors of Islamic banks – central banks)	VERSION 3 (External auditors, external rating agencies, representatives of IFSB and AAOIFI)		
SECTION A	Risk identification Risk measurement Risk management RQ 1	The extent of information required by supervisors of Islamic banks to monitor risk profile of Islamic banks RQ 2	The extent of information required by external auditors, external rating agencies, representatives of IFSB and AAOIFI to assess the transparency of Islamic banks RQ 3		
SECTION B (see Table 7.4)	Market discipline RQ 3	Market discipline RQ 3	Market discipline RQ 3		
SECTION C	Demographic information	Adequacy of the risk information in existing Islamic banks' annual reports RQ 4	Adequacy of the risk information in existing Islamic banks' annual reports RQ 4		
SECTION D		Demographic information	Demographic information		

Table 7.	.4: Main	Contents	of the	Questionnaire
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Data acquisition is organised as follows:

a. A questionnaire (Version 1) was used to elicit opinions of the Islamic banks' CFOs, CEOs or General Managers and Risk Managers on the inherent risks, risk measurement, risk management techniques and the transparency of Islamic banks with regard to risk reporting. The covering letter accompanying the questionnaire clarified

and explained the objectives of the research study. The questionnaire then was divided into two sections. Section A (Q1 to Q3) deals with the importance of the risks as experienced by the banks in the financial instruments, the risk measurement and risk management/mitigation techniques employed by the banks.

Q4 is intended to get the information on the accounting standards used by the Islamic banks.

Section B deals with the issue of transparency and market discipline. In Q5, the respondents were asked whether the banks provide any voluntary disclosures in the annual reports and then indicate the extent of this disclosure (Q6) and give the items that they provide voluntarily in the annual reports (Q7). In Q8, they were asked to rank the importance of these users in using the information published in the annual reports and which of these users have more power to monitor the behaviour of Islamic banks (Q9).

Q10 is intended to get their perceptions on the issue of market discipline in Islamic banks (see Table 7.5 below). 31 statements were presented to the survey respondents. This part of the questions applied to all the respondents, which means that it appears in all versions. Replies from the respondents were obtained by asking one to answer questions using a 5-point Likert scale (ranking from Strongly Disagree = 1 to Strongly Agree = 5) (see Appendix 4A).

Table	7.5:	Main	Content	of	the	Questionnaire	relating	to	Transparency	and
Marke	et Dis	cipline	•							

and the second	والمحاولات المحالية المحاكر والمحاكر والمحاركة والتركي المتوجع والمحاد والمحاد والمحاد والمحاد والمحاد والمحاد
Statements1-4, 6, 17-21	The importance of transparency,
	disclosure and market discipline
Statements 7-9, 12	The relationship between market
	discipline and banking supervision
Statements 10-11, 13-14	The role of supervisors of Islamic banks
Statements 15-16	Withdrawal (liquidity) risk and displaced
	commercial risk
Items 22-24	Basel II
Items 25- 29	The information about external rating
	agencies on the issue of transparency and
	disclosure
Items 30-31	Signalling hypothesis and risks disclosure

b. In Version 2 of the questionnaires, Section A (Q1) aims to elicit opinions of the supervisors of Islamic banks (central banks) on the information that the bank supervisors require most to monitor the risk profile of an Islamic bank. 14 items were given and the respondents were asked to answer the degree of importance in a 5-point Likert scale (ranking from Very Unimportant = 1 to Very Important = 5) (see Appendix 4B). These 14 items include the items which are required by financial reporting standards and not required by financial reporting standards.

Q2 in Section A (Version 2) is intended to get other non-public information required by the supervisors of Islamic banks to monitor the risk profile and management of Islamic banks. The respondents were asked to rank the importance of the risk assessment approaches in supervising Islamic banks in Q3 of the same section.

c. With regard to the adequacy of risk reporting in existing Islamic banks' annual reports, a set of questions was designed in Section C of Version 2 and 3 to elicit the respondents' opinions on this issue. 13 items were used which include the disclosure of all the risks, the liquidity, profitability, solvency, capital adequacy, risk measurement, risk management, accounting policies, corporate governance and other risk information (BCBS, 1998). The information was used as a measure of transparency in Islamic banks' annual reports. Replies from the respondents were obtained by asking each one to answer questions using a 5-point Likert scale (ranking from Very Inadequate = 1 to Very Adequate = 5) (see Appendices 4B and 4C).

d. In Version 3 of the questionnaire, Section A (Q1) presents the same items as in Q1 (Version 2) but the questions were designed to get the respondents' opinions on the importance of the items to assess the transparency in Islamic banks. The reason why the same items were used but in different questions is to see whether the respondents differ in their opinions or not. Then, the same respondents were asked to give additional information in Q2 (Section A). Q3 asks whether the current risk and segment reporting in Islamic banks are satisfactory (see Appendix 4C).

e. The last section in each version covers the background data of the respondents and their organisation. The aim of obtaining this information was that it could be used

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when analysing the data obtained from the other parts of the questionnaire to see whether personal characteristics had any effect on the respondents' answers.

In total 110 questionnaires were distributed as shown in Table 7.6.

### 7.9.2 Face-to-face Interview

After the receipt of completed questionnaires from each respondent, the researcher met the CFO/CEO, Risk Managers and the supervisors of Islamic banks in Malaysia to discuss the questionnaires and follow up questions were asked to lead the respondent to answer more fully and accurately. An audio recorder was used in the interview. Malaysia was chosen because of accessibility. Due to time and budget constraints, the researcher was unable to visit other countries to conduct the interview, so the follow-up e-mails were used as an alternative to clarify some of the answers.

Group	Number	Country			
		Malaysia	Bahrain	Others	
Islamic banks – CFOs/ CEOs	28	2	5	21	
Islamic banks – Risk managers	28	2	5	21	
Central banks	26	9	5	12	
External auditors	20	4	5	11	
External rating agencies	4			4	
IFSB	2	2			
AAOIFI	2		2		
Total	110	19	22	69	

Table 7.6: Distribution of the Questionnaires in the Main Survey

# 7.10 Methods of Data Analysis

Having chosen the appropriate method of analysis, the choice of statistics is affected by both the method of analysis itself, the level of measurement of variables and the complexity of research questions (de Vaus, 2002). In this study, the returned questionnaires were numbered and accordingly the data collected were keyed into SPSS software package which is used for data analysis. Once the data had been entered in the computer and checked for errors, they were ready for analysis. The basic objectives in data analysis are to answer the research questions and to test the propositions developed for the research.

Siegel and Castellan (1988) have argued that the proper interpretation of parametric tests is not only based on normal distribution, but also assumes that the scores being analysed result from measurement in at least an interval scale. However, as indicated earlier, most questions in this study's questionnaire used a 5-point Likert scale in order to measure the respondents' opinions about sets of statements concerning transparency of risk reporting in Islamic banks. Responses to the statements can be summed. This implies that the Likert scales are commonly treated as interval scales but one might still use non-parametric statistics, because of non-normality. The problem is that a Likert scale is essentially an ordinal scale, and not an interval scale.

However, as argued by Oppenheim (2001), the most important criticism levelled against this type of scale is its lack of reproducibility, which means that the same total score may be obtained in many different ways. This being so, it has been argued that such scores have little meaning or that two or more identical scores may have totally different meanings. For this reason, normally, the pattern of responses becomes more interesting than the total score.

Since this scale is relatively easy to construct and the scores provide more precise information about the respondents' degree of agreement/disagreement (Oppenheim, 2001), the Likert scale will still be used in this study despite its disadvantages.

A number of statistical techniques will be employed in this research. They include descriptive statistics and statistical analysis using non-parametric tests. The reason why non-parametric tests are used, apart from the normality assumption not being met (refer to Appendix 5), is the small sample size. These techniques are as follows:

# i- Descriptive Statistics

Descriptive statistics are summaries of data, which can be tabular, numerical or graphical. Green et al (2000) state that descriptive statistics involve summarisation of distribution scores by using tabular or graphical presentation and computation of

descriptive statistical measures. Different types of descriptive statistics such as the mean, the mode, the median, standard deviation, the minimum, the maximum and coefficient of skewness are calculated.

### ii- Statistical Analysis: Non-parametric Tests

Descriptive statistics have a useful role to play in providing indicators regarding the topic under investigation, but the role of statistical inference is considerably more significant in enabling conclusions to be drawn about the values of specific measures or characteristics relating to the whole population from the values obtained from a sample of that population (Curwin and Slater, 1991).

In this study, one objective was to test whether there are significant differences in perceptions of respondents at the overall sample level and among various groups of respondents. Significance testing is usually concerned with accepting or rejecting hypotheses or propositions. The testing can be conducted by parametric and nonparametric tests. Parametric tests usually suit samples which are drawn from a normally distributed population and data collected on an interval or ratio scale. Nonparametric tests are used when the normal distribution assumptions of parametric tests are not met (Coakes and Steed, 2001). The non-parametric tests are usually referred to as distribution free tests, i.e., these tests do not rely on any seriously restrictive assumptions concerning the shape of the sampled population(s) (Siegel and Castellan, 1988). These tests are usually preferred when data are collected using a nominal or ordinal scale and when the parametric distribution within the population is not specified (Sekaran, 2000). It has been stated that when data are measured on nominal and ordinal scales, they do not meet the stringent assumptions of the parametric tests and when the sample is very small, non-parametric techniques are ideal (Siegel and Castellan, 1988).

Therefore, non-parametric tests were considered to be appropriate for the current study, because the data collected were mainly nominal and ordinal; the responses were not normally distributed, as shown from descriptive statistics, the Kolmogorov-Smirnov Test for normality (see Appendix 6). In addition, the sample for the present study is very small, which justifies the use of non-parametric test.

The assumptions for the non-parametric tests include:

- 1. Random sampling
- 2. Similar shape and variability across distributions.
- 3. Independence of observations.

In order to analyse data acquired from the respondents, the following non-parametric tests were used:-

#### a. The Chi-square Test of Significance

The Chi-square test is used to measure the association between dependent variables and independent variables (Saunders et al., 2000). Chi-square calculations are based on frequency distributions. The test is appropriate for testing the goodness of fit variables. This is because the test can be applied to determine whether or not an observed set of frequencies matches some expected set of frequencies. Chi-square contingency tables tests are particularly valuable tests, because they are relatively simple to understand and apply. Moreover, the data can be of any level [i.e., nominal, ordinal interval or ratio (Clark, 1998)]. For example, values from a 5-point linear, numeric scales are equal interval data, but the range of values is limited. There are no fractions or decimals in such data, and the integer values can be used to define five categories for analysis of relationship with another categorical variable using contingency table analysis. To ensure the validity of a chi-square test of significance, expected cell frequencies are supposed to be five or greater than five. In this study, a Chi-square contingency table test was used to all the theoretical propositions (P1 through P13), with the exception of theoretical Propositions 3, 4 and 5. The significance level used for this Chi-square test is 10% as it is possible to adjust the cut-off point from a traditional 5% significance level to a higher percentage level due to a small sample size (Stevens, 1996)

### b. Mann-Whitney U Test of Significance

This test is the non-parametric alternative to the independent group t test. Once again, the decision to use Mann-Whitney U test was based on the fact that the normality assumption was not met, and the distribution was negatively skewed (see Chapter 8 and 9). This test was used to test the theoretical proposition (P13) for the differences in the perceptions of the following pairs of group: Central banks and Other Groups. The significance level used for this Mann-Whitney U test is 10%.

### c. Kruskal-Wallis Test of Significance

This test is a non-parametric alternative to the one-way between groups Analysis of Variance (ANOVA) and allows one to measure the possible differences between two groups or more. In the present study, the Kruskal-Wallis test was used to test the theoretical propositions (P3 and P6 to P13) concerning the market discipline and transparency and the adequacy of risk reporting in Islamic banks' annual reports. The significance level used for this Kruskal-Wallis test is 10%.

### d. Friedman test

The Friedman test is used to find a tendency for some variables to receive higher ranks than others, for example assigning the ranks of 1 to 10 to the most preferred and least preferred variables, respectively (Kinnear and Gray, 2000). The Friedman test ranks the scores for each of the cases and then calculates the mean score for each sample. If there is no significant differences between the samples, their mean score ranks should be similar (Bryman and Cramer, 1990). The Friedman test determines whether the rank totals for each condition or variable differ significantly from the values which would be expected by chance (Siegel and Castellan, 1988). This test was used to test the theoretical propositions (P1, P2, P6 and P7) in the current study. The significance level used for this Friedman test is 1%.

### 7.11 Concluding Remarks

This chapter provides discussion about the research methodological approach of this study. The research objectives and questions were developed and then the research propositions were formulated in this chapter. The data collection method was presented which was mainly the questionnaire survey. The survey samples in this research study had been categorised into three groups, i.e. Islamic bankers, the supervisors of Islamic banks and other groups which include external auditors, external rating agencies and the representatives from IFSB and AAOIFI.

The final part of this chapter discussed the statistical techniques which were used in order to analyse the collected data. In this study, non-parametric statistical tests were used due to the violations of the distribution assumptions of parametric tests.

Having discussed the research instrument, the sample of the survey, the pilot study, the administration of the research instrument and the form of data analysis, the next chapter presents the findings of the empirical work conducted for this study.

# Chapter 8

# Research Findings 1: Nature of Risks, Risk Measurement and Risk Management in Islamic Banks and the Information required by the Supervisors of Islamic banks

### 8.1 Introduction

In Chapter 7, the following research questions were developed:

RQ1 How does the risk perception of Islamic bankers differ from conventional bankers with respect to the market in which Islamic banks typically operate? Do Islamic banks use the more technically advanced risk measurement techniques? Apart from using similar risk mitigation approaches as in conventional banks, do Islamic banks widely use *Shari'a* compliant risk mitigation approaches? Also which risk mitigation approaches used by conventional banks are not used by Islamic banks?

RQ2 How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors? Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?

The research propositions were discussed in Chapter 7.

This chapter presents the findings of the empirical work in the following order: Section 8.2 provides the description of the sample. Reliability analysis is presented in Section 8.3. Section 8.4 presents the findings of the empirical work to answer RQ 1 and RQ 2 and to provide evidence for Propositions 1 to 7. Finally, Section 8.5 provides concluding remarks.

### 8.2 The Sample

As mentioned in Chapter 7 (section 7.6), the questionnaire survey was conducted in December 2003. The selected countries were Malaysia, Bahrain and others (Saudi Arabia, Jordan, Sudan, Kuwait, United Arab Emirates, Indonesia, Egypt, Qatar, Turkey, Iran, Bangladesh and Pakistan). The questionnaires were distributed to:

- 1- CFOs/ CEOs/ General Managers of Islamic banks
- 2- Risk Managers of Islamic banks
- 3- Supervisors of Islamic banks- Central Banks
- 4- External auditors for Islamic banks
- 5- External rating agencies of Islamic banks
- 6- AAOIFI's representatives
- 7- IFSB's representatives

# 8.2.1 Sample Size

Since the questions in the questionnaire could only be answered by certain people in Islamic banks, central banks, audit firms and rating agencies, the final sample consisted of only 110 questionnaires, which were distributed as follows:

- 2 representatives of AAOIFI (100% from Bahrain) and 2 representatives of IFSB (100% from Malaysia);
- 28 CEOs/CFOs of Islamic banks (7% from Malaysia, 18% from Bahrain and 75% from others);
- 28 Risk Managers of Islamic banks (7% from Malaysia, 18% from Bahrain and 75% from others);
- 26 representatives from Central Banks (35% from Malaysia, 19% from Bahrain and 46% from others);
- 20 external auditors for Islamic banks (21% from Malaysia, 26% from Bahrain and 53% from others); and
- 4 representatives from external rating agencies of Islamic banks.

Table 8.1 shows that 65 (59%) usable responses were received.

Subjects	Distributed	Received	Usable Replies (N)	Usable Response Rate (%)
Islamic banks – CFOs/ CEOs	28	18	16	57
Islamic banks – Risk managers	28	13	13	46
Central banks	26	19	19	73
External auditors	20	10	10	50
External rating agencies	4	4	4	100
IFSB	2	2	2	100
AAOIFI	2	1	1	50
Total	110	67	65	59%

### Table 8.1: Response to the Survey

Figure 8.1 provides summary of the sample in this study.



Figure 8.2 shows the number of responses in the study in Malaysia, Bahrain and other countries.



# 8.2.2 Sample Characteristics

Table 8.2 summarises the demographic information about the respondents. The general conclusion that can be made from Table 8.2 is that the modal groups of the respondents were:

- 1- In the age group of 35-44 (48%).
- 2- Male (85%).
- 3- Holding up to MSc qualifications (36%).

4- Having 11-15 years working experience  $(32\%)^{63}$ .

Variable	Descriptio	n	_		
Age	25-34	35-44	45-54	55-64	65+
	27%	48%	19%	4%	2%
Gender	Male			Female	
	85%			15%	
Education	HS	BSc	MSc	PhD	PQ <sup>64</sup>
	3%	31%	36%	6%	24%
Working	0-5	6-10	11-15	16-20	21+
Experience (in years)	12%	18%	32%	16%	22%

**Table 8.2: Sample Characteristics** 

Table 8.3 shows that seven Islamic banks (32%) stated that they used IAS only as compared to two Islamic banks (9%) which used only AAOIFI standards. Ten Islamic banks (45%) used both IAS and AAOIFI. Looking at the other standards, mainly the national standards in the countries surveyed, only one Islamic bank (5%) used both IAS and other standards and two Islamic banks (9%) used both AAOIFI and other standards. One Islamic bank (5%) used all the three standards (IAS, AAOIFI and other standards).

Table 8.3: The Use of the Financial Reporting Standards

Accounting Standards	Percentages of banks in the sample
IAS only	32%
AAOIFI only	9%
IAS and AAOIFI	45% **
IAS and other	5%
AAOIFI and other	9%

\*\* From these percentages, 5% of them (one Islamic bank) used all the three standards (IAS, AAOIFI and other standards)

<sup>&</sup>lt;sup>63</sup> Even though 42° of the sample had higher degrees (Master and PhD qualifications), 70% of the sample has more than 10 years working experience. The main reason is because the respondents are in the senior position in these organisation and not necessary having higher qualifications. <sup>64</sup> PQ is Professional Qualification.

### 8.3 Reliability Analysis

The purpose of conducting reliability tests is to determine consistency of the scale measurement. A reliable scale is one which individual yields much the same results on two different occasions (de Vaus, 2002). According to Oppenheim (2001), reliability may be measured in several different ways:

- i- By repeatedly administering the scale to the same people within a short period (*test-retest* reliability). Due to time and budget constraints, this method could not be applied in this study.
- ii- Internal consistency method, which is an indicator of how well several different items measure the same variable. The internal reliability can be assessed through a number of methods in SPSS software. The most common method is *Cronbach*'s alpha, where the average of all possible split-half reliability coefficients is calculated. *Cronbach*'s alpha ranges in value from 0 to 1 because it can be interpreted as a correlation coefficient. The higher the value of alpha the more reliable the scale. As a rule of thumb, alpha should be at least 0.7<sup>65</sup>.

For the present study, *Cronbach*'s alpha was used to measure the internal consistency of the scale. The results are presented in Table 8.4.

Question #	Alpha
Section A (Q1 in Version 1)	0.84
Section B (Q10 in Version 1,	
Q4 in Version 2 and Version	0.81
3)	
Section C (Q5 in Version 2	
and Version 3)	0.94
Section A (Q1 in Version 2	
and Version 3)	0.78

Table 8.4: Reliability Analysis of the Questions

The results from Table 8.4 indicates for Section A, B and C in all versions, alpha methods produce high coefficients (> 0.70). This means that each scale in the

<sup>&</sup>lt;sup>65</sup> See de Vaus, 2002, pp 184.

questionnaire measures a single concept and the items that make up the scale are internally consistent. That is to say, the scale measurement of this questionnaire is internally reliable.

### 8.4 Findings

The findings of the survey in this chapter will be described in the following order:

- 8.4.1 Islamic bankers' opinions about the nature of risks, risk measurement and risk management techniques in Islamic banks
- 8.4.2 Supervisors of Islamic banks' opinions about the additional risk information which is not required by financial reporting standards to monitor risk profiles and management of Islamic banks

# 8.4.1 Islamic bankers' opinions about the nature of risks, risk measurement and risk management techniques in Islamic banks

The questions in this part aim to get the perceptions of the bankers about the nature of risks, risk measurement and risk management techniques in Islamic banks. These questions seek to find the answers to the following research question (Propositions 1 to 5):

 How does the risk perception of Islamic bankers differs from conventional bankers with respect to the market in which Islamic banks typically operated? Do Islamic banks use the more technically advanced risk measurement techniques? Apart from using similar risk mitigation approaches as in conventional banks, do Islamic banks widely use *Shari'a* compliant risk mitigation approaches? Also which risk mitigation approaches used by conventional banks are not used by Islamic banks?

### 8.4.1.1 Risk Perceptions

**Proposition 1**: Salam and Istisna'a are perceived as more risky than Murabaha and Ijarah.

**Proposition 2**: Profit sharing assets (*Musharaka* and *Mudaraba*) are perceived as more risky than mark-up based assets (*Murabaha*, *Salam*, *Istisna'a* and *Ijarah*).

From Table 8.5, the descriptive statistics show that the means are between 3.96 and 4.48, the median is between 4 and 5 and the mode is 4 for all the risks (except for credit risk, operational risk and *Shari'a* non-compliance risk where the mode is 5).

However, due to the nature of the data collected by using a Likert scale, the median and the mode seem to be more appropriate measurements for this study's data. The major advantage of the median and the mode is that unlike the mean, they are unaffected by extreme scores. Another advantage of these measures, when contrasted with the mean, is that they do not require any assumptions about the interval properties of the scale (Howell, 1997).

Table 8.5: Descriptive Statistics for Each Type of Risks (Overall) in Section A (Version 1)

Items	Mean	Median	Mode	SD	Skewness	Chi-	Response
						square	rate
1. Credit risk (n – 29)	4.48	5.00	5	0.871	-1.511	0.000	52%
2. Rate of return risk	4.10	4.00	4	0.772	-0.684	0.001	52%
(n = 29)							
3.Price risk $(n = 28)$	4.00	4.00	4	0.861	-0.375	0.046	50%
4.Foreign exchange risk	4.21	4.00	4	0.686	-0.302	0.066	50%
(n = 28)							
5. Liquidity risk	4.19	4.00	4	0.834	-0.804	0.010	48%
(n - 27)							
6. Operational risk	4.10	4.00	5	1.012	-0.663	0.016	52%
(n = 29)							
7. Shari'a non-	3.96	4.00	5	1.160	-0.882	0.008	48%
compliance risk (n = 27)		1					
Friedman test	0.010*						

Notes: \* The differences between the items are significant at 1% using the Friedman test of significance; n = number of responses

Furthermore, there is a negative coefficient of skewness for all the risks. These descriptive statistics imply that the majority of the survey respondents have a positive degree of agreement with the proposition for all the risks, particularly credit risk and operational risk. This is supported by the results of the Chi-square test, which

indicates that Chi-square values of the responses are significantly different at 10% (p < 0.10).

The Chi-square test is used to explore frequency data in order to test whether the observed pattern of responses differs significantly from what we might have expected by chance alone. In this study, the responses for each item were analysed by using Chi-square test in order to determine whether the degrees of either important or unimportant of the respondents, with each item mentioned in the survey questionnaire, are significant.

From the analysis, as shown in Table 8.5 and Figure 8.3, it can be seen that on average as indicated by mean values, the Islamic bankers rate credit risk as the most important in the banks, followed by foreign exchange risk and liquidity risk. *Shari'a* non-compliance risk is rated as the least important risk in Islamic banks by the survey respondents.



In addition to the Chi-square test, another non-parametric test was used for further investigating in the perceptions of the survey respondents. The Friedman test is used to find a tendency for some variables to receive higher ranks than others. Based on Friedman test as shown also in Table 8.5, there is significant difference among all the

risks at the 1% level of significance. This again confirms that the risks are different statistically from each other and credit risk is the most important risk in Islamic banks; in fact there is the same median for all the risks other than credit risk.

Table 8.6: Risk Perceptions in Different Modes of Financing (Mean and Medi	ian
Values)	

	Credit	Rate of	Price	Liquidity	Foreign	Operational	Shari'a	Total	Chi-
	risk	return	risk	risk	exchange	risk	non-		square
		risk			risk		compliance		
							risk		
Murabaha	4.10	3.55	3.38	3.89	3.74	3.72	4.00	3.79	0.000
	(4.00)	(4.00)	(3.50)*	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	
	n = 29	n = 29	n = 26	n = 27	n = 27	n = 29	n = 27		
Salam	4.50	4.11	4.25	3.63	4.13	4.18	3.81	4.14	0.000
}	(5.00)	(4.00)	(4.50)*	(3.50)*	(3.50)*	(5.00)	(4.00)	(5.00)	
	n = 18	n = 18	n = 16	n = 16	n = 16	n = 17	n = 16		
Istisna'a	4.47	4.00	3.94	4.25	3.82	4.05	3.85	4.06	0.000
	(5.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	
	n = 19	n = 19	n = 17	n = 20	n = 17	n = 21	n = 20		
Ijarah	4.00	3.70	3.63	3.96	3.83	3.86	3.85	3.85	0.000
	(4.00)	(4.00)	(3.50) *	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	
	n = 27	n = 27	n = 24	n = 26	n = 23	n = 28	n = 26		
Mudaraba	4.45	4.22	3.76	4.27	4.38	4.14	3.85	4.17	0.000
(asset side)	(5.00)	(5.00)	(4.00)	(4.00)	(5.00)	(4.00)	(4.00)	(4.00)	
	n = 22	n = 23	n = 21	n = 26	n = 24	n = 28	n = 26		}
Musharaka	4.23	4.41	3.85	3.96	4.29	4.37	3.88	4.16	0.000
	(5.00)	(5.00)	(4.00)	(4.00)	(5.00)	(5.00)	(4.00)	(4.00)	
	n = 22	n = 22	n = 20	n = 25	n = 21	n = 27	n = 25		
Diminishing	4.10	4.25	4.11	4.14	4.05	4.25	3.95	4.14	0.000
Musharaka	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	(4.00)	
	n = 20	n = 20	n = 18	n = 22	n = 20	n = 24	n = 22		
Friedman	0.001*	<u> </u>	,, _, _, <b></b> l						
Fotal respondents	56								

Notes: The figures in the bracket are the medians for each risk in different modes of financing;

\* The differences between the items are significant at 1% using the Friedman test of significance; n = number of responses

<sup>\*</sup> The median values are 3.5 and 4.5 respectively, because the total observations are even numbers, so the middle values are between the two numbers, for example between 3 and 4 and between 4 and 5.

The modes for operational risk and *Shari'a* non-compliance risk are higher than the medians because the minimum value for operational risk is 2 and for *Shari'a* non-compliance risk is 1.

Table 8.6 and Figure 8.4 summarise the risk perceptions of the respondents in different modes of financing (mean values and median) for the Islamic bankers in the study. It shows that Islamic bankers perceive *Salam* and *Istisna'a* (mean value of 4.14 and 4.06 respectively) to be riskier than *Murabaha* (mean value of 3.79) and *Ijarah* (mean value of 3.85). This is supported by the median values where for *Salam* and *Istisna'a*, the median 5.00 and 4.00 respectively, whereas for *Murabaha* and *Ijarah*, the median is 4.00.

These findings are supported by the results of the Chi-square test presented in Table 8.6 which indicated that the Chi-square values of the items are very significant (p < 1%). In addition, the Friedman test of significance in Table 8.6 shows that there is a significant difference with regard to the risk in each mode of financing at 1% significance level.



In addition, Table 8.6 also shows that profit sharing assets (*Mudaraba* and *Musharaka*) are perceived as more risky than mark-up based assets, particularly *Murabaha* and *Ijarah*, in the exception of *Salam<sup>66</sup>*, which has a higher median and a slightly lower mean than profit sharing assets. This again is supported by the results of the Chi-square and Friedman test which shows that the differences are very significant at 1% level.

Table 8.6 shows that *Salam* and *Istisna'a* are perceived as the most risky for credit risk (the mean values are 4.50 and 4.47 respectively and the medians for both are 5.00). This is followed closely by *Mudaraba* (mean of 4.45) and *Musharaka* (mean of 4.23).

Similar perceptions also apply to price risk. *Salam* is perceived to have the most important price risk (mean of 4.25), followed by Diminishing *Musharaka* (mean value of 4.11). The least important price risk is perceived to be that in the *Murabaha* contract.

For rate of return risk, Islamic bankers perceive *Musharaka* to be the most risky (mean value and median are 4.41 and 5.00 respectively) and followed by Diminishing *Musharaka* (mean value and median are 4.25 and 4.00 respectively).

Liquidity risk of instruments will be smaller if the assets can be sold in markets and/or have short term maturity. The bankers perceive the *Mudaraba* contract to have the most liquidity risk (mean value of 4.27), followed by *Istisna'a* (4.25) and Diminishing *Musharaka* (4.14). Diminishing *Musharaka* is perceived to have higher liquidity risk than ordinary *Musharaka* because of the longer financing in order to reduce the equity of the Islamic banks. Furthermore, the median for all these three instruments is 4.00. Interestingly, *Salam* is perceived to have the least liquidity risk (the lowest mean and median).

<sup>&</sup>lt;sup>66</sup> The reason why Salam has a higher median but a slightly lower mean than the profit sharing assets is because the mean for the liquidity risk in Salam is small, which lower down the overall mean for Salam. Furthermore, it is perceived that most of the Islamic banks in the study do not have Salam in their banks, which is a limitation for this study. Salam is equally risky because in the country like Sudan, for example, the authority did not allow parallel Salam.

Table 8.6 also shows that Islamic bankers perceive foreign exchange risk to be the most important in *Mudaraba* (4.38), followed by *Musharaka* (4.29). The median is 5.00 for these two instruments. The reason may arise because these instruments are frequently transacted in foreign currency and therefore changes in currency may expose these instruments to risks.

Operational risk is lower in mark-up based assets i.e. *Murabaha* and *Ijarah* (mean value of 3.72 and 3.86 respectively and median of 4.00) and the highest in *Musharaka*, Diminishing *Musharaka* and *Salam* (mean values of 4.37, 4.25 and 4.18). The relatively higher means of the latter instruments indicate that banks find these contracts complex and difficult to implement. This is supported by the medians of *Musharaka* and *Salam* (both have medians of 5.00).

*Shari'a* non-compliance risk is highest in *Murabaha* contracts (mean value of 4.00 and median of 4.00) and the lowest in *Salam* (mean value of 3.81 and median of 4.00).

In addition to the above risks, there are two other risks faced by Islamic banks, which are withdrawal risk (part of liquidity risk) and displaced commercial risk – a form of market risk (AAOIFI, 1999). The main purpose of including the following statements is to get the opinion of the respondents on these risks faced by Islamic banks.

### Statements:

15. A low rate of return on deposits will lead to withdrawal of funds from Islamic banks.

Table 8.7: The Frequency Results of the Responses to Statements 15 and 16

Statement #	SD/D	N	A/SA	Chi-square
15	23%	29%	48° o	0.000
16	26%	23%	51%	0.001

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

The frequency results shown in Table 8.7 revealed that 48% and 51% of the respondents agree/strongly agree with Statement 15 and 16 respectively. These

<sup>16.</sup> The rate of return on deposits in Islamic banks should be commensurate with the rate of return of similar financial instruments offered by other banks (conventional and Islamic).

percentages outnumbered those disagreeing and strongly disagreeing. These findings are supported by the results of the Chi-square test presented in Table 8.7 which indicated that the Chi-square values of both statements are significantly different at 1% level.

In addition, Table 8.8 shows that the respondents agree that Islamic banks also experienced these two risks (negative coefficient of skewness), the mean values are greater than 3, the median is between 3.00 and 4.00, and the mode is 4 for both statements. Moreover, the results of the Kruskal-Wallis test indicate that there is no difference in the degrees of agreement in each group of respondents (Islamic banks, central banks and others) on the above issue.

 Table 8.8: Descriptive Statistics for Statements 15 and 16

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n *
15	3.29	3.00	4	1.027	1	5	-0.354	N/S	65
16	3.34	4.00	4	1.108	1	5	-0.288	N/S	65

\* Response rate = 59%

Notes: N/S indicates that the differences of the responses between the organisation groups are not significant at 10% using the Kruskal-Wallis test of significance; n = number of responses

**Proposition 3**: Differences in *Shari'a* interpretation may lead to different perceptions of risk by Islamic bankers in different countries in the study.

Table 8.9 summarises the mean values and the median by country and it shows that all countries (Malaysia, Bahrain and Others) perceive credit risk as the most important. This is consistent with the studies on conventional banks where it was found that credit risk was considered the most important risk (Trema Management Consulting, 2001). In addition, the Basel Committee reports that weak credit risk management practices and poor credit quality continue to be a dominant cause of bank failures and banking crises worldwide. This shows the importance of credit risk in the banking sector, including Islamic banks.

In Malaysia, for example, the Islamic banking system operates side-by-side with conventional banking. Therefore, movements in interest rates, either upwards or downwards will have an effect on Islamic banks' operations. As stated by one Islamic bank's risk manager: "Theoretically speaking the interest rate risk is not applicable but in practice this change in the rate may impact the results and hence expose the bank as the rate is used as the benchmark or pricing index due to the fact that the Islamic banking are still in its early stages and can't have its own pricing indicators".

Table 8.9: Mean and Median Values: Overall Risks Perceived by Islamic Bankers

Risks	Total	Malaysia	Bahrain	Others	K-W
Credit risks	4.48	4.75	4.33	4.47	N/S
	(5.00)	(5.00)	(4.50) <sup>∞</sup>	(5.00)	
Liquidity risk	4.19	4.50	4.00	4.17	N/S
	(4.00)	(4.50) <sup>∞</sup>	(4.00)	(4.00)	
Foreign exchange risk	4.21	4.00	4.20	4.26	N/S
	(4.00)	(4.00)	(4.00)	(4.00)	
Operational risk	4.10	4.75	3.50	4.16	N/S
	(4.00)	(5.00)	(3.00)	(4.00)	
Rate of return risk	4.10	4.00	3.83	4.21	N/S
	(4.00)	(4.00)	(4.00)	(4.00)	
Price risk	4.00	4.25	3.67	4.06	N/S
	(4.00)	(4.00)	(3.50)∞	(4.00)	
Shari'a non-compliance risk	3.96	4.25	3.83	3.94	N/S
	(4.00)	(4.00)	(3.50)∞	(5.00)	
Number of responses (n)	29	4	6	19	
Response rate	52%	100%	60%	45%	

Notes: The figures in brackets are the medians for each risk in three different countries and in total; N/S indicates that the differences of the responses between countries are not significant at 10% using the Kruskal-Wallis test of significance

It is interesting to see that in Malaysia, operational risk is considered as important as credit risk, unlike in other countries (as shown by the highest mean and median). This is consistent with the emphasis that is placed in Basel II on operational risk in banks and the recent collapse of several companies due to this risk (e.g. US energy trader -

 $<sup>^{\</sup>circ}$  The median values are 3.5 and 4.5 respectively, because the total observations are even numbers, so the middle values are between the two numbers, for example between 3 and 4 and between 4 and 5.

Enron, 2001). However, the difference in the perceptions of the respondents in Malaysia, Bahrain and other countries is not significant as explained below.

Table 8.9 also shows the significance test for all these risks. From this table, it can be seen that all the Kruskal-Wallis values are more than 10%, which means that there is no significant difference in the perceptions of the Islamic bankers in Malaysia, Bahrain and other countries.

### 8.4.1.2 Risk Measurement

**Proposition 4**: Not many Islamic banks use the more technically advanced risk measurement approaches.

Based on the analysis, not many Islamic banks are perceived to use the more technically advanced risk measurement approaches [VaR, Simulation techniques, Estimates of Worst Case, RAROC and Internal Based Rating System].

Table 8.10 and Figure 8.5 shows the frequencies of the risk measurement approaches used by Islamic banks in the study.

Risk measurement	Yes	No	Number of responses (n)
Credit ratings	57%	43%	28
Gap analysis	68%	32%	28
Duration analysis	43%	57%	28
Maturity matching	82%	18%	28
Earnings at Risk	43%	57%	28
VaR	29%	71%	28
Simulation techniques	18%	82%	28
Estimates of Worst Case / Stress tests	43%	57%	28
Risk Adjusted Return on Capital	14%	86%	28
Internal Based Rating System	46%	54%	28

Table	8.10:	Risk	Measurement	in	Islamic	banks
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Note: Response rate = 50%



The results showed that maturity matching (82%), gap analysis (68%) and credit ratings (57%) approaches are perceived to be the most widely used by the Islamic banks in this study, followed by internal based rating system (46%), duration analysis (43%), estimates of worst case (43%) and earnings at risk (43%). This implies that a more technically advanced risk measurement approaches are perceived not to be widely used by these Islamic banks, except perhaps for Internal Based Rating System and Estimates of Worst Case, where 46% and 43% respectively, of the respondents used that method in their banks. However, the percentages of not using a more technically advanced risk measurement approaches, for example, RAROC (86%), Simulation techniques (82%) and VaR (71%) outnumbered the percentages of using the less technically advanced risk measurement approaches. This is consistent with the PA Global Survey 2001 in their study on conventional banks, where they found that most conventional banks already have the basic risk measurement tools in place.

Even though maturity matching is the basic technique of liquidity management, 18% of the respondents said that they did not use this method. Looking at this 18% of the respondents who did not use maturity matching, 40% of them are also perceived not to use all the risk measurement approaches listed in the questionnaire. The main

explanation could be that their banks did not have such risk measurement approaches in measuring the bank's risks.

# 8.4.1.3 Risk Management

**Proposition 5**: Islamic banks use a number of risk mitigation methods that are intended to be *Shari'a* compliant and are different from methods used by conventional banks.

The analysis in Table 8.11 and Figure 8.6 shows that Islamic banks use the same risk management techniques as the conventional banks for managing the risks, in particular credit risks. Collateral arrangements and guarantees are the most widely used by Islamic banks in this survey, followed by loan loss reserves and third party enhancements. The least used mitigation techniques are *Urboun*, Parallel *Salam* and Parallel *Istisna'a*, which are some of the *Shari'a* compliant risk mitigation methods. The reason is mainly because these techniques are subjected to different interpretation by *Shari'a* scholars.

R	isk management	Yes	No	Number of
				responses (n)
1.	Collateral arrangement	93%	7%	27
2.	Third party enhancements	78%	22%	27
3.	Loan Loss Reserves	89%	11%	27
4.	On Balance Sheet Netting	22%	78%	27
5.	Guarantees	93%	7%	27
6.	Parallel Salam contracts	11%	89%	27
7.	Parallel Istisna'a contracts	15%	85%	27
8.	Urboun (over-the-counter Islamic derivatives)	4%	96%	27

 Table 8.11: Risk Management Techniques in Islamic Banks

Note: Response rate = 48%



Moreover, based on the earlier findings, *Salam* and *Istisna'a* contracts are not widely used by Islamic banks in this study (38% and 24% of the Islamic bankers state that they did not have *Salam* or *Istisna'a* contracts in their banks). Even for the Islamic banks entering into *Salam* and *Istisna'a* contracts, the overall percentage of use for Parallel *Salam* and Parallel *Istisna'a* was very low (18% and 19% respectively have used Parallel *Salam* and Parallel *Istisna'a*).

By contrast, another Islamic bank's risk manager has said about the fiduciary duty of Islamic banks: "In fact I believe Islamic banks should have a strong risk management process as most our funds are under a Mudaraba contract, we must ensure that all funds invested are getting appropriate returns".

# 8.4.2 Supervisors of Islamic banks' opinions about the information required most to monitor risk profile and management of Islamic banks

This section discusses the supervisors of Islamic banks' perceptions about the information required most to monitor risk profile and management of Islamic banks and the risk assessment approaches to supervise Islamic banks. These questions attempt to find the answers to the following research question (Propositions 6 and 7):

• How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors? Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?

**Proposition 6**: Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks.

Table 8.12 presents the frequency results of the responses to items 1 to 14 in Question 1, Version 2.

Item	% Neutral	% Important *	Chi-square	n **
1. Type of risks	0%	100%	0.003	19
2. Severity of risks	5%	95%	0.003	19
3. Risk management	0%	100%	0.003	19
4.Breakdown – operating segments	5%	95%	0.008	19
5. Breakdown – geographical segments	21%	74%	0.008	19
6. Capital adequacy ratio and banks' own	5%	95%	0.000	19
ratio				
7. Liquidity	5%	95%	0.001	19
8. Maturity matching	1100	89%	0.004	19
9. Profitability	16%	84%	0.143 N/S	19
10. Asset quality	0%	100%	0.003	19
11. Compliance with relevant accounting	11%	89%	0.004	19
standards	[			
12. Compliance with Shari'a requirements	0%	100%	0.012	19
13. Shari'a's view - permissibility of taking	26%	74%	0.196 N/S	19
on certain risks	}			
14. Shari'a's view – risk mitigation	21%	69%	0.024	19
techniques				]
Friedman test	0.000*			

 Table 8.12: The Frequency Results of the Responses to Items 1 to 14

Notes: Scale: 1 = Very Unimportant (VU), 2 = Unimportant (U), 3 = Neutral (N), 4 = Important (I),

5 = Very Important (VI); \* Includes "Important" and "Very Important";

N/S indicates that the differences of the responses are not significant at 10% using the Chi-square test of significance; n = number of responses;

\* The differences of the items are significant at 1% using the Friedman test of significance

\*\* Response rate = 73%

Regarding the frequency results shown in Table 8.12, the majority of the respondents rated the information either Important or Very Important on all these items. These findings are supported by the results of the Chi-square test shown in Table 8.12 which

revealed that the Chi-square value of each item is significant (in the exception of profitability and *Shari'a* view on permissibility of taking on certain risks). These results indicated that the respondents largely perceived that all the items are important for the supervisors to monitor the risk profile and management of Islamic banks.

Table 8.	.13:	Mean	Values	for	the	Risk	Information	Required	by	Supervisors	of
Islamic	banl	ks									

Items	Required by	Total	Malaysia	Bahrain	Others	K-W
	IAS/AAOIFI					
1. Type of risks	IAS 32, FAS 1	4.84 (5.00)	4.89	5.00	4.75	N/S
2. Severity of risks	No	4.63 (5.00)	4.56	4.50	4.75	N/S
3. Risk management	IAS 32, ED 7	4.84 (5.00)	4.89	4.50	4.88	N/S
4.Breakdown – operating segments	IAS 14	4.26 (4.00)	4.22	3.50	4.50	N/S
5. Breakdown – geographical segments	IAS 14	3.84 (4.00)	3.78	4.50	3.75	N/S
6. Capital adequacy ratio and banks' own ratio	Statement of CAR, AAOIFI	4.74 (5.00)	4.89	5.00	4.50	N/S
7. Liquidity	FAS 1	4.68 (5.00)	4.89	5.00	4.38	N/S
8. Maturity matching	FAS 1	4.58 (5.00)	4.56	5.00	4.50	N/S
9. Profitability	FAS 1	4.37 (5.00)	4.44	5.00	4.13	N/S
10. Asset quality	No	4.84 (5.00)	4.78	5.00	4.88	N/S
11. Compliance with relevant accounting standards	IAS 1, FAS 1	4.58 (5.00)	4.44	5.00	4.63	N/S
12. Compliance with Shari'a requirements	Governance Std 2	4.79 (5.00)	4.89	4.00	4.88	0.019
13. <i>Shari'a</i> 's view – permissibility of taking on certain risks	No	4.26 (5.00)	4.44	3.00	4.38	N/S
14. <i>Shari'a</i> 's view – risk mitigation techniques	No	4.00 (4.00)	4.44	3.00	3.75	N/S
Number of responses (n)		19	8	2	9	
Response rate		73%	89%	40%	75%	

Notes: The figures in brackets are the medians for each item;

N/S indicates that the differences of the responses between countries are not significant at 10% using the Kruskal-Wallis test of significance

In addition, the above findings are supported by the analysis in Table 8.13 where it is seen that the supervisors of Islamic banks rated all the risk information to be important to monitor the risk profile of Islamic banks (the mean values are between 3.84 and 4.84). The most important information as perceived by the bank supervisors is information on the **type of risks**, **the risk management** and the **asset quality** (all

have the mean values of 4.84) and **compliance with** *Shari'a* **requirements** (mean value of 4.79). The differences between the items are statistically significant at 1% as shown by Friedman test of significance in Table 8.12.

The interview with one of the supervisors of Islamic banks supports this finding. As stated by him: "Apart from annual reports, the supervisors of Islamic banks require additional information to be submitted to them either weekly, quarterly or annual basis, whether it is on the domestic or global position".

With regard to maturity matching, Table 8.10 shows that 18% of the respondents (in this case, Islamic bankers) perceive that they did not use that method in risk measurement. However, when the same item was asked to supervisors of Islamic banks (in this case, central banks), 89% of them rated information on maturity matching as 'important' in monitoring the risk profile of Islamic banks. This implies that this method is important to assess the riskiness of the Islamic banks.

Table 8.13 also shows that the total number of respondents (supervisors of Islamic banks) in Bahrain is only 2. This is because according to Bahrain Monetary Agency's representative, the responses represent the collective views of all members of the directorate. Therefore, additional questionnaires would have the same response.

In addition, from the open-ended questions asked to them, they also point out that they need additional non-public information (apart from the issue of frequency), which is also not required by financial reporting standards to supervise Islamic banks. They include:

- 1. Rating of the bank by a rating agency.
- 2. Any non-compliance to Shari'a requirement Reputational risk.
- 3. The implementation of good corporate governance.

This is consistent with the findings of studies in the literature that bank supervisors have an information advantage over other parties (De Young et al, 2001; Jordan et al, 2000, Berger et al, 2000; Flannery and Houston, 1999 and Berger and Davies, 1998). They need more information than what is required by financial reporting standards in order to perform their supervision on Islamic banks, apart from the issue of frequency.

The results of the Kruskal-Wallis test show that there is only a significant difference in the opinion of the respondents for item 12: *Compliance with Shari'a requirements*. From Table 8.14 and Figure 8.7, it can be seen that while 89% of the supervisors of Islamic banks in Malaysia and 88% of the supervisors of Islamic banks in other countries perceive item 12 to be Very Important, there is zero percentage from Bahrain for Very Important, in fact 100% of Bahrain was for Important. This implies that in Bahrain, compliance with *Shari'a* requirements was perceived as only "important" and not "very important" to supervise Islamic banks. According to one of the supervisors of Islamic banks in Bahrain, since Islamic banks have a *Shari'a* Supervisory Board, the Board should concentrate on the *Shari'a* issues in Islamic banks and the regulator could deal with other supervisory matters.

Table 8.14:	Compliance	with	Shari'a	Requirements
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	Country				
			Other		
	Malaysia	Bahrain	countries		
Important	11%	100%	12%		
Very Important	89%	0%	88%		



Additional questions were also asked in the questionnaire to get the survey respondents' perceptions on the role of supervisors of Islamic banks in improving bank's transparency (Statements 10, 11, 13 and 14).
### Statements:

- 10. The most effective way to ensure the Islamic bank adheres to public risk disclosure requirements as required by accounting standards is to impose penalties for non-disclosure.
- 11. Sufficient attention has been given by bank supervisors to ensure that public risk disclosure requirements are proportionate to the nature and scale of the Islamic bank.
- 13. Bank supervisors have adequate information that enables them to assess the risks inherent in Islamic banks.
- 14. Bank supervisors impose on Islamic banks rules for public risk disclosure that improve banks' transparency.

The frequency results shown in Table 8.15 revealed that the majority of the survey respondents agree with all these statements. These findings are supported by the results of the Chi-square test which are presented in Table 8.15 and which indicated that the Chi-square values of the responses for all these statements are significantly different at the 1% level.

Table 8.15: The Frequency Results of the Responses to Statements 10, 11, 13 and 14

		_				
Statement #	SD	D	N	A	SA	Chi-square
10	2%	6%	31%	48%	13%	0.000
11	300	12° o	31%	46%	8%	0.000
13	2° o	15%	32%	42%	9%	0.000
14	000	600	21%	59%	14%	0.000

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

Table 8.16: Descriptive Statistics for Statements 10, 11, 13 and 14							
Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n*
10	3.66	4.00	4	0.853	1	5	-0.525	N/S	65
11	3.43	4.00	4	0.918	1	5	-0.602	0.024	65
13	3.42	4.00	4	0.917	1	5	-0.307	N/S	65
14	3.80	4.00	4	0.754	2	5	-0.550	0.022	65

\* Response rate = 59%

Notes: N/S indicates that the differences of the responses between organisation groups are not significant at 10% using the Kruskal-Wallis test; n = number of responses

In general, a majority of the respondents (73%) agree or strongly agree that the supervisors of Islamic banks play an important role in improving transparency in Islamic banks by imposing rules for public risk disclosure. This is evidenced from the negative coefficient of skewness for all the statements, and the mode is 4 (Agree) for all statements (Table 8.16).

The results of the Kruskal-Wallis test show that there is only a significant difference in the opinion of the respondents on Statements 11 and 14 (p < 10%).

In Statement 11, Table 8.17 shows that while 74% of the supervisors of Islamic banks agree or strongly agree that "Sufficient attention has been given by bank supervisors to ensure public risk disclosure requirements are proportionate to the nature and scale of the Islamic bank", it is only 52% of Islamic bankers and 35% of other respondents who agree or strongly agree with the same statement.

		Group					
	Islamic banks	Central banks	Others				
Strongly Disagree	3%	0%	6%				
Disagree	10%	5%	24%				
Neutral	35%	21%	35%				
Agree	45%	58%	35%				
Strongly Agree	7%	16%	0%				
Total	100%	100%	100%				

Table 8.17: Views about Statement 11

Statement 14 is another example of the differences in the perceptions of the surveyed groups. While 72% of Islamic bankers and 89% of the supervisors of Islamic banks agree or strongly agree with Statement 14, only 53% of other respondents have shared the same view as shown in Table 8.18.

Table 8.18: Views about Statement 14

	Group							
	Islamic banks	Central banks	Others					
Disagree	7%	0%	12%					
Neutral	21%	11%	35%					
Agree	62%	63%	47%					
Strongly Agree	10%	26%	6%					
Total	100%	100%	100%					

**Proposition 7:** Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks as compared to other approaches (e.g. statistically based).

The analysis in this section aims to elicit the opinion of the supervisors of Islamic banks on the risk assessment approaches that they used to supervise Islamic banks. Table 8.19 shows the frequency responses for all the approaches. The results show that in general the supervisors of Islamic banks perceive the risk assessment approaches to be either Important or Very Important. This is supported by the results of Chi-square test of significance which indicated that the Chi-square values are significantly different at the 10% level (except for Financial Ratios).

 Table 8.19: The Frequency Results of the Responses for the Risk Assessment

 Approaches used to supervise Islamic Banks

Supervisory assessment	VU	U	N	Ι	VI	Chi-
approaches						square
Supervisory bank rating	0%	0%	5%	21%	74%	0.001
systems						
Financial ratios	0%	0%	11%	44%	45%	0.135 N/S
Peer group analysis	0%	5%	11%	74%	10%	0.000
Comprehensive bank risk	0%	0%	11%	27%	63%	0.016
assessment						
Statistical methods	5%	11%	16%	7%	21%	0.037
Friedman test	0.000*	· ·			·	

**Notes:** Scale: 1 = Very Unimportant (VU), 2 = Unimportant (U), 3 = Neutral (N), 4 = Important (I), 5 = Very Important (VI);

N/S indicates that the differences of the responses are not significant at 10% using the Chisquare test of significance;

\* The differences of the items are significant at 1% using the Friedman test of significance.

As shown in Table 8.20 and Figure 8.8, supervisors of Islamic banks perceive supervisory bank rating systems (e.g. CAMELS or similar) to be the most important risk assessment approach to supervise Islamic banks (mean value = 4.68), followed by comprehensive bank risk assessment and financial ratios (mean values of 4.53 and 4.33 respectively). This is supported by the result of the Friedman test, which is significant at 1%.

Both supervisory bank rating systems (e.g. CAMELS or similar) and comprehensive bank risk assessment have the median of 5.00. Statistical methods are perceived to be the least important approach.

The results of the Kruskal-Wallis test show that there is a significant difference only in the opinions of the respondents on supervisory bank rating systems (p < 10%).

Table	8.20:	Descriptive	Statistics	for	the	Risk	Assessment	Approaches	used	to
superv	vise Is	lamic Banks								

Supervisory Assessment	Mean	Median	Mode	SD	Skewness	Kruskal-
approaches						Wallis test
Supervisory bank rating	4.68	5.00	5	0.582	-1.766	0.069
systems $(n = 19)$						
Financial ratios $(n = 19)$	4.33	4.00	4	0.686	-0.547	0.569N/S
Peer group analysis	3.89	4.00	4	0.658	-1.204	0.912N/S
(n = 19)						
Comprehensive bank risk	4.53	5.00	5	0.697	-1.205	0.848N/S
assessment (n = 19)						
Statistical methods	3.68	4.00	4	1.108	-0.933	0.442N/S
(n = 19)						

**Notes:** N/S indicates that the differences of the responses between countries are not significant at 10% using the Kruskal-Wallis test of significance; n = number of responses



		Country						
	Malaysia	Bahrain	Others					
Neutral	11%	0%	0%					
Important	11%	100%	12%					
Very Important	78%	0%	88%					
Total	100%	100%	100%					

Table	8.21:	Views	about	Supervisory	' Bank	Rating	Systems
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From Table 8.21, it can be seen that 78% of the supervisors of Islamic banks in Malaysia and 88% of other groups perceived the Supervisory bank rating systems (e.g. CAMELS or similar) to be very important, while in Bahrain, the bank supervisors perceived it as just important i.e. they did not perceive it as very important. The main reason is because in Bahrain, the Bahrain Monetary Agency has additional items over what is in CAMELS to supervise Islamic banks. They include liquidity issues, concentration of risks, related party transactions, the management of investment accounts, corporate governance and provisions/reserves, where there are no ratings used but the benchmarks are established.

### 8.5 Concluding Remarks

It is noted that credit risk is perceived to be the most important risk in Islamic banks (as perceived by all countries), followed by foreign exchange risks and liquidity risk. The above findings show that Islamic bankers perceive *Salam* and *Istisna'a* to be riskier than *Murabaha* and *Ijarah*. This again supports Proposition 1. Furthermore, profit sharing assets (*Mudaraba* and *Musharaka*) are perceived to be more risky than mark-up based assets particularly *Murabaha* and *Ijarah*, in the exception of *Salam*. Therefore, Proposition 2 is not fully supported.

It is interesting to note that Islamic bankers in Malaysia perceived operational risk to be as important as credit risk. However, there is no significance difference between the perceptions of Islamic bankers in Malaysia and other countries on these risks. In addition to that, Islamic bankers in the countries surveyed agree that Islamic banks faced withdrawal risk and displaced commercial risk. This provides no support for **Proposition 3**.

Islamic banks are perceived to use less advanced risk measurement approaches and *Shari'a* compatible risk mitigation techniques are not widely used in Islamic banks. **These findings provide support for Proposition 4 and no support for Proposition 5**. Many of Islamic banks in the study do not have *Salam* and *Istisna'a* contracts, therefore no risk mitigation (Parallel *Salam* and Parallel *Istisna'a*) were used here.

**Evidence indicates that Proposition 6 and 7 are supported**. The questionnaire survey concludes that the supervisors of Islamic banks required additional risk information over that which is required by financial reporting standards (apart from the issue of frequency) in order to monitor risk profile of Islamic banks. This includes asset quality, rating of the bank by a rating agency, any non-compliance to *Shari'a* requirement – (Reputational risk) and the implementation of good corporate governance. Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks, except in Bahrain where they used other assessment approaches to supervise Islamic banks and rated CAMELS as "important" only.

The next chapter presents the second part of the research findings in this study.

### Chapter 9

# Research Findings 2: Transparency and Market Discipline in Islamic Banks

### 9.1 Introduction

This chapter presents the second part of the research findings in this study and mainly aims to answer the following research questions:-

RQ3 What is the perceived role of transparency in Islamic banks from a risk reporting point of view, with particular reference to Basel II?

RQ4 To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports perceived by the supervisors of Islamic banks and other interested parties to be adequate to provide sufficient transparency for Islamic banks that can enhance market discipline?

RQ5 What are the implications of the above for the implementation of Basel II, for regulation of risk disclosures (Pillar 3) and for banking supervision (Pillar 2)?

In particular, this chapter aims to answer RQ 3 to RQ 5 and to provide evidence for Propositions 8 to 13, which have been discussed in Chapter 7. This chapter is organised as follows:

Section 9.2 presents the findings of the empirical work, which is divided into three subsections. Section 9.3 provides concluding remarks.

### 9.2 Findings

The findings of this survey will be described in the following order:

- 9.2.1 Transparency and market discipline in Islamic banks
- 9.2.2 The level of adequacy of qualitative risk information in existing Islamic banks' annual reports
- 9.2.3 Other information

### 9.2.1 Transparency and market discipline in Islamic banks

This section intends to discuss several issues related to transparency and market discipline in Islamic banks. The questions asked in this part attempt to find the answers to the following research question (Propositions 8, 9, 10, 11 and 12):

• What is the perceived role of transparency in Islamic banks from a risk reporting point of view, with particular reference to Basel II?

**Proposition 8**: Market discipline could facilitate banking supervision in Islamic banks, similarly to conventional banks.

The questions in this part aim to elicit the opinions of the respondents on the effectiveness of market discipline for bank supervisors. The respondents were asked to indicate their degree of agreement for the following statements.

### Statements:

- 7. Market discipline can effectively reduce the need for official supervision of Islamic banks.
- 8. Market discipline reduces the need for supervisory oversight in maintaining capital in Islamic banks.
- 9. Effective market discipline can lower the supervision costs by the supervisors of Islamic banks.
- 12. Bank supervisors have a strong interest in facilitating effective market discipline in Islamic banks.

 Table 9.1: The Frequency Results of the Responses to Statements 7, 8, 9 and 12

_Statement #	SD/D	N	A/SA	Chi-square
7	35%	35%	30%	0.000
8	35%	40° •	25%	0.000
9	12%	40%	48%	0.000
12	3%	14%	83° o	0.000

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

Table 9.1 reveals that most of the survey respondents either disagree with or are neutral about statements 7, 8 and 9. For Statement 12, 83% of the respondents either agree or strongly agree. This is supported by the results of the Chi-square test of significance which indicated that the Chi-square values of the responses are significant at the 1% level.

Based on the descriptive statistics used to analyse this part as shown in Table 9.2, the mean was between 2.95 and 4.03 the median was between 3.00 and 4.00 and the mode was between 2 and 4. There is a negative coefficient of skewness for statement 12, and a positive coefficient of skewness for statements 7, 8 and 9. This implies that respondents mainly disagreed with statements 7 and 8 and this is also evidenced by the lowest mean values in both statements (3.09 and 2.95 respectively) and the median of 3.00. However, the respondents did agree that bank supervisors have a strong interest in facilitating effective market discipline (mean is 4.03 and there a positive coefficient of skewness) but were less convinced that effective market discipline could lower the supervision costs. This is supported by the results of Chi-square test of significance which indicates the Chi-square values of the responses are significant at the 1% level.

 Table 9.2: Descriptive Statistics for Statements 7, 8, 9 and 12

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n *
7	3.09	3.00	3	1.142	1	5	0.464	0.071	65
8	2.95	3.00	3	0.991	1	5	0.492	N/S	65
9	3.45	3.00	3	0.830	2	5	0.007	N/S	65
12	4.03	4.00	4	0.706	2	5	-0.592	0.011	65

100%

100%

\* Response rate = 59%

Total

Notes: N/S indicates that the differences of the responses between the organisation groups are not significant at 10% using the Kruskal-Wallis test; n = number of responses

The results of the Kruskal-Wallis test show that there is only a significant difference in the opinion of the respondents in statements 7 and 12 (p < 10%).

	Group							
Islamic banks	Central banks	Others						
4%	5%	0%						
17%	47%	41%						
41%	26%	35%						
7%	6%	24%						
31%	16%	0%						
	Islamic banks 4% 17% 41% 7% 31%	Group           Islamic banks         Central banks           4%         5%           17%         47%           41%         26%           7%         6%           31%         16%						

×7.

Table 9.3 and Figure 9.1 show that 52% of the supervisors of Islamic banks either disagree or strongly disagree that market discipline can effectively reduce the need for official supervision of Islamic banks. On the other hand, Islamic bankers are rather neutral about this statement (41% neutral).

100%

Statement 12 assumes that the supervisors of Islamic banks have a strong interest in facilitating effective market discipline. 95% of the supervisors of Islamic banks strongly agree/agree with this statement, whereas only 76% of Islamic bankers and 82% of other groups share the same view about this statement. This implies that the supervisors of Islamic banks are more convinced about their interest in facilitating market discipline than other groups of respondents.



Table 9.4: Views about Statement 12

		Group	
	Islamic banks	Central banks	Others
Disagree	3%	0%	6%
Neutral	21%	5%	12%
Agree	59%	47%	76%
Strongly Agree	17%	48%	6%
Total	100%	100%	100%

In addition, based on the Islamic bankers' perceptions, the supervisors of Islamic banks are perceived to have the most influence in monitoring the behaviour of the Islamic banks (61% of the sample agreed to that), followed by credit rating agencies and Islamic bank's shareholders. The percentages are calculated based on the three rankings given by the Islamic bankers.

From Table 9.5, it can be seen that 61% of the Islamic bankers perceived that the supervisors of Islamic banks had the most influence on Islamic banks compared to credit rating agencies and Islamic bank shareholders. This implies that due to the lack of transparency and in the absence of market discipline, Islamic bank shareholders play a lesser role in Islamic banks and this may lead to corporate governance issues.

Table 9.5: Perceptions on the Group to have the Most Influence on Islamic Banks (Number of responses = 28)

Groups	Percentages	
Islamic bank supervisors	61%	
Credit rating agencies	38%	
Islamic bank shareholders	38%	

Note: Response rate = 50%

**Proposition 9**: Transparency with regard to risk reporting is perceived to be more important in Islamic banks than in conventional banks.

Statements 6 and 17 to 21 aim to get the opinion of the respondents on the importance of transparency in Islamic banks as compared to conventional banks. The main reason is that Islamic banks have profit sharing investment account holders which require more transparency in order to monitor their investment in Islamic banks.

#### Statements:

- 6. Investment account holders in Islamic banks need more information on all risks faced by the banks than conventional depositors.
- 17. The more information on risks that are disclosed, the greater the confidence felt by investment account holders to invest in Islamic banks.
- 18. Greater risk disclosure in Islamic banks informs investment account holders of the potential risks to which their investments are exposed.
- 19. Greater risk disclosure encourages new investments in Islamic banks.
- 20. The more risk information disclosed in the annual report of Islamic banks, the more are market participants able to monitor the banks.
- 21. It is necessary to have a separate statement in the annual report to highlight the Islamic banks' risks and risk management techniques.

Based on the analysis shown in Table 9.6, the majority of the respondents in the study agree with all the statements. This is again supported by the results of Chi-square test of significance which indicates the Chi-square values of the responses are significant at 1%.

In addition, as per Table 9.6, the lowest value of the mean is 3.71 and the highest is 4.12, the median and the mode are 4 for all statements, and there is a negative coefficient of skewness for all. This implies that the respondents agree with what was discussed by these statements. However, the lowest mean of 3.71 for Statement 19 means that the respondents were not strongly convinced that greater risk disclosure encourages new investments in Islamic banks. 21% of the Islamic bankers, 16% of the supervisors of Islamic banks and 0% of other respondents strongly agree with this statement.

Table 9.6: The Frequency Results of the Responses to Statements 6 and 17 to 21

					SA	Chi-square
Statement #	SD	D	170/		39%	0.000
6	0%	4° o	1/%	4070	2494	0.001
17	000	5° o	26%	35%		0.001
18	0%	2° 0	17%	55%	26%	0.000
10	0.00	500	34%	48%	13%	0.000
			11%	65%	23%	0.000
20		10%		550/	25%	0.000
	2%	4º n	14%	55%	2.570	

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

 Table 9.7: Descriptive Statistics for Statements 6 and 17 to 21

		<u> </u>	Mada	l sn	Minimum	Maximum	Skewness	K-W	<u>n ^</u>
Statement #	Mean _	Median	wiode	<u>  30</u>			0.704	0.091	65
6	4.12	4 00	4	0.857	2	2	-0.704	0.071	60
0	4.12	1.00		0.902	2	5	0377	N/S	65
17	3.98	4.00	4	0.075	<u> </u>	<u> </u>	0.265	N/S	64
10	1.06	4.00	4	0.710	2	5	-0.305	100	
18	4.00	4.00	+	0.7(5	12	5	-0.091	N/S	65
19	3.71	4.00	4	0.705	4		0.450	NUC	65
	4.00	4.00	1	0.631	2	5	-0.456	IN/5	05
20	4.09	4.00		0.031	<u>↓</u>	5	-1.054	N/S	65
21	3 97	4 00	4	0.847	I	3	-1.051		

\* Response rate = 59% with the exception of statement 18 where the response rate = 58% Notes: N/S indicates that the differences of the responses are not significant at 10% using the Kruskal-Wallis test; n = number of responses

The results of the Kruskal-Wallis test show that there is only significant difference in the perceptions of the respondents with regard to Statement 6.

Table 9.8 shows that while 41% and 53% of Islamic bankers and the supervisors of Islamic banks respectively strongly agree that investment account holders in Islamic

banks need more information on all risks faced by the banks than conventional depositors respectively, only 18% of other groups (external auditors, external rating agencies and representatives from IFSB and AAOIFI) share the same view.

		Group	
	Islamic banks	Central banks	Others
Disagree	7%	0%	6%
Neutral	7%	21%	29%
Agree	45%	26%	47%
Strongly Agree	41%	53%	18%
Total	100%	100%	100%

Table 9.8: views about Statemen	it (	Statemen	about	Views	).8:	ble	Ta
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**Proposition 10**: In the countries in which Islamic banks are surveyed, it is perceived that effective disclosure helps market participants to assess the investment account holders' performance.

The question in this part aims to get the opinion of the survey respondents about the relationship between transparency, market discipline and disclosure. However, the researcher was aware about the social desirability bias<sup>67</sup> problem based on the ways the following statements have been phrased. But, the questions were still asked in order to get some general opinion from the respondents relating to these issues.

### Statements:

- 1. Transparency is a pre-requisite for achieving market discipline.
- 2. Market discipline can work effectively only on the basis of adequate and accurate information disclosure and transparency.
- 3. Lack of transparency in financial reporting on risks could lead to difficulties in assessing the bank's performance.
- 4. Effective disclosure is essential to ensure that market participants have a better understanding of the banks' risk profiles.

The frequency results in Table 9.9 show that in general, the respondents in the study either agree or strongly agree with all these statements, which are supported by the results of the Chi-square test of significance.

<sup>&</sup>lt;sup>67</sup> In some circumstances, respondents may be tempted to give the socially desirable response rather than describe what they actually think, believe or do. This has typically been assumed to be a function of two factors, the general strength of need for approval felt by an individual (personality trait) and the demands of a particular situation (Phillips and Clancy 1972).

Statement #	SD	D	N	A	SA	Chi-square
1	0%	0%	8%	41%	51%	0.000
2	0%	0%	5%	47%	48%	0.000
3	0%	0%	5%	43%	52%	0.000
4	0%	0%	6%	42%	52%	0.000

### Table 9.9: The Frequency Results of the Responses to Statements 1 to 4

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A),

5 = Strongly Agree (SA)

### Table 9.10: Descriptive Statistics for Statements 1 to 4

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n *
1	4.44	5.00	5	0.639	3	5	-0.700	N/S	64
2	4.43	4.00	5	0.585	3	5	-0.446	N/S	65
3	4.48	5.00	5	0.589	3	5	-0.618	N/S	65
4	4.46	5.00	5	0.614	3	5	-0.684	N/S	65

\* Response rate = 59% with the exception of statement 1 where the response rate = 58%

Notes: N/S indicates that the differences of the responses between organisation groups are not significant at 10% using the Kruskal-Wallis test; n = number of responses

Furthermore, Table 9.10 shows that the lowest mean value is 4.43 and the highest is 4.48, the mode is 5 for all these statements and the median is 5.00 (except for Statement 2, where the median is 4.00). There is a negative coefficient of skewness for all statements. This implies that the respondents strongly agreed with what was discussed by these statements as per analysis in Table 9.9.

The results of the Kruskal-Wallis test show that there is no significant difference in the perceptions of the respondents with regard to all the statements.

**Proposition 11**: Basel II is applicable to Islamic banks with modifications.

The main theme of including statements 22 to 24 is to find out the perceptions of the respondents about Basel II.

### Statements:

- 22. The New Basel Accord (Basel II) is a welcome development for Islamic banks.
- 23. There is a need to adapt the New Basel Accord (Basel II) to cover the uniqueness of Islamic banks.
- 24. Islamic Financial Services Board (IFSB) can facilitate the adoption of the New Basel Accord (Basel II) in Islamic banks.

Table 9.11 shows the frequency results of the responses to Statements 22 to 24. In general, it can be seen that the survey respondents agree with all the statements, in

particular Statement 24, where 86% of the respondents were in agreement with this statement. There is a less enthusiasm for Statement 22; only 51% agreed or strongly agreed with the statement, 11% disagreed or strongly disagreed and 38% were neutral. Again, the results are supported by the Chi-square test values.

Table 9.11: The Frequency Results of the Responses to Statements 22 to 24

Statement #	SD	D	N	A	SA	Chi-square
22	6%	5%	38%	42%	9%	0.000
23	3%	6%	19%	38%	34%	0.000
24	0%	0%	14%	53%	33%	0.001

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

 Table 9.12: Descriptive Statistics for Statements 22 to 24

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n *
22	3.44	4.00	4	0.957	1	5	-0.768	N/S	64
23	3.94	4.00	4	1.037	1	5	-0.930	0.036	64
24	4.19	4.00	4	0.664	3	5	-0.226	N/S	64
+ D									

\* Response rate = 58%

Notes: N/S indicates that the differences of the responses between organisation groups are not significant at 10% using Kruskal-Wallis test; n = number of responses

In addition, it can be seen from Table 9.12 that the mean values are between 3.44 and 4.19, the median and the mode are 4 for all these three statements. There is also a negative coefficient of skewness in all statements as shown in Table 9.12, which again support the findings in Table 9.11.

The results of the Kruskal-Wallis test show that there is only a significant difference in the perceptions of the respondents for statements 23 (p>10%).

Table 9.13: Views about Statement 23

		Group	
	Islamic		
	banks	Central banks	Others
Strongly Disagree & Disagree	11%	0%	18%
Neutral	18%	11%	29%
Agree & Strongly Agree	71%	89%	53%
Total	100%	100%	100%

As shown in Table 9.13 and Figure 9.2, a majority of central bankers (89%) and Islamic bankers (71%) either strongly agreed or agreed with Statement 23: *There is a need to adapt Basel II to cover the uniqueness of Islamic banks*, whereas 53% of other

groups shared the same view about this statement. This implies that fewer members of groups (which include the representatives of IFSB, AAOIFI, external rating agencies and external auditors) were convinced about this statement.



The results from the interviews<sup>68</sup> indicated that there are problems in applying this Basel II to Islamic banks as stated by one of the Islamic bankers "*The main problem to apply this Accord was in terms of human resource and costs to be invested in the system.*" This problem is faced by conventional banks and is even worse for Islamic banks due to their relatively small size.

Another problem mentioned by an Islamic bank's risk manager related to the lack of ratings in Islamic banks and their obligors (clients); and the fact there is no historical data to implement the Accord:

"No doubt that the Accord will serve the soundness of the financial institutions in the manner in which they operate. However, it may not suit all banks and financial institutions or rather the region in which they operate due to the requirement that all banks or financial institutions and their clients be rated by external rating agencies. There is a lack of rating agencies specialised in the Gulf region or the Arab world. As the Accord also suggests that in case there is no rating, the company need to be rated in accordance to the internal rating model of the Bank or Basel I, which may not reflect the soundness of the company or not take into consideration important facts or

<sup>&</sup>lt;sup>68</sup> Follow-up e mails were used to the Islamic bankers in countries other than Malaysia to clarify several issues due to time and budget constraints. The answers obtained were used in this chapter.

realities that form an important aspects for the business."

Another Islamic bank's risk manager stated that:

"Even not all conventional institutions would be able to subscribe to the Accord, let alone the Islamic institutions. Anyway, the IFSB should be of some assistance to this. Otherwise, the Islamic bank will have to apply the standard method which is disadvantageous. This is because the Islamic bank does not have the historical data to use the advanced method".

**Proposition 12**: External credit ratings of Islamic banks are perceived to help the public to assess the banks' financial conditions.

Statements 25 to 29 are intended to get the opinion of the respondents in the study about the role of external rating agencies on the issue of transparency in Islamic banks.

### Statements:

- 25. Information intermediaries are sufficient in the case of Islamic banks to reduce informational asymmetries.
- 26. The Islamic bank credit ratings are based on the ability of the Islamic banks to access the capital market to raise funds.
- 27. The external credit ratings affect the ability of Islamic banks to attract investment funds for the following year.
- 28. The release of the Islamic bank credit ratings to the public affects the market confidence.
- 29. The release of the credit ratings to the public leads Islamic banks to disclose less information in the annual reports.

 Table 9.14: The frequency Results of the Responses to Statements 25 to 29

Statement #	SD	D	N	A	SA	Chi-square
25	300	1800	46%	23%	10%	0.000
26	6%	19%	32%	35%	8%	0.000
27	0° o	9° o	29%	51° o	11%	0.000
28	3%	8° o	25%	46%	18%	0.000
29	9° o	40%	37%	14%	0%	0.000

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

Based on Table 9.14, the respondents in this study generally agree with statements 26 to 28 (in particular statements 27 and 28). However, they seem not to agree with

statement 29 and are rather neutral for statement 25. Figure 9.3 presents the survey respondents' views about Statement 29: *The release of the credit ratings to the public leads Islamic banks to disclose less information in the annual reports*. The Chi-square test supports these findings.



Table 9.15: Descriptive Statistics for Statements 25 to 29

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n*
25	3.18	3.00	3	0.958	1	5	0.096	0.082	61
26	3.20	3.00	4	1.034	1	5	-0.329	N/S	65
27	3.63	4.00	4	0.802	2	5	-0.349	0.020	65
28	3.69	4.00	4	0.967	1	5	-0.729	N/S	65
29	2.55	3.00	3	0.848	1	4	0.064	N/S	65

\* Response rate = 59% with the exception of statement 25 where the response rate = 55% Notes: N/S indicates that the differences of the responses between organisation groups are not significant at 10% using Kruskal-Wallis test; n = number of responses

The descriptive statistics used to analyse this section as shown in Table 9.15 also support these results. The mean was between 2.55 and 3.69 and the mode was 4 (except for statements 25 and 29, where the mode was 3). The median is 3.00 for statements 25, 26 and 29 and 4.00 for statements 27 and 28. And responses to statements 26, 27 and 28 were negatively skewed. This means that the respondents agreed with the statements, particularly statements 27 and 28 as evidenced by the medians. For statement 29, the mean value is 2.55 indicating that the respondents disagreed with the statement. The release of the credit ratings to the public was not thought to lead Islamic banks to disclose less information in the annual reports.

The results of the Kruskal-Wallis test show that there is a significant difference in statements 25 and 27 (p < 10%).

	Group				
	Islamic banks	Central banks	Others		
Strongly Disagree	0%	0%	12%		
Disagree	15%	18%	24%		
Neutral	52%	35%	47%		
Agree	22%	29%	17%		
Strongly Agree	11%	18%	0%		
Total	100%	100%	100%		

### Table 9.16: Views about Statement 25

With regard to Statement 25, 33% of Islamic bankers and 47% of the supervisors of Islamic banks either agreed or strongly agreed that: *Information intermediaries are sufficient in the case of Islamic banks to reduce informational asymmetries*, while only 17% of other groups expressed the same view. This implies that fewer members of groups (which include the representatives of external rating agencies themselves, the representatives of IFSB, AAOIFI and external auditors) were in agreement with this statement.

As indicated in Table 9.17, 35% of the Islamic bankers and 21% of the supervisors of Islamic banks were of the opinion to reject Statement 27, whereas 65% of other respondents shared the same view. This means that the majority of the other respondents did not strongly agree that the external credit ratings affect the ability of Islamic banks to attract investment funds for the following year. This group includes external credit rating agencies themselves.

Table 9.17: Views about Statement		2'	7
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	Group				
	Islamic banks	Central banks	Others		
Disagree	14%	0%	12%		
Neutral	21%	21%	53%		
Agree	52%	63%	35%		
Strongly Agree	13%	16%	0%		
Total	100%	100%	100%		

# 9.2.2 The level of qualitative risk information adequacy in existing Islamic banks' annual reports

This section aims to examine the level of qualitative risk information adequacy in existing Islamic banks' annual reports. The questions asked in this part attempt to find the answers to the following research question (Propositions 13):

• To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports adequate to provide sufficient transparency for Islamic banks that can enhance market discipline?

**Proposition 13**: The existing disclosure about the qualitative information on risks and risk management techniques in Islamic banks' annual reports in the countries surveyed is not adequate to provide sufficient transparency that can enhance market discipline.

The frequency results of responses in Table 9.18 show that majority of the respondents perceived that the risk information disclosures were inadequate in the existing annual reports of Islamic banks (particularly the qualitative information on market risks, quantitative information on market risks, operational risk, risk measurement, risk management strategies and other qualitative risk information), where the percentages of either very inadequate, inadequate or neutral were greater than 60%. This is supported by the Chi-square test where the responses are significant at 1%.

Table 9.19 also shows that Islamic banks in the sample are considered to have inadequate disclosure with particular regard to qualitative information because the mean values are below 3, for example the disclosure of risk management strategies and practices used by Islamic banks for each category of risk (mean value is 2.65). For quantitative information, for example profitability, the mean value is higher (4.00).

					*
Disclosure Items	VID/ID	N	AD/VAD	Chi-	n "
				square	
Credit risks.	45%	6%	39%	0.000	30
Qualitative information on	56%	8%	36%	0.000	36
market risk faced by Islamic					
banks					
Quantitative information on	55%	6%	39%	0.000	36
market risk.					
Operational risk	58%	3%	39%		36
Liquidity and funding risks.	39%	3%	58%	0.000	36
Conital adequacy position of	19%	8%	72%	0.001	36
Capital adequacy position of					
Islamic balks.	28%	11%	61%	0.008	36
Solvency of Islamic balks.	50/	6%	89%	0.000	36
Profitability of Islamic banks.	<u> </u>	0/0	31%	0.000	36
Risk measurement and	61%	8%	5170	0.000	
evaluation for each category of					
risk				0.000	36
Risk management strategies	66%	6%	28%	0.000	50
and practices used by Islamic					
banks for each category of risk.					26
Significant accounting policies.	8%	8%	84%	0.000	30
Corporate governance	47%	8%	45%	0.000	36
information.					
Other qualitative risk	53%	19%	28%	0.001	36
information on Islamic banks.					

# Table 9.18: The Frequency Results of the Responses to the following Disclosure Items

\* Response rate = 67%

Notes: Scale: 1 = Very Inadequate (VID), 2 = Inadequate (ID), 3 = Neutral (N), 4 = Adequate (AD), 5 = Very Adequate (VAD); n = number of responses

# Table 9.19: Mean and Median Values of Items Disclosed in the Islamic Banks' Annual Reports

Items	Mean values
1. Disclosure of credit risks faced by Islamic banks.	3.11 (3.50)
2. Disclosure of qualitative information on market risk faced by Islami banks.	c 2.78 (2.00)
3. Disclosure of quantitative information on market risk faced by Islamic banks.	2.89
4. Disclosure of operational risk faced by Islamic banks.	2.78 (2.00)
5. Disclosure of liquidity and funding risks faced by Islamic banks.	3.25 (4.00)
6. Disclosure of capital adequacy position of Islamic banks.	3.72 (4.00)
7. Disclosure of solvency of Islamic banks.	3.47 (4.00)
8. Disclosure of profitability of Islamic banks.	4.00 (4.00)
10. Disclosure of risk measurement and evaluation for each category of risk.	2.67 ((2.00)
11. Disclosure of risk management strategies and practices used by Islamic banks for each category of risk.	2.61 ((2.00)
12. Disclosure of significant accounting policies.	3.94 (4.00)
13. Disclosure of corporate governance information.	3.08 (4.00)
14. Disclosure of other qualitative risk information	2.83

Note: The figures in brackets represent the medians for each item

The results from Mann-Whitney U test as indicated in Table 9.20 show that there is a significance difference with regard to items 1, 4, 5, 6, 7, 8, 9 and 12 (p < 10%).

Table 9.20: Mann-Whitney U Test for Perceptions by Central Banks and Others (external auditors, external rating agencies, AAOIFI and IFSB) of Items Disclosed in the Islamic Banks' Annual Reports

Items	p values
1. Disclosure of credit risks faced by Islamic banks.	0.071
<ol> <li>Disclosure of qualitative information on market risk faced by Islam banks.</li> </ol>	ic p>10%
<ol> <li>Disclosure of quantitative information on market risk faced by Islam banks.</li> </ol>	ic p>10%
4. Disclosure of operational risk faced by Islamic banks.	0.076
5. Disclosure of liquidity and funding risks faced by Islamic banks.	0.057
6. Disclosure of capital adequacy position of Islamic banks.	0.003
7. Disclosure of solvency of Islamic banks.	0.013
8. Disclosure of profitability of Islamic banks.	0.052
9. Disclosure of risk measurement and evaluation for each category o risk.	f 0.042
10. Disclosure of risk management strategies and practices used by Islamic banks for each category of risk.	c p>10% N/S
11. Disclosure of significant accounting policies.	p>10% N/S
12. Disclosure of corporate governance information.	0.015
13. Disclosure of other qualitative risk information on Islamic banks.	0.066

**Note:** N/S indicates that the differences of the responses between the two organisation groups are not significant at 10% using the Mann-Whitney U test

Based on the interview with one of the supervisors of Islamic banks, he said: "There is still little information being reported on risks and risk management of Islamic banks", which again supports the findings above.

Additional questions were asked in Statements 5, 30 and 31, asking the respondents to give their perceptions about the adequacy of risk reporting in Islamic banks' annual reports and the signalling hypothesis.

### Statements:

- 5. All the inherent risks in Islamic banks (credit, rate of return, price, foreign exchange, liquidity and operational risks) have been disclosed in the annual reports.
- 30. If the performance of the Islamic bank is good, the bank tends to disclose more information to the market on its risks and risk management techniques.
- 31. The benefits to Islamic banks from signalling more risk information outweigh the costs incurred.

Table 9.21: The Frequency Results of the Responses to Statements 5, 30 and 31

Statement #	SD	D	N	Α	SA	Chi-square
5	3%	22%	30%	28%	17%	0.004
30	2%	12%	26%	37%	23%	0.000
31	2%	3%	48%	35%	12%	0.000

Note: Scale: 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), 5 = Strongly Agree (SA)

Table 9.21 indicates that a minority of the survey respondents agreed (45%) that all inherent risks in Islamic banks have been disclosed in their annual reports (statement 5). However, 60% did agree with statement 30, which is consistent with the signalling hypothesis, and 47% either agreed or strongly agreed with Statement 31, while 5% disagreed and 48% were neutral. The findings are statistically different at 1% level using the Chi-square test of significance.

 Table 9.22: Descriptive Statistics for Statements 5, 30 and 31

Statement #	Mean	Median	Mode	SD	Minimum	Maximum	Skewness	K-W	n *
5	3.34	3.00	3	1.094	1	5	-0.052	N/S	65
30	3.68	4.00	4	1.017	1	5	-0.408	0.014	65
31	3.54	3.00	3	0.812	1	5	-0.037	0.093	65

\* Response rate = 59%

Notes: N/S indicates that the differences of the responses between the organisation groups are not significant at 10% using the Kruskal-Wallis test; n = number of responses

The above findings were supported by the analysis in Table 9.22 which shows that the respondents were not really agreed with all the statements. This is evidenced by the mean values between 3.34 and 3.68, the median is 3.00 for statements 5 and 31 and 4.00 for statement 30, and the mode is 3 for all statements (except statement 30 where the mode is 4), and the low negative coefficient of skewness for all statements. The highest mean (3.68) goes to statement 30, which indicates that the majority (60%) of the respondents agreed that if the performance of the Islamic bank is good, the bank tends to disclose more information to the public on its risks and risk management techniques as explained by Table 9.21.

The results of the Kruskal-Wallis test as shown in Table 9.22 indicates that there is only a significant difference in the opinion of the survey respondents with regard to Statements 30 and 31.

	Group			
	Islamic banks	Central banks	Others	
Strongly Disagree	3%	0%	0%	
Disagree	14%	11%	12%	
Neutral	28%	11%	41%	
Agree	41%	26%	41%	
Strongly Agree	14%	52%	6%	
Total	100%	100%	100%	

Table 9.25: views about Statement 5	Table 9.2	23: Views	about	Statement	30
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While 55% of Islamic bankers and 47% of other groups rather strongly agree or agree about Statement 30, 78% of the supervisors of Islamic banks strongly agree or agree with this statement. This is shown in Table 9.23.

Table 9.24: Views about Statement 31

	Group				
	Islamic banks	Others			
Strongly Disagree	3%	0%	0%		
Disagree	7%	0%	0%		
Neutral	52%	37%	53%		
Agree	28%	37%	47%		
Strongly Agree	10%	26%	0%		

With regard to Statement 31: *The benefits to Islamic banks for signalling more risk information outweigh the costs incurred*, Islamic bankers and other groups are rather neutral (52% and 53% respectively) compared to the supervisors of Islamic banks (63% strongly agree/agree). This implies that the supervisors of Islamic banks are more convinced than the others that the benefits from signalling information for Islamic banks outweigh the costs incurred.

### 9.2.3 Other information

The question was also asked to the Islamic bankers whether they provide voluntary disclosure in the annual reports and the findings as shown in Figure 9.4 indicate that 46% of the Islamic banks surveyed provide voluntary disclosure in the annual reports and 54% do not provide such information.



According to the Islamic bankers, the voluntary disclosure information that some of the Islamic banks provide include:

- 1. Investments, *Murabaha* receivables, *Ijarah* assets, investments in managed *Mudaraba*, account payables, profit allocations in unrestricted/restricted investment, share capital, liquidity risk analysis/maturity breakdown of assets and liabilities, risk analysis (profit margin, credit, concentration), concentration of assets and liabilities, equity, restricted investment accounts.
- 2. Financial analysis.
- 3. Shari'a Board Report.

Looking at the question on segment and risk reporting in Islamic banks, it is perceived by the respondents (representatives of AAOIFI, IFSB, credit rating agencies and external auditors) not to be satisfactory (the percentage of answering "Yes" is 47% and 35% for segment and risk reporting respectively). The number of responses is 16. Figure 9.5 show these results.

The reasons as given by the survey respondents for not having satisfactory reports include:

- 1. Though Islamic banks in Malaysia did segregate their receivables portfolio by product and maturity, there is inadequate disclosure of risks for each of these categories that can be easily comprehended by laymen.
- 2. Current reporting may to a certain extent report/disclose the type of risk, for example, funding via Profit Sharing Investment Accounts (PSIA), but in general

does not emphasise the risk management techniques employed by the bank to address the credit, market and other risks.

3. Not all banks disclose the amount of non-performing financing under credit risk and market risk.



- 4. Related disclosure is also poor with regard to unquoted investments.
- 5. There is no standardisation in terms of items to be reported and accounting rules and practices.
- 6. Regulation and supervision of Islamic banks also weakly standardised.
- 7. An insider view seems the only way to assess the true level of risk carried by an Islamic bank.
- 8. Islamic banks do not have buyers of last resort and can be stuck to the goods purchased on behalf of customers, who do not pay for the good itself. Consequently, Islamic banks can have inventories, which are resold at heavy discounts for liquidity purposes. All these matters have to be disclosed, otherwise, the transparency does not exist in Islamic banks.

Supervisors of Islamic banks, Islamic bank shareholders, external credit rating agencies and Islamic banks counterparties are perceived to be the most important users in using the information published in existing Islamic banks' annual reports (mean values of 4.59, 4.55 and 4.45 respectively). This is supported by the median values of 5.00 for these users. As discussed earlier in Table 9.5, Islamic bank shareholders were not perceived by Islamic bankers to have the most influence to

monitor the behaviour of the Islamic banks, even though they are perceived by Islamic bankers, to be one of the most important users in using the information published in existing Islamic banks' annual reports. Table 9.25 summarises the mean values and the median for each user. The least important users are saving accountholders and unrestricted investment accountholders as perceived by the Islamic bankers. The findings show that in terms of the mean scores, unrestricted investment account holders are considered to use less the information published in Islamic banks' annual reports as compared to restricted investment account holders. Since unrestricted investment accountholders' funds are typically commingled with the bank's own funds, in principle they have a greater need for information on the bank's performance, while restricted investment accountholders are interested in the performance of their funds. However, by looking at the median values, both have the same median (4.00). This implies that the small difference in the means is not significant and both parties are considered to have similar needs for this information.

The Kruskal-Wallis test as shown in Table 9.25 shows that there is only significant difference with regard to Islamic banks' shareholders and other investors when compared across countries.

Users		Mean values	Median	K-W	n	
1.	Depositors-current accounts	3.69	4.00	N/S	29	
2.	Depositors-saving accounts	3.55	4.00	N/S	29	
3.	Investment account holders- unrestricted	3.62	4.00	N/S	29	
4.	Investment account holders- restricted	3.66	4.00	N/S	29	
5.	Islamic banks shareholders	4.55	5.00	0.022	29	
6.	Islamic banks counterparties	4.45	5.00	N/S	29	
7.	External credit rating agencies	4.55	5.00	N/S	29	
8.	Other investors	4.07	4.00	0.030	28	
9.	Islamic banks supervisors	4.59	5.00	N/S	29	

Table	9.25:	Important	Users	in	using	the	Information	Published	in	Islamic
Banks	' Annı	ual Reports								

\* Response rate = 52% with the exception of item 8 where the response rate = 50%

Notes: N/S indicates that the differences are not significant at 10% using Kruskal-Wallis test; n = number of responses

		Country Malaysia Bahrain Others				
	Malaysia					
Neutral	0%	17%	11%			
Important	0%	66%	16%			
Very Important	100%	17%	74%			

 Table 9.26: Views about Islamic Bank Shareholders

As shown in Table 9.26, Islamic bankers in Malaysia and other countries perceived that Islamic bank shareholders are very important users in using the information published in Islamic banks' annual reports compared to Islamic bankers in Bahrain.

Table 9.27: Views about Other Investors

	Country					
	Malaysia	Others				
Very Unimportant	0%	0%	6%			
Unimportant	0%	17%	0%			
Neutral	0%	33%	11%			
Important	25%	50%	39%			
Very Important	75%	0%	44%			
Total	100%	100%	100%			

With regard to other investors<sup>69</sup>, Table 9.27 shows that 100% and 83% of Islamic bankers from Malaysia and other countries respectively perceived that other investors are important users; only 50% of Islamic bankers in Bahrain shared the same view.

This implies that there is a significant difference between Islamic bankers in Malaysia and other countries with Islamic bankers in Bahrain for these two user groups.

Section A (Question 1) in Version 3 asked the respondents (external auditors, external rating agencies, the representatives from IFSB and AAOIFI) the importance of the given items to assess the transparency in Islamic banks. In general, the respondents perceived the type of risks, liquidity and compliance with *Shari'a* requirements as the most important items to assess the transparency in Islamic banks. This is supported by the highest mean values and the median of 5.00 for all the three items. Table 9.28 presents the descriptive statistics of these items. The Chi-square of the responses for all these items is also significant at 1% level of significance.

<sup>&</sup>lt;sup>69</sup> Other investors include foreign investors.

The same items were asked to the supervisors of Islamic banks as discussed in Chapter 8 (Table 8.11 and 8.12) in order to provide answers to Proposition 6:

Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks.

Table 9.28: Descriptive	Statistics	of Items	to assess	the <b>T</b>	<b>Fransparency</b>	in Islamic
Banks						

Item	Mean	Median	SD	Skewness	Chi-square
	4.50	5.00	0 (10	1.075	0.000
1. Type of risks $(n = 10)$	4.59	5.00	0.618	-1.2/3	0.000
2. Severity of risks (n = 16)	4.18	4.00	0.883	-0.998	0.000
3. Risk management (n = 16)	4.29	4.00	0.588	-0.109	0.000
4.Breakdown – operating segments $(n = 16)$	3.76	4.00	0.831	-0.243	0.000
5. Breakdown – geographical segments	3.59	4.00	0.795	0.097	0.000
(n = 16)					
6. Capital adequacy ratio and banks' own	4.35	4.00	0.493	0.677	0.000
ratio (n = 16)					
7. Liquidity (n = 16)	4.65	5.00	0.493	-0.677	0.000
8. Maturity matching (n = 16)	4.35	4.00	0.606	-0.310	0.000
9. Profitability (n = 16)	4.18	4.00	0.636	-0.143	0.000
10. Asset quality $(n = 16)$	4.35	4.00	0.702	-0.634	0.000
11. Compliance with relevant accounting	4.29	4.00	0.772	-0.592	0.000
standards (n = 16)					
12. Compliance with Shari'a requirements	4.41	5.00	0.870	-1.629	0.000
(n = 16)					
13. Shari'a's view - permissibility of taking	4.29	4.00	0.849	-1.344	0.000
on certain risks (n = 16)					
14. Shari'a's view – risk mitigation	4.35	4.00	0.702	-0.634	0.000
techniques (n = 16)					

Note: Response rate = 57%

The main reason for asking the same questions to different groups of respondents is to evaluate whether the respondents differ in their opinions or not. The Mann-Whitney test shows that there is a significant difference in the responses of these two groups (the supervisors of Islamic banks and other respondents) with respect to severity of risks, risk management, capital adequacy ratio and bank's ratio and asset quality as presented in Table 9.29.

This implies that some of this information, in particular asset quality and risk management, are perceived by the supervisors of Islamic banks as the most important

to monitor the risk profile of Islamic banks but to other groups, they are not so important to assess the transparency of Islamic banks.

# Table 9.29: Mann-Whitney U Test for Perceptions by Central Banks and Others (external auditors, external rating agencies, AAOIFI and IFSB) of the following Risk Information

Item	p values
1. Type of risks	0.165 NS
2. Severity of risks	0.084
3. Risk management	0.003
4.Breakdown – operating segments	0.118 NS
5. Breakdown – geographical segments	0.495 NS
6. Capital adequacy ratio and banks' own ratio	0.017
7. Liquidity	0.650 NS
8. Maturity matching	0.185 NS
9. Profitability	0.324 NS
10. Asset quality	0.016
11. Compliance with relevant accounting standards	0.215 NS
12. Compliance with Shari'a requirements	0.151 NS
13. Shari'a's view – permissibility of taking on	0.945 NS
certain risks	
14. Shari 'a's view – risk mitigation techniques	0.528 NS

Note: N/S indicates that the differences of the responses between the two organisation groups are not significant at 10% using the Mann-Whitney U test.

### 9.3 Concluding Remarks

From the analysis above, the findings of the research can be summarised as follows: Market discipline could facilitate banking supervision in Islamic banks, emphasises though the need for official supervision in Islamic banks. **This provides support to Proposition 8.** 

Furthermore, the analysis also supports Propositions 9 and 10. Transparency with regard to risk reporting is perceived to be more important in Islamic banks than in conventional banks because of profit sharing investment account holders. In the countries in which Islamic banks are surveyed, it is perceived that effective disclosure is important to inform the market participants about the condition of the bank.

With regard to Proposition 11: Basel II could apply to Islamic banks but with modifications, majority of the respondents perceived that Basel II could be applied to

Islamic banks but with some adaptations and the IFSB could play an important role in this context. **Therefore, Proposition 11 is supported**.

Islamic banks' external credit rating agencies are perceived to help the public to assess the banks' financial conditions. This again provides support to Proposition 12.

**Evidence indicates that Proposition 13 is supported**: The level of qualitative risk information is not adequate in the existing Islamic banks' annual reports to enhance market discipline. This is based on the perceptions of the respondents on the given disclosure items, which gives the low mean and median for the qualitative risk information. In addition, the voluntary disclosures are very minimal and there is still a need for improved disclosures for risk reporting and segment reporting. The Exposure Drafts on Risk Management and Capital Adequacy issued by IFSB in March 2005 could be seen as a good initiative for this. Furthermore, as mentioned by one of the supervisors of Islamic banks in Malaysia, the central bank has issued a new guideline for the disclosure in Islamic banks to improve the risk reporting, which has effective date for the year 2004.

Having presented the findings of the research, what follows in Chapter 10 is a discussion of these findings as well as the conclusions and implications of the current study and also the areas in which future research appears to be desirable.

### Chapter 10

### Conclusions, Limitations and Suggestions for Further Research

### 10.1 Introduction

This final chapter summarises the main results and conclusion of the thesis. Section 10.2 outlines the research objectives, research questions and methods used in the study to answer the research questions. The main findings and results of the propositions testing are reported in Section 10.3. Implications of the survey findings are summarised in Section 10.4. Section 10.5 addresses the limitations of the study. Finally, Section 10.6 concludes the thesis with suggestion for further research.

### 10.2 Summary of the Research Objectives, Research Questions and Methods

This research study deals with the perceptions of several groups of respondents on transparency in Islamic banks with regard to risks and risk management techniques. The research objectives, research questions and research methods of the study are summarised below:-

### 10.2.1 The Research Objectives

The objectives of the study are as follows:-

- To ascertain the perceptions of Islamic bankers on nature of risks, risk measurement and risk management approaches of Islamic banks in comparison to those of conventional banks and with reference to the market environment in which Islamic banks typically operate.
- To ascertain the information that the supervisors of Islamic banks require most to monitor the risk profile of Islamic banks, but which is not required by financial reporting standards (with reference to IAS 32, ED 7 and FAS 1), and also the most important supervisory tool to monitor the risk profile of Islamic banks.
- To examine the implications of transparency with particular reference to market discipline for Islamic banks and disclosure of risk and risk management.
- To evaluate the adequacy of risk reporting in existing Islamic banks' annual reports.

• To explore policy implications from the above for the Islamic banks' regulators (central banks) and standard setters (IFSB and AAOIFI), with reference to Pillar 2 and Pillar 3 of Basel II.

### 10.2.2 The Research Questions

The thesis aims to answer the following research questions:-

RQ1 How does the risk perception of Islamic bankers differ from conventional bankers with respect to the market in which Islamic banks typically operate? Do Islamic banks use the more technically advanced risk measurement techniques? Apart from using similar risk mitigation approaches as in conventional banks, do Islamic banks widely use *Shari'a* compliant risk mitigation approaches? Also which risk mitigation approaches used by conventional banks are not used by Islamic banks?

RQ2 How important for monitoring the risk profile and management of Islamic banks is the additional risk information which is not required by current financial reporting standards (with reference to IAS 32, ED 7 and FAS 1) but is provided to bank supervisors? Which supervisory tool is perceived by bank supervisors to be the most important to supervise the risk profile and risk management of Islamic banks?

RQ3 What is the perceived role of transparency in Islamic banks from a risk reporting point of view, with particular reference to Basel II?

RQ4 To what extent are existing public disclosures on qualitative risk information in Islamic banks' annual reports perceived by the supervisors of Islamic banks and other interested parties (refer to footnotes 5 and 58) to be adequate to provide sufficient transparency for Islamic banks that can enhance market discipline?

RQ5 What are the implications of the above for the implementation of Basel II, for example for regulation of risk disclosures (Pillar 3) and for banking supervision (Pillar 2)?

### 10.2.3 Research Methods

The study adopted the methodology of questionnaire survey (most of the questions are close-ended to make the respondents answered them easily) to answer the five

research questions. Table 10.1 summarises the methods used in this study to answer each of the research questions.

The responses from several groups of respondents were analysed using descriptive statistics and tested using non-parametric tests. Thirteen propositions were developed and tested. The results revealed that ten propositions were supported, one proposition was not fully supported and two propositions were not supported.

<b>Research Question</b>	Method	Respondents
RQ1	Questionnaire survey, interview, follow-up e mails	56 Islamic bankers from 28 Islamic banks
RQ2	Questionnaire survey, interview, follow-up e mails	26 supervisors of Islamic banks from 14 countries
RQ3	Questionnaire survey, interview, follow-up e mails	56 Islamic bankers, 26 supervisors of Islamic banks, 20 external auditors, 4 rating agencies, 2 representatives from IFSB and 2 representatives from AAOIFI
RQ4	Questionnaire survey, interview, follow-up e mails	26 supervisors of Islamic banks, 20 external auditors, 4 rating agencies, 2 representatives from <i>IFSB</i> and 2 ( representatives from AAOIFI
RQ5	Infer from the empirical findings for RQ1 to RQ 4 and relate to the theoretical framework and prior research on Basel II and market discipline	

Table 10.1: Research Methods to answer the five Research Questions

### **10.3** The Main Findings

The survey questionnaire received a high response rate (59%); therefore, the conclusions below may be considered to be representative of informed opinion in the countries surveyed (Malaysia, Bahrain, Saudi Arabia, Jordan, Sudan, Kuwait, United

Arab Emirates, Indonesia, Egypt, Qatar, Turkey, Iran, Bangladesh and Pakistan) - refer to Table 8.1: Responses to the Survey.

The responses given by the respondents of this survey reflected their views on:

- (a) the nature of each risk as currently experienced by Islamic banks;
- (b) the risk measurement and management techniques as used in Islamic banks;
- (c) the risk information that the supervisors of Islamic banks required to monitor the risk profile of Islamic banks;
- (d) the importance of transparency in Islamic banks; and
- (e) the adequacy of risk reporting in the existing Islamic banks' annual reports

Table 10.2 provides all the propositions used in this study together with the results.

## 10.3.1 Islamic bankers' opinions about the nature of risks, risk measurement and risk management techniques in Islamic banks

Islamic banks, like their conventional counterparts, are financial intermediaries offering services to current account holders and investment account holders on one side and providing finance to companies, entrepreneurs and the public sector on the other. Therefore, the findings show that they are exposed to many risks that are similar to those of conventional banks. Islamic bankers perceived credit risk as the most important risk in Islamic banks, which is similar to conventional banks (Bank Risk Disclosure Survey, 2001; Trema Management Consulting, 2002). However, the form in which this risk arises is different as compared to conventional banks. For example, the findings confirm that credit risk is the most important in Salam and Istisna'a contracts. This relates to the risk of a counterparty's failure to meet his or its obligations in terms of making deferred payment and making or taking delivery of an asset. A failure could relate to a delay or default in payment or in delivery of the subject matter of Salam or Istisna'a, entailing a potential loss of income and even capital for Islamic banks. Due to the above reasons, Salam and Istisna'a are perceived to be riskier than Murabaha and Ijarah. It follows that these findings provide support for proposition 1 - Salam and Istisna'a are perceived as more risky than Murabaha and Ijarah.
Propositions	Description	Results
Proposition 1	Salam and Istisna'a are perceived as more risky tha Murabaha and Ijarah.	n Supported
Proposition 2	Profit sharing contracts ( <i>Musharaka</i> and <i>Mudaraba</i> ) ar perceived as more risky than mark-up based contract ( <i>Murabaha</i> , <i>Salam</i> , <i>Istisna'a</i> and <i>Ijarah</i> ).	e Supported except for s Salam
Proposition 3	Differences in <i>Shari'a</i> interpretation may lead to different perceptions of risk by Islamic bankers in different countries in the study.	Not supported
Proposition 4	Not many Islamic banks use the more technically advanced risk measurement approaches.	/ Supported
Proposition 5	Islamic banks use a number of risk mitigation methods that are intended to be <i>Shari'a</i> compliant and are different from methods used by conventional banks.	Not supported
Proposition 6	Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks.	Supported
Proposition 7	Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks as compared to other approaches (e.g. statistically based).	Supported
Proposition 8	Market discipline could facilitate banking supervision in Islamic banks, similarly to conventional banks.	Supported
Proposition 9	Transparency with regard to risk reporting is perceived to be more important for unrestricted profit sharing investment account holders in Islamic banks than for depositors in conventional banks.	Supported
Proposition 10	In the countries in which Islamic banks are surveyed, it is perceived that effective disclosure helps market participants to assess the investment account holders' performance.	Supported
Proposition 11	Basel II is applicable to Islamic banks with modifications.	Supported
Proposition 12	External credit ratings of Islamic banks are perceived to help the public to assess the banks' financial condition.	Supported
Proposition 13	The existing disclosure about the qualitative information on risks and risk management techniques in Islamic banks' annual reports in the countries surveyed is not adequate to provide sufficient transparency that can enhance market discipline.	Supported

Table 10.2: Propositions used in this study and the results

Furthermore, the findings show that the most risky contracts, i.e. those with the highest mean scores, in Islamic banks are *Mudaraba* and *Musharaka* contracts, which are supported by the results of the Chi-square test and Friedman test. Therefore, the **survey findings partially support proposition 2** – Profit sharing assets (*Musharaka* and *Mudaraba*) are perceived as more risky than mark-up based assets (*Murabaha*, *Istisna'a* and *Ijarah*), in the exception of *Salam*. Investments made via *Mudaraba* and *Musharaka* contracts may contribute substantially to Islamic banks' earnings, but they expose them to significant rate of return risk (mean values = 4.25 and 4.42, respectively; liquidity risk (mean values = 4.27 and 3.96, respectively); foreign exchange risk (mean values = 4.38 and 4.29 respectively; and operational risk (mean values = 4.14 and 4.37, respectively).

In addition, Islamic banking entails special risks that need to be recognised. They are withdrawal risk (part of liquidity risk) and displaced commercial risk (a form of market risk). The withdrawal risk arises because the *Mudaraba* contracts give investment account holders withdrawal rights that are difficult to honour due to the lack of cash-equivalents that are *Shari'a* compliant. The findings show that all the respondents agree that these risks are also faced by Islamic banks in the study (negative coefficients of skewness, mean values are greater than 3 and the mode is 4 for the analysis). This is consistent with the Statement on the Purpose and Calculation of the Capital Adequacy Ratio for Islamic Banks, which was issued by AAOIFI in 1999.

Even if there are differences in *Shari'a* interpretations between Malaysia, Sudan and the Gulf countries, the perceptions of the nature of risks among them by the Islamic bankers were not significantly different. All the Islamic bankers in the study in Malaysia, Bahrain and other countries perceived all the risks in a similar way. This **provides no support for proposition 3** – Differences in *Shari'a* interpretation may lead to different perceptions of risk by Islamic bankers in different countries in the study.

The above findings confirm that different contracts have different implications for the importance of each risk. Therefore, the findings suggest that each risk should be

assessed separately for each financial instrument to facilitate appropriate risk management. The findings show that Islamic banks are perceived to use less technically advanced risk measurement techniques of which the most commonly used are maturity matching, gap analysis and credit ratings. The more technically advanced risk measurement techniques which include VaR, Simulation techniques, Estimates of Worst Case and RAROC are perceived not to be used widely by Islamic banks in the study. The main explanation is that Islamic banks are still new and do not have sufficient resources and systems in place to employ more technical advanced techniques. This finding supports proposition 4 – Not many Islamic banks use the more technically advanced risk measurement approaches.

In addition, the results show that Islamic banks are not fully using the *Shari'a* compliant risk mitigation methods which are different from the ones used by conventional banks. The reason is because these methods are still subject to several objections by *fiqh* scholars, which according to them, (for example parallel *Bai' Salam*) may lead to speculation (Usmani, 1996). Therefore, the finding provides no support to proposition 5 - Islamic banks use a number of risk mitigation methods that are intended to be *Shari'a* compliant and are different from methods used by conventional banks.

In principle, there is a variety of activities that Islamic banks can carry out in many ways to provide financing. These ways need to be adapted to be consistent with the principles on which Islamic banks conduct their business. Therefore, there is an urgent need for identification, measurement, management and supervision of such special risks. This should not be left to the initiative of Islamic banks only; the supervisory authorities should also undertake a role in this respect by providing guidelines to enhance transparency with regard to risk reporting in Islamic banks.

## 10.3.2 Supervisors of Islamic banks' opinions about the information required most to monitor risk profile of Islamic banks

The findings confirm that supervisors of Islamic banks require additional information compared to what is required by financial reporting standards in order to supervise Islamic banks. This is consistent with the findings in conventional literature regarding the informational advantage of bank supervisors (Berger and Davies, 1998 and Berger et al., 2000). The results from the questionnaire survey show that type of risks, the risk management, asset quality and compliance with *Shari'a* requirements are the most important risk information required by the supervisors of Islamic banks to monitor the risk profile of Islamic banks.

Other information required by the supervisors of Islamic banks, which are not required by current financial reporting standards (IAS and AAOIFI), include rating of the bank by a rating agency and the implementation of good corporate governance.

This finding provides support to proposition 6 – Like supervisors of conventional banks, supervisors of Islamic banks require additional risk information over that which is required by current financial reporting standards in order to monitor the risk profile and management of the banks (apart from the issue of frequency).

In view of the UK FSA's initiative on Risk Based Approach to Supervision of Banks (1998), supervisors of Islamic banks tend to share the same view. The FSA's aim is to ensure that the attention is focused, in the case of each bank, on those areas which can put depositors' funds at risk, in which they adopt the RATE (for UK and EEA banks) and SCALE (for non-EEA banks) frameworks (refer to Section 3.2.3 in Chapter 3). Risk management and type of risks faced by the Islamic banks are perceived to be the most important information to the supervisors of Islamic banks. Looking at the risks exposed by Islamic banks as discussed earlier, the supervisors of Islamic banks play even greater role to assess and evaluate these risks in their supervision.

Looking at Basel II, it is clear that the three Pillars in this accord complement each other. The supervisory review process (Pillar 2), together with Pillar 3 (market discipline), complements Pillar 1 (minimum capital requirements) in achieving a level of capital commensurate with a bank's overall risk profile.

Pillar 2 suggests that the banks assess their capital adequacy relative to their overall risk exposures, and that supervisory review and take appropriate actions in response to those assessments. This is a key component in effective banking supervision.

Central banks have used a variety of approaches to supervisory review of conventional banks, including (BCBS, 2001):

- on-site examinations or inspections;
- requirements for policy statements on risk management issues;
- off-site review;
- discussions with bank management;
- commission and review of work done by external auditors (provided it is adequately focused on the necessary capital issues); and
- periodic reporting.

Having carried out the review, supervisors should take appropriate action if they are not satisfied with the results of the bank's own risk assessment and capital allocation process. Actions may include, but are not limited to:

- increased monitoring of the bank;
- requiring improvements in the controls environment and risk management process of the bank; and/or
- additional capital requirements above the basic minimum.

There is no exception for the supervisors of Islamic banks. They have the same systems in place in their supervisions; in most cases they however require different information from that supplied by conventional banks due to *Shari'a* requirements.

In order for the supervisors of Islamic banks to perform their supervision effectively, the findings suggest that they must have an adequate understanding on the wide array of risks undertaken by Islamic banks and satisfy themselves that Islamic banks have in place an adequate risk management and reporting process, which according to this study, is still lacking. Furthermore, the supervisors of Islamic banks require timely and reliable information about the financial condition and risk profile of banks, and they have the system in place to capture the required information to assist their supervision.

Based on the findings in the study, the supervisors of Islamic banks perceive supervisory bank rating systems (e.g. CAMELS or similar) to be the most important risk assessment approach to supervise Islamic banks. This risk assessment approach could assist the Islamic bank supervisors in their supervision by providing early warning signals about the bank's condition and performance. The survey finding **support proposition 7** - Supervisory bank rating systems (e.g. CAMELS or similar) are perceived to be the most important assessment approaches to supervise Islamic banks as compared to the statistically based approaches, except in Bahrain, where they perceived CAMELS to be only important and not very important as they also used other assessment approaches to supervise Islamic banks with regard to risks.

#### 10.3.3 Transparency and market discipline in Islamic banks

The findings suggest that market discipline could not effectively reduce the need for official supervision in Islamic banks but the use of market discipline is to supplement the bank supervision and regulation. This finding provides **support to proposition 8**: Market discipline could facilitate banking supervision in Islamic banks, similarly to conventional banks.

In addition, the supervisors of Islamic banks are perceived to have a strong interest in facilitating market discipline as 95% of the supervisors of Islamic banks in the study strongly agree with statement 12: *Bank supervisors have a strong interest in facilitating effective market discipline in Islamic banks*.

With regard to monitoring power, the findings show that the supervisors of Islamic banks are perceived to have the most influence in monitoring the behaviour of Islamic banks, followed by credit rating agencies and Islamic banks' shareholders. This is based on Islamic bankers' perceptions. This implies that due to the lack of transparency and in the absence of market discipline, Islamic banks' shareholders play a lesser role than the supervisors of Islamic banks in monitoring Islamic banks. This relates to corporate governance issues. The Organisation for Economic Cooperation and Development<sup>70</sup> (OECD) defines corporate governance as a set of relationships between a company's management, its board, shareholders, and other stakeholders. Corporate governance also provides the structure for companies to set and attain their objectives and monitor performance. Good corporate governance provides boards and

<sup>&</sup>lt;sup>70</sup> See "OECD Principles of Corporate Governance" issued June 21, 1999.

management with incentives to pursue objectives in the company shareholders' interest and facilitates effective monitoring and efficient use of resources.

Disclosure may be considered to be the foundation of any system of corporate governance (Cadbury, 1999). A system of corporate governance needs a good level of disclosure and adequate information to eliminate (or at least reduce) information asymmetries between all parties in order to balance the powers of the corporate stakeholders, making corporate insiders accountable for their actions.

Transparency of risk reporting in Islamic banks is perceived to be more important than in conventional banks due to the existence of profit sharing arrangements, and in particular to unrestricted investment account holders. Effective disclosure may help market participants to assess the bank's performance. Therefore, the findings provide **support to proposition 9** - Transparency with regard to risk reporting is perceived to be more important in Islamic banks than in conventional banks because of profit sharing investment account holders.

For Islamic banks, transparency is an important supervisory pillar and has considerable relevance for enhancing their ethical responsibility and credibility, thereby contributing to their greater acceptance, and elimination of any misconceptions of their activities. However, the information made available to the market must be of the right quality and volume, and it is important to avoid flooding the market with information that would be hard to interpret or to use in understanding the bank's actual risk profile.

This is also relevant to the findings of this study. The survey findings **support proposition 10** - In the countries with Islamic banks surveyed, it is perceived that effective disclosure is important to inform the market participants about the condition of the bank. As Islamic banks' shareholders play a lesser role in monitoring Islamic banks, this relates to the current level of disclosure in Islamic banks, which is still not sufficient for the Islamic banks' shareholders to use to monitor the Islamic banks. The results of the questionnaire survey and interviews (also follow-up e mails) indicated a perception that transparency is still lacking in Islamic banks.

The BCBS has issued standards and principles in risk areas including credit, liquidity operations, consolidation and capital adequacy. Many of these standards are equally relevant and applicable to Islamic banks but with some modifications. The results from the interviews indicated that there are problems in applying this Basel II to Islamic banks in terms of human resources and costs to be invested in the system. This problem is faced by conventional banks and is even worse for Islamic banks due to their relatively small size. Another problem mentioned by Islamic bankers related to the lack of rating agencies for Islamic banks and the fact there is no historical data to implement the Accord.

This suggests that there should be modifications to Basel II to suit the Islamic banks' transactions, which is also supported by the questionnaire findings. Therefore, the findings **provide support for proposition 11** – Basel II could apply to Islamic banks but with modifications. The results from the questionnaire survey suggest that majority of the respondents either agree or strongly agree (86%) that IFSB can facilitate the adoption of Basel II in Islamic banks and there was no significant difference in their perceptions of this. This implies that IFSB can play an important role as shown in the findings to adapt Basel II to suit the nature of Islamic banks.

On the other hand, Islamic bank external ratings are perceived to help the public to assess the banks' financial condition, even though there is still a need for the supervisors of Islamic banks to perform their effective supervision on Islamic banks. Hence, the findings **support proposition 12** – External credit ratings of Islamic banks are perceived to help the public to assess the banks' financial conditions.

The rating agencies serve as intermediaries in the disclosure process by collecting, analysing, and distributing bank information and this could assist bank supervisors in their supervision. Aside from public information, the agencies often receive bank proprietary information in this process. Such information becomes embedded in ratings, which, in turn, are key inputs to credit decisions by other market participants. In this indirect way, some proprietary information becomes part of the process through which market discipline is exerted. However, in the case of Islamic banks, the main limitation is that not all Islamic banks are being rated by the rating agencies, as

mentioned above, which also leading to the problem in implementing Basel II proposals.

# 10.3.4 The level of adequacy of qualitative risk information in existing Islamic banks' annual reports

The findings show that the level of risk reporting, particularly the qualitative information in existing annual reports of Islamic banks, was not adequate to provide sufficient transparency. As discovered in the above findings, corporate governance is still weak in Islamic banks because the supervisors of Islamic banks were perceived to have more power in monitoring than Islamic banks' shareholders. Thus, the disclosure of firms' risk-management positions and strategies is crucial to improve corporate transparency for market participants and to enhance corporate governance. It can be concluded that the findings **support proposition 13** – The existing disclosure about the qualitative information on risks and risk management techniques in Islamic banks' annual reports in the countries surveyed is not adequate to provide sufficient transparency that can enhance market discipline.

Based on the findings in this study, it is important for the standard setters and the bank regulators to work together to improve these disclosures. In Malaysia, for example, there is a new set of guidelines issued by Bank Negara Malaysia known as GP8I (effective in 2004). This is in addition to GP8 which was issued in 1996 for all financial institutions in Malaysia. Every Islamic financial institution in Malaysia must make disclosures in its annual reports based on these guidelines, which it is hoped, will improve transparency in risk reporting.

It is hoped also that by having adequate disclosure in the annual reports, particularly risks information, future banking crises could be avoided. This is because research has shown that one of the causes of the Asian banking crises was the lack of transparency in the annual reports. However, as mentioned earlier, not all information should be made available to the public, because some of the information such as the nature and the amount of investments of the restricted investment account holders should be made available to restricted investment account holders.

#### 10.3.5 Other information

The results from the questionnaire survey revealed that only 46% of the Islamic banks surveyed provide voluntary disclosure in the annual reports (i.e. 54% do not provide such information). Segment and risk reporting, which can be part of voluntary disclosure, were not satisfactory. This again relates to the issue of adequacy in the existing Islamic banks' annual reports. Voluntary disclosure could provide more information to the investment account holders. For example, based on the respondents' answers for the open-ended question in the questionnaire, the voluntary disclosures include Investments, *Murabaha* receivables, *Ijarah* assets, investments in managed *Mudaraba*, accounts payable, profit allocations in unrestricted/restricted investment, liquidity risk analysis/maturity breakdown of assets and liabilities, risk analysis (profit margin, credit, concentration), concentration of assets and liabilities, equity, restricted investment accounts and *Shari'a* Board's Report.

The supervisors of Islamic banks, Islamic banks' shareholders, external credit rating agencies and Islamic banks counterparties are perceived to be the most important users in using the information published in existing Islamic banks' annual reports, even it as suggested above Islamic banks' shareholders have less influence in monitoring the behaviour of the Islamic banks as compared to the supervisors of Islamic banks.

#### **10.4** Implication of Findings

The findings of the present study have an implication for the issue of transparency with particular reference to risk reporting in Islamic banks. Islamic banks in the study perceived the importance of all the inherent risks in their operations, and yet the existing risk reporting in the annual reports is still not adequate.

## **10.4.1** Policy Implications

The results have some policy implications for AAOIFI, IFSB and the supervisors of Islamic banks (Central Banks). The AAOIFI, IFSB and Central Banks may find it useful to assess the level of adequacy of risk reporting in Islamic banks and come up with the new guidelines for risk reporting. The findings provide evidence for IFSB and Central Banks to pursue policies that promote transparency with regard to risks and risk management. The researcher believes that the general findings in this study if

confirmed by other studies have important implications for setting of risk reporting standards for Islamic banks.

Efforts are needed at the level of AAOIFI or IFSB to develop more detailed disclosure requirements to enhance transparency of risks. The publication of the two exposure drafts on Risk Management and Capital Adequacy in March 2005 by IFSB could provide guidelines to Islamic banks.

Central banks and also IFSB would play a greater role in this case to increase risk disclosure as the growing recognition that the corporate governance of banks has an important role to play in assisting bank supervisors to perform their tasks, allowing supervisors to have a working relationship with bank management, rather than an adversarial one (BCBS, 1999<sup>71</sup>). This will improve a bank's overall management through a clearer understanding of total risks, risk measurement and management practices.

The findings also show that Islamic banks are still far behind the current best practice in terms of risk disclosure (risks and risk management methods) as practised by leading conventional banks (for example, UBS) in their annual reports. This has implications, particularly for investment account holders, because as mentioned earlier, due to the profit sharing arrangements, they require adequate risk information to monitor their investment. In particular, this enables them to assess the potential risks and rewards of their investments and to protect their own assets. Islamic bankers could also find this findings useful in order to improve their current risk management techniques since all the inherent risks are perceived to be very important in this study.

The issuance of ED 7 by IASB could be seen as a good initiative towards the improvements of risk disclosures in conventional banks. Since Islamic banks have different characteristics compared to conventional banks, this ED 7 could be subjected to several modifications before it can be applicable to Islamic banks. For example, Islamic banks are not exposed to interest rate risk, but will be exposed to other type of risks, namely rate of return risk. However, the ED 7 could become a very important

<sup>&</sup>lt;sup>71</sup> BCBS (1999), 'Enhancing Corporate Governance for Banking Institutions, September 1999.

guideline to be used in order to improve the risk disclosures in Islamic banks, which based on the findings in this study, are still inadequate. There are several important risk disclosure items, in particular the qualitative and quantitative risk information suggested in ED 7, which could also be tailored to suit the nature of Islamic banks' operations. The findings in this study confirm that Islamic banks use widely similar risk measurement and management techniques to those used by conventional banks, so the disclosure of this information as in ED 7 could make the activities of Islamic banks more transparent to the users, in particular the investment account holders.

However, many entities would wish to provide the disclosures in paragraphs 32 - 45of ED 7 (refer to Section 3.2.7) in one place, perhaps as a coherent and complete statement of risk. While it will be possible to audit all the required disclosures if they are included in the financial statements, the audit of some of the more narrative and forward looking disclosures<sup>72</sup> may result in considerable additional expense for entities, not to mention regulatory constraints on auditing forward looking information. For example, enormous quantitative data based on information provided internally to key management could be replaced with a general principle that management must disclose sufficient information to enable readers to understand the nature and extent of risks arising from financial instruments. Furthermore, data provided to management are generally proprietary (such as the policies and processes for managing risk and capital targets set by the management) and include strategic business information. Disclosing this information might put entities with a strong risk management function at a competitive disadvantage to those with a less robust function and to those that are not required or not permitted to provide such disclosures such as US GAAP<sup>73</sup> reporting entities.

#### **10.4.2** Theoretical Implications

The thesis has shown the relationship between the transparency of risk reporting and the effectiveness of market discipline, which is perceived to apply to Islamic banks, as discussed in the conventional banking literature. This study has filled a gap in the literature by looking specifically into the case of Islamic banks and this is the first

 <sup>&</sup>lt;sup>72</sup> Information provided to key management is generally forward looking. Assumptions and scenarios are generally used to quantify certain risks for management, and much of that information is based on future forecasts.
<sup>73</sup> US SEC prohibits the inclusion of forward looking statements in the audited financial statements (Section 27A of the Securities)

<sup>&</sup>lt;sup>73</sup> US SEC prohibits the inclusion of forward looking statements in the audited financial statements (Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934).

empirical study in the academic literature in the area of risk reporting in Islamic banks. Previous findings in the conventional literature have shown the link between lack of transparency in risk reporting and the implications for corporate governance issues. The findings in this study have confirmed that there is still lack of risk transparency in Islamic banks' annual reports, which is an obstacle to good corporate governance. This aspect, namely the alignment of management interests, which often pursue growth policies through acquisitions, with shareholders' objectives, which mainly focus on investment returns, once again calls for the active involvement of supervisory authorities.

Research by bank regulators, particularly BCBS, provides an implication for Islamic banks. In particular, Basel II, which is issued by BCBS, required some modifications to suit the nature of Islamic banks' operations. This is not something new. Studies have confirmed that even in conventional banks, (Sironi, 2003), this Basel II appears problematic to apply, particularly for smaller banks. Most of Islamic banks are small in size and there is little historical data and lack of ratings.

Furthermore, due to *Shari'a* requirements, Islamic banks are lacking in risk management techniques to manage their risks. Even, current *Shari'a* compliant risk management techniques are still not widely used due to several objections from *fiqh* scholars.

In addition, this study has confirmed that signalling theory (Watts and Zimmerman, 1986, Morris, 1987) originating from developed countries is less applicable in Islamic banks, of which most are located in developing countries. The reasons suggested by the study include inadequate transparency about risk conditions in Islamic banks, low market discipline and poor corporate governance. Effective market discipline depends on market participants having information about the risks and financial conditions of banking organisation (Crockett, 2001). This shows that there is a weak information environment in developing countries where most of the Islamic banks are located. Even segment reporting is still lacking in Islamic banks.

The results confirm the general criticism made of annual reports for their inadequate disclosure of risks from the perceptions of the supervisors of Islamic banks, rating agencies, external auditors, representatives from IFSB and AAOIFI.

#### 10.5 Limitations

There is no perfect study and the current one is no exception. Therefore, this section will discuss some limitations in the present study, which include:

#### 10.5.1 Social Desirability Bias

This is defined as 'The tendency for respondents to give answer to survey questions that are consistent with what society believes is right, proper, correct, or acceptable, creating bias in the results whenever the true answers are suppressed to meet social norms', (Alreck and Seattle, 1995, p455). For the present study there is possibility of social desirability bias, since the supervision of Islamic banks are done by the central banks, and this may introduce a bias into opinions expressed by respondents to the research questions. Social desirability bias may be reduced but not completely removed. To minimise the social desirability bias in the present study, the researcher has made a clear statement within the covering letter of the questionnaire, to the respondents ensuring them of confidentiality and anonymity. In addition to that, the sample of the survey was not concentrated on one geographical area, but covered different geographical areas such as Malaysia, Bahrain, Saudi Arabia, Jordan, Sudan, Kuwait, United Arab Emirates, Indonesia, Egypt, Qatar, Turkey, Iran, Bangladesh and Pakistan.

#### 10.5.2 Statistical Limitations due to Limited Number of Respondents

The research study focused on the small sample of Islamic bankers and supervisors of Islamic banks, who have been involved in the risk reporting of Islamic banks, therefore a higher significance level is used in this study to test the significance of the data (Stevens, 1996). The possibility of a non-significant result may be due to insufficient power (small sample size).

#### **10.6** Further Research Directions

The conclusions drawn from the research study and limitations thereon suggest opportunities for future research. The following are suggested ideas for further research:

(1) The current study focused on the risk reporting of Islamic banks, using a questionnaire survey to obtain the respondents' perceptions on several issues in risk reporting. More research will be needed from various perspectives in order to form a whole picture of the interests of the related parties and to determine which party should take the initiative in order to develop the risk disclosures standards. The study on how ED 7 and the revised IAS 32 could be adapted by Islamic banks could also relevant to undertake in the future. Should the Islamic banks take the lead or should the standard setters offer general guidelines, or should Islamic banks and the standard setters have a cooperative effort in this?

(2) It is possible to extend the research in investigating in details the disclosure of each risk and how it is being measured and mitigated. Additional interviews on the topic discussed, which include a large number of respondents (Islamic bankers and other interested parties – Islamic bank shareholders and investment accountholders) about the additional ways to improve the risk disclosures may be desirable and worthwhile. How much quantitative and qualitative risk information should be disclosed?

(3) It is also possible to obtain the regulators' point of view on the issues of transparency and risk disclosures in Islamic banks in terms of their roles to improve the current situation. An interview with the regulators of Islamic banks would give additional insights on their roles to improve the transparency of risk condition in Islamic banks.

Nevertheless, it is hoped that this study has added its useful contribution of the debate for more transparency in banks, with respect to risk reporting, particularly to Islamic banks. Transparency of risk reporting has been a pre-requisite to achieve effective market discipline. Research in this area has made significant contribution to the development of the policy for Islamic banks. The challenges, complexities and the dynamic nature of globalisation will continue to provide a fertile landscape for research.

Furthermore, the exposure draft of a new IFRS, ED 7: Financial Instruments: Disclosures issued by IASB to replace IAS 30 and partly the existing IAS 32 can be seen as a good initiative to improve disclosures about financial instruments in financial statements.

This initiative is hoped to improve financial reporting by helping users to understand the significance of financial instruments in financial statements by giving information about companies' capital and by revealing more clearly risks attached to holding financial instruments, which has been suggested by this thesis. This ED 7 could be also applicable to Islamic banks, but after some modifications to suit the specificaties of Islamic banks.

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Appendices

## **APPENDIX 1**

## **Example of Best Disclosure Practice**

## 1. UBS Group (Union Bank of Switzerland, Europe's largest bank) Source: UBS Financial Report 2000

The UBS Group's consolidated financial statements have been prepared in accordance with International Accounting Standards (IAS). UBS is a global integrated investment services firm and a leading bank in Switzerland. It provides a broad range of financial services such as advisory services, underwriting, financing, market making, asset management, brokerage and retail banking on a global level. It was formed on 29 June 1998 when Swiss Bank Corporation and Union Bank of Switzerland merged. The consolidated financial statements are sated in Swiss Francs (CHF), the currency of the country in which UBS is incorporated.

As a global financial services firm, UBS's businesses are affected by the external environment in the markets in which UBS operates. In particular, the results of UBS's business in Switzerland, and notably the results of its credit-related activities would be adversely affected by any deterioration in the state of the Swiss economy because of the impact this would have on UBS's creditworthiness.

The risks disclosed by UBS can be summarised as follows:

## Credit risk

Credit risk represents the loss, which UBS would suffer if a counterparty or issuer failed to perform its contractual obligations in all forms. It is inherent in traditional banking products – loans, commitments to lend, and contracts to support counterparties' obligations to third parties such as letters of credits – and in foreign exchange and derivatives contracts, such as swaps and options ("traded products"). Positions in tradeable assets such as bonds and equities, including both direct holdings and synthetic positions through derivatives, also carry credit risk.

The risk is managed primarily based on reviews of the financial status of each specific counterparty, which are rated on a 14 point rating scale, based on probability of default. Credit risk is higher when counterparties are concentrated in a single industry or geographical region.

### a. On-balance sheet assets

As of 31 December 2000, due from banks and loans to customers amounted to CHF 285 billion. 57.9% of the gross loans were with clients domiciled in Switzerland. The breakdown by region and by type of issuer is found in UBS Financial Statement Notes (Note 12 and 14 respectively).

## b. Off-balance sheet financial instruments

## Credit commitments and contingent liabilities

Of the CHF 81 billion in credit commitment and contingent liabilities as at 31 December 2000, 15% related to clients domiciled in Switzerland, 30% Europe (excluding Switzerland) and 45% North America.

### <u>Derivatives</u>

Credit risk represents the current replacement value of all outstanding derivative contracts with an unrealised gain by taking into consideration legally enforceable master netting agreements. Positive replacement values amounted to CHF 58 billion as at 31 December 2000. Based on the location of the ultimate counterparty, 6% of this credit risk amount related to Switzerland, 45% to Europe (excluding Switzerland) and 32% to North America. 42% of the positive replacement values are with other banks.

## c. Credit risk mitigation techniques

Credit risk associated with derivative instruments is mitigated by the use of master netting agreements. Master netting agreements eliminate risk to the extent that only the net claim is due to be settled in the case of a default of the counterparty. The impact of master netting agreements on derivative instruments as at 31 December 2000 is to mitigate credit risk on derivative instruments by approximately CHF 80 billion.

#### Market risks

Include interest rate risk and currency risk.

a. Interest rate risk

Interest rate risk is the potential impact of changes in market interest rates on the fair values of assets and liabilities on the balance sheet and on the annual interest income

and expense in the income statement. One commonly used method to present the potential impact of market movements is to show the effect of a one basis point (0.01%) change in interest rates on the fair value of assets and liabilities, analysed by time bands within which the Group is committed. This type of presentation, described as a sensitivity analysis.

#### b. Currency risk

The Group views itself as a Swiss entity, with the Swiss franc as its reporting currency. Hedging transactions are used to manage risks in other currencies. The Group shows the breakdown of assets and liabilities by currencies in its financial statement notes for the year ended 31 December 2000 and 31 December 1999, which include Swiss Franc, US Dollar, Euro and other currencies.

#### Liquidity Risk

This is explained by a statement showing the maturity analysis of assets and liabilities, which can be broken down into on demand, subject to notice<sup>\*</sup>, due within 3 months, due within 3 and 12 months, due within 1 and 5 years and due after 5 years. Majority of the assets and liabilities are due within 3 months.

#### Segment Reporting

In addition to that, UBS presents segment reporting by business group in its financial reports. UBS is organised into three Business Groups: UBS Switzerland, UBS Warburg and UBS Asset Management, and the Corporate Center. Total operating income and expenses, total assets and liabilities and operating profit before tax are reported for each business segments.

The geographic analysis of total assets is based on customer domicile. Operating income and capital investment is based on the location of the office in which the transactions and assets are recorded. The geographical analysis of operating income, total assets, and capital investment is provided in order to comply with International Accounting Standards, and does not reflect the way the Group is managed. The

<sup>\*</sup> Deposits without a fixed term, on which notice of withdrawal or termination has not been given. (Such funds may be withdrawn by the depositor or repaid by the borrower subject to an agreed period of notice).

analysis is done based on these geographical regions: Switzerland, Rest of Europe, Americas, Asia/Pacific and Africa/Middle East.

## 2. Barclays PLC

## Source: Barclays PLC Annual Report 2000

Barclays PLC is a public limited company registered in England and Wales. It is a UK-based financial services group engaged primarily in banking, investment banking and asset management. In terms of assets employed, Barclays is one of the largest financial services groups in the UK. The company was originally named Barclay & Co. Ltd. in 1896 and then changed to Barclays Bank Limited in 1917. On 1 January 1985, the company changed its name to Barclays PLC.

The annual report of Barclays PLC showed the bank disclosed the risk management process in order to achieve superior shareholder value through high quality risk management techniques and practices.

The aim of Barclays PLC is to achieve superior shareholder value through high quality risk management techniques and processes. It manages a variety of risks in the ordinary course of business.

A summary of the risks reported by Barclays is as follows:

## **Credit risk**

Credit risk arises because the Bank's customers, clients or counterparties may not be willing or able to fulfil their contractual obligations. This type of risk may be divided into a number of different categories which includes primary, trading and settlement risks. The report showed the significant concentrations of credit risk by country and by sector.

The Group uses a grading structure to show the probability of future default by borrowers. This is used to estimate levels of annualised credit losses from the overall lending portfolio.

a. Analysis of loans and advances to banks and customers

Geographical analyses of the banking business are based on the location of the office from which the lending are made.

### b. Provision for bad and doubtful debts

A specific charge is raised when the Bank considers that the credit-worthiness of a borrower has undergone deterioration such that the recovery of the whole outstanding advance is in serious doubt.

### Market risk

The risk of loss arising from changes in the level or volatility of market prices, which can occur in the interest rate, foreign exchange, equity and commodity markets. The Group uses a daily 'value at risk' (DVAR) measure as the primary mechanism for controlling market risk. DVAR is an estimate, with a confidence level of 98%, of the potential loss which might arise if the current positions were to be held unchanged for one business day. It uses the historical simulation method for calculating DVAR. As DVAR does not provide a direct indication of the potential size of losses that could arise in extreme conditions, Barclays Capital uses a number of complementary techniques for controlling market risk. Weekly firm-wide stress tests, based on both historical and hypothetical extreme movements of market prices are produced.

## <u>Derivatives</u>

The use of derivatives and their sale to customers as risk management products is an integral part of the Group's trading activities. They are used to manage the Group's own exposure to fluctuations in interest and exchange rates as part of its asset and liability management activities. They include swaps, forward rate agreements, futures, options and combinations of these instruments and primarily affect the Group's net interest income, dealing profits, commission received and other assets and liabilities.

#### Treasury asset and liability management

It involves management of liquidity, funding, interest risk and exchange rate risk arising from non-trading positions through use of both on- and off-balance sheet instruments. This includes control over asset maturities and the volume and quality of liquid assets and short term funds. In hedging, the Group employs interest rate swaps, currency swaps and other derivatives that are designated as hedges.

#### **Operational risk**

Operational risk is inherent in all business activities. It is the potential of financial loss, and business instability arising from failures in internal controls, operational processes or the systems that support them.

It is recognised that such risks can never be entirely eliminated and that the cost of controls in minimising these risks may outweigh the potential benefits.

#### **Compliance risk**

This risk arises from a failure or inability to comply with the laws, regulations or codes applicable to the financial services industry. Non-compliance can lead to fines, public reprimands, enforced suspension of operations or, in extreme cases, withdrawal of authorisation to operate.

#### Legal risk

Legal risk is the risk that the business activities of the Group have unintended or unexpected legal consequences. The Group manages this risk through effective use of its internal and external legal advisers.

#### Tax risk

Tax risk is the risk of loss or increased charges associated with changes in, or errors in the interpretation of taxation rates or law.

#### **Segment Reporting**

The analyses by geographical segment are generally based on the location of the office recording the transaction. For this Group, the geographical regions are as follows: UK, Foreign UK-based, Other European Union, United States and Rest of the World. Total assets, net assets, interest receivable, fees and commission receivable, dealing profits, other operating income and attributable profit (loss) are disclosed by geographical segment.

The analyses by class of business are done for net interest income, non-interest income, total income, total assets, net assets and profit (loss) on ordinary activities before tax for 7 types of business. They are Retail Financial Services, Barclaycard, Corporate Banking, Barclays Capital, Barclays Global Investors, Businesses in Transition and Other.

## 3. Deutsche Bank

## Source: Deutsche Bank Annual Report 2000

Deutsche Bank is a leading European bank in Germany. It operates in the interests of its quartet of stakeholders: shareholders, customers, staff and society. It was the only major German bank stock that was able to avoid price losses. The consolidated financial statements of Deutsche Bank are in accordance with the IAS in force on balance date.

Deutsche Bank believes that the long-term viability and the continued success of a global financial institution are critically dependent on a optimal enterprise-wide management of risks inherent in all of its activities. Excellence in risk management is centred on the ability to identify, measure, aggregate and manage risks, to attribute capital and to price risks appropriately.

The risks reported by Deutsche Banks are as follows:

## **Credit risk**

It reflects the potential that customers might not fulfil their contractual payment obligations to the bank. The Bank discloses credit risk profile by division, by credit rating category and by region. Credit risk represents the largest single risk and is comprised of the following types:

<u>Default risk</u>: The failure of customers to meet contractual payment obligations.

<u>Country risk</u>: The inability of customers to fulfil their payment obligations owing to government measures (for example transfer restrictions) or country-specific economic factors (for example currency devaluation).

<u>Settlement risk</u>: The risk that arises if financial obligations are not settled on time or at all either for the bank or when the bank acts as an intermediary for its clients or other third parties.

Deutsche Bank established a set of principles to define its appetite for default risk and to measure and actively manage this risk.

#### Market risk

Market risk arises from the uncertainty about changes in market prices and rates (interest rates, equity prices, exchange rates and commodity prices) and the correlation between them and their levels of volatility. Deutsche Bank uses Value at Risk (VaR) for group and trading units by risk category to derive a quantitative measure specifically for market risk under normal conditions. The VaR estimates are made at a 99% confidence level and for a one day time horizon. It applies a Monte Carlo simulation process. Weekly stress tests on trading portfolios are also used to simulate market movements.

#### Liquidity risk

Liquidity risk refers to the possibility that the bank's payment obligations are not met fully and punctually when due. It also covers potential losses from being forced to borrow at excessive interest rates or to invest surplus funds at rates below market. The management of this risk is to ensure the protection of the bank's solvency and the ability to support asset portfolios with funding of appropriate term and at a reasonable cost. Deutsche Bank monitors net cash flows by currency and location as well as globally.

#### **Operational risk**

Operational risk is the potential for incurring losses through unmanageable events, business disruption, inadequately defined controls or control/system failure in relation to staff, customer relationships, technology, assets, other third parties/regulators as well as project and other risks.

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## Segment reporting

The Group's reporting of segment information according to IAS relates in its primary format to the results of the Group Divisions. The information published in the reporting of segment information by Group Division corresponds to internal reporting to the Group Board and goes further than the requirements according to IAS.

The analysis by Group/business is as follows: Retail and Private Banking, Corporates and Real Estate, Global Corporates and Institutions, Asset Management, Global Technology and Services, Corporate Center and Others. The segment revenue, provision for losses on loans and advances, operational expenses, balance of other income/expenses, assets, liabilities and profit before taxes are reported here.

For total assets, total credit extended, liabilities and revenue from ordinary activities, the geographical analysis were disclosed based on Germany, Europe (excluding Germany), Asia/Pacific/Africa, North America and South America.

## The Complete Set of Financial Statements for Islamic Banks

Source: Financial Accounting Standard No. 1, 'General Presentation and Disclosure in the Financial Statements of Islamic Banks and Financial Institutions' (FAS 1), AAOIFI

Financial Statements	Disclosure Required
1. A statement of financial position (balance sheet)	e Include the Islamic bank's assets, its liabilities, equity of its unrestricted investment account holders and their equivalent, and its owners' equity.
2. An income statement	Include revenues, expenses, gains and losses, return (profit or loss) on unrestricted investment accounts and their equivalent and net income or net loss.
3. A statement of changes in owners' equity or a statement of retained earnings	A statement of changes in owner's equity includes net income, investments by and distributions to owners. A statement of retained earnings include net income (net loss), dividends and transfers to other owners' equity accounts.
4. A statement of cash flows	Differentiate between cash flows from operations, cash flows from investing activities and cash flows from financing activities, which include inflows and outflows.
5. A statement of changes in restricted investment and their equivalents	Include all the restricted investments, deposits and withdrawals by holders of restricted investment accounts and their equivalents.
6. A statement of sources and uses of funds in the Zakah (Islamic tax) and charity fund	Include sources and uses of funds in the Zakah and charity.
7. A statement of sources and uses of funds in the Qard fund	Include sources and uses of funds during a period and the fund balance as of a given date.
8. Notes to the financial statements	
9. Any statements, reports and other which assist in providing information required by users of financial statements as specified in the Statement of Objectives	

### Sample

Islamic banks included in the survey are as follows:

Islamic banks	Country			
1. Bank Islam Malaysia Berhad	Malaysia			
2. Bank Muamalat Malaysia Berhad	Malaysia			
3. Al Baraka Islamic Bank	Bahrain			
4. ABC Islamic Bank	Bahrain			
5. Bahrain Islamic Bank	Bahrain			
6. Shamil Bank	Bahrain			
7. First Islamic Investment Bank Bahrain				
8. Bank Muamalat Indonesia	Indonesia			
9. Faisal Islamic Bank of Egypt	Egypt			
10. Jordan Islamic Bank	Jordan			
11. Islamic International Arab Bank	Jordan			
12. Al Meezan Investment Bank Limited	Pakistan			
13. Al Baraka Islamic Bank	Pakistan			
13. Qatar International Islamic Bank	Qatar			
14. Qatar Islamic Bank	Qatar			
15. Islamic Development Bank	Saudi Arabia			
16. Al Rajhi Banking and Investment Corp	Saudi Arabia			
17. Tadamon Islamic Bank	Sudan			
18. Sudanese Islamic Bank	Sudan			
19. Al Shamal Islamic Bank	Sudan			
20. Animal Resources Bank	Sudan			
21. El Gharb Islamic Bank	Sudan			
22. Abu Dhabi Islamic Bank	United Arab Emirates			
23. Dubai Islamic Bank	United Arab Emirates			
24. Kuwait Finance House	Kuwait			
25. Al Barakah Turkish Finance House	Turkey			
26. Faisal Islamic Bank of Kibris Ltd	Turkey			
27. Islami Bank Bangladesh Ltd	Bangladesh			
28. Bank Saderat Iran	Iran			

Central banks included in the survey are as follows:-

- 1. Bank Negara Malaysia
- 2. Bahrain Monetary Agency
- 3. State Bank of Pakistan
- 4. Bank Indonesia
- 5. Bank of Sudan
- 6. Central Bank of Kuwait
- 7. Qatar Central Bank
- 8. Saudi Arabian Monetary Agency

- 9. Bank Markazi Jamhouri Islami Iran
- 10. Central Bank of Jordan
- 11. Central Bank of Bangladesh
- 12. Central Bank of Egypt
   13. Central Bank of the UAE
- 14. Central Bank of the Republic of Turkey

#### **Cover letter and Questionnaires**

Cover letter

Date as postmark

## الشادم غليكم ورحمة اللو وتركانه

Dear Sir/Madam,

I am a postgraduate researcher at the School of Management, University of Surrey, United Kingdom, currently undertaking a PhD research project on the topic: 'Enhancing the Transparency of Islamic Banks: Risk Reporting Issues' under the supervision of Professor Simon Archer and Professor Rifaat Ahmed Abdel Karim.

As part of the research, I have prepared the enclosed questionnaire. It seeks your opinions about some of the issues associated with 'Enhancing Transparency' within the context of Islamic Banks. The questionnaire has been designed so that you can complete it easily. In most cases, you need to tick the appropriate box which describes your opinion. It takes about 30 minutes.

It would be highly appreciated if the questionnaire were completed and returned within one week of the date of receipt using the self-addressed envelope provided. You can absolutely sure that all information you provide is strictly confidential and is used for research purposes only.

Thank you in advance for your help.

Sincerely yours,

Noraini Mohd Ariffin <u>n.mohd.ariffin@surrey.ac.uk</u>

#### APPENDIX 4A: Version 1 SURVEY ON 'ENHANCING TRANSPARENCY – RISK REPORTING ISSUES' WITHIN THE CONTEXT OF ISLAMIC BANKS

Section A : General information on risk disclosure in Islamic banks.

#### Q1 Risk identification

Below are the inherent risks in Islamic banks. Could you please identify the importance of the following overall and instrument specific risks to your bank in the tables below (as currently experienced by your bank). Please tick ( $\sqrt{}$ ) the appropriate box.

SCALE						
Very Unimportant	Unimportant	Neutral	Important	Very Important	Not Available	
1	2	3	4	5	N/A	

Cr	edit or default risk	1	2	3	4	5	N/A
(the acc	e risk that counterparty will fail to meet its obligations timely and fully in ordance with agreed terms)						
1.	Overall risk						
2.	Murabaha			1			
З.	Salam						
4.	Istisna'a						
5.	Ijarah						
6.	Mudaraba (asset side)						
7.	Musharaka						
8.	Diminishing Musharaka						

Ra rate	te of return risk (the risk arising from changes in the expected e of return given)	1	2	3	4	5	N/A
1.	Overall risk						
2.	Murabaha			_			_
З.	Salam						
4.	Istisna'a						
5.	Ijarah						
б.	Mudaraba (asset side)						
7.	Musharaka						
8.	Diminishing Musharaka						

		S	CALE			_			
Very Unimportant	Unimportant	Neutral	Impo	rtant	Ir	Very nportan	t	Not Av	ailable
1	2	3	4	ļ		5	Ν	//A	_
Price risk				1	2	3	4	5	N/A
(the risk arising from	n the changes in market	prices)							
1. Overall ris	k								
2. Murabaha									
3. Salam					$\vdash$				
4. Istisna'a									
5. Ijarah									
6. Mudaraba	(asset side)								
7. Musharaka									
8. Diminishin	g Musharaka								
<u> </u>	iak			- <u>-</u> -	2		4	T 5	N/A
r oreign exchanged for the value of the risk that the value of the val	e of the assets and habili	ities dominated in for	reign	•					
currencies in which th	he banks held will chang	e)			┝───	<u> </u>		<u> </u>	<u> </u>
1. Overall risk									
2. Murabaha				_					
3. Salam									
4. Istisna'a									
5. Ijarah									
5. Mudaraba (a	sset side)								
7. Musharaka									
B. Diminishing	Musharaka								

		SCA	ALE		
Very Unimportant	Unimportant	Neutral	Important	Very Important	Not Available
1	2	3	4	5	N/A

Up	erational risk	1	2	3	4	5	N/A
(the syste	risk of losses from inadequate or failed internal processes, people or em)						
1.	Overall risk						
2.	Murabaha						
3.	Salam						1
4.	Istisna 'a						
5.	Ijarah						
6.	Mudaraba (asset side)						
7.	Musharaka						
8.	Diminishing Musharaka		-				
		L	<b>I</b>				
Shar regard	ri'a non-compliance risk - a category of operational risk with to non compliance to Shari'a rules	1	2	3	4	5	N/A
1.	Overall risk						
2.	Murabaha				 		
2. 3.	Murabaha Salam			 			
2. 3. 4.	Murabaha Salam Istisna'a						
2. 3. 4. 5.	Murabaha Salam Istisna'a Jjarah						
2. 3. 4. 5.	Murabaha Salam Istisna'a Ijarah Mudaraba (asset side)						
2. 3. 4. 5. 6.	Murabaha Salam Istisna'a Ijarah Mudaraba (asset side) Musharaka						

#### Please list below any other risks that affect your bank.

Other risks	1	2	3	4	5	N/A
l.						
2.						
3.						
4.						
5.						

#### Q2 Risk measurement

For the risks that you answered above, please indicate whether you have the measurement below in your bank.

Risk measurement	YES/NO
1. Credit ratings of prospective investors	
2. Gap analysis	
3. Duration analysis	
4. Maturity Matching analysis	
5. Earnings at Risk	
6. Value at Risk	
7. Simulation techniques	
8. Estimates of Worst Case Scenarios	
9. Risk Adjusted Rate of Return on Capital (RAROC)	
10. Internal Rating System	
11. Others (please specify)	

#### Q3 Risk management and mitigation

Please indicate the risk management and mitigation techniques that you employ to manage risks in your bank.

		YES/NO
1.	Collateral arrangement	
2.	Third party enhancements	
3.	Loan Loss Reserves	
4.	On Balance Sheet Netting	
5.	Guarantees	
6.	Internal ratings	
7.	Parallel Salam contracts	
8.	Parallel Istisna'a contracts	
9.	<i>Urboun</i> (over-the-counter Islamic derivatives)	
10.	Others (please specify)	

Q4 Accounting standards used by your bank comply with:-

1.	International Accounting
	Standards

2. AAOIFI Standards

3. Other (please specify)

YES	NO

Section B: Information on the issue of market discipline<sup>1</sup> in Islamic banks.

Q5 Does your bank provide any voluntary disclosures<sup>2</sup> in the annual reports?

Yes

□ No

Q6 If the answer to Q5 is 'YES', please indicate the extent of voluntary disclosures in your annual reports. Please tick ( $\sqrt{}$ ) the appropriate box.

Very High	High	Neutral	Low	Very Low
1	2	3	4	5

Q7 Please list down the information that you provide voluntarily in the annual reports.

1.	
2.	
3.	
4.	 · · · · · · · · · · · · · · · · · · ·
5.	
6.	 
7	
8.	
9.	
10.	

<sup>&</sup>lt;sup>1</sup> Market discipline = an environment in which market participants can take actions to 'discipline' the bank with the effect of improving its management practices (Pillar 3 of Basel II).

<sup>&</sup>lt;sup>2</sup> Voluntary disclosures = additional disclosures made which are not required by mandatory accounting standards.

Q8 Please rank the importance of these users in using the information published in your annual reports.

		SCALE		
Very Unimportant	Unimportant	Neutral	Important	Very Important
1	2	3	4	5

Sci		1	2	3	4	5
1. -	Depositors Current Accounts Saving Accounts					
2. - -	Investment account holders Unrestricted Mudaraba Restricted Mudaraba					
3	Islamic banks' shareholders					
4.	Islamic banks' counterparties					
5.	Credit rating agencies					
6.	Other investors					
7.	Islamic banks' supervisors					
8.	Others (please specify)					

# Q9 Which of the users in Q8 have more power to monitor the behaviour of Islamic banks (exert market discipline)? Please list below.

1.			 	 		 	 			
2.						 				
3.		_					 			
4	 	 _			_					
5		 								
<u> </u>		 _	 	 		_	 _	_	_	_

Q10 The following statements refer to your perceptions on the issue of market discipline in Islamic

banks. Respond to each statement by ticking ( $\sqrt{}$ ) the appropriate box.

		<u>SCALE</u>							
Strongly Disagree	Strongly Disagree Disagree Neutral Ag							gree	
1									
Scale 1 2 3 4 5									
1. Transparency is	1. Transparency' is a pre-requisite for achieving market discipline.								
2. Market discipline can work effectively only on the basis of adequate and accurate information disclosure and transparency.									
3. Lack of transpa difficulties in asse	rency in financial re essing the bank's perfor	eporting on risks cou rmance.	ild lead to						
4. Effective disclosu better understandi	re is essential to ensu ng of the banks' risk p	re that market particip rofiles.	ants have a						
<ol> <li>All the inherent ri exchange, liquidi annual reports.</li> </ol>	5. All the inherent risks in Islamic banks (credit, rate of return, price, foreign exchange, liquidity and operational risks) have been disclosed in the annual reports.								
<ol> <li>Investment accour risks faced by the</li> </ol>	nt holders in Islamic ba banks than conventiona	anks need more inform al depositors.	ation on all						
7. Market discipline Islamic banks.	can effectively reduce t	the need for official sup	pervision of						
8. Market discipline maintaining capita	e reduces the need l in Islamic banks.	for supervisory ov	ersight in						
9. Effective market of banks' supervisors.	discipline can lower t	he supervision costs	by Islamic						
<ol> <li>The most effective disclosure requiren penalties for non-di</li> </ol>	0. The most effective way to ensure the Islamic bank adheres to public risk disclosure requirements as required by accounting standards is to impose penalties for non-disclosure.								
<ol> <li>Sufficient attention risk disclosure requ Islamic bank.</li> </ol>	has been given by bairements are proportion	ank supervisors to ens nate to the nature and s	ure public cale of the						
12. Bank supervisors l discipline in Islamic	have a strong interest c banks.	in facilitating effecti	ve market						

<sup>&</sup>lt;sup>3</sup> Transparency = public disclosure of reliable and timely information that enables users of that information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices.

	SCALE								
	Strongly Disagree	Disagree	Neutral	Agree	_	Stro	ngly A	Agree	
	1	2	3	4			5		
	13. Bank supervisors have adequate information that enables them to assess the risks inherent in Islamic banks.								
1	14. Bank supervisors impose Islamic banks rules for public risk disclosure that improve bank's transparency.								
1:	15. A low rate of return on deposits will lead to withdrawal of funds from Islamic banks.								
10	16. The rate of return on deposits in Islamic banks should be commensurate with the rate of return of similar financial instrument offered by other banks (conventional and Islamic).								
17	7. Greater risk disc holders of the pote	closure in Islamic ba ential risks to which the	anks informs investme eir investments are expo	ent account osed.					
18	6. Greater risk disc holders of the pote	closure in Islamic ba ential risks to which the	nks informs investme eir investments are expo	ent account osed.					
19	. Greater risk disclo	sure encourages new i	nvestments in Islamic b	oanks.					
20	. The more risk info the more is market	ormation disclosed in the participants able to me	ne annual report of Islar onitor the banks.	nic banks,					
21	. It is necessary to h the Islamic banks'	ave a separate stateme risks and risk manager	nt in the annual report t ment techniques.	to highlight					
22.	The New Basel Ac	cord is a welcome dev	elopment for Islamic ba	anks.					
23.	There is a need to Islamic banks.	adapt the New Basel A	Accord to cover the uni	iqueness of					
24.	Islamic Financial S New Basel Accord	Services Board (IFSB) in Islamic banks.	can facilitate the adop	tion of the					
25.	Information interm reduce information	ediaries are sufficient al asymmetries.	in the case of Islamic	c banks to					
26.	The Islamic bank banks to access the	credit ratings are base capital market to raise	ed on the ability of the funds.	he Islamic					
27.	The external credit investment funds for	t ratings affect the ab or the following year.	ility of Islamic banks	to attract					
28.	The release of the market confidence.	Islamic bank credit	ratings to the public a	affects the					
29.	market confidence.         P. The release of the credit ratings to the public leads Islamic banks to disclose less information in the annual reports.								

		SCALE						
Strongly Disagree	Disagree Neutral		Agree	Strongly Agree				
1					5			
30. If the performance of the Islamic bank is good, the bank tends to disclose more information to the market on its risks and risk management techniques.								
31. The benefits to outweigh the costs	Islamic banks for incurred.	signalling more risk	information					

Section C: Demo	ographic Informa	ation About You

I would appreciate if you could complete the following short answers about yourself. All information will be held in strict confidence and used for research purposes only.

Please tick ( $\sqrt{}$ ) the appropriate  $\Box$ .

Q11	What is your gender?		
	Male		Female
Q12	Which of these age ranges do you fall i	into?	
	25-34		35-44
	45-54		55-64
	65 +		
Q13	What is the highest level of education t	hat you have	achieved?
	High school diploma		Bachelor's degree
	Master's degree	Π	PhD
	Professional accounting qualifications	_	
Q14	What is your job title and department?		
	Job title :		
	Department :		
Q15	How many years have you worked in yo	our organisat	ion?
	Write number of years here :		

Q16 Approximately how many years have you been in full-time employment? Write number of years here:

Section D: Contact Details							
• Would you be willing, if necessary	, to grant an interview?						
Yes	□ No						
• If the answer is 'Yes', please provid	de us with your name, and contact number/address:						

Name	
Contact Number	
Contact Address	
E mail Address	

## THANK YOU FOR YOUR COOPERATION

Please place this completed questionnaire in the enclosed self-addressed envelope and return to:

Noraini Mohd Ariffin PhD Researcher Room 35 MS 02 School of Management University of Surrey Guildford, Surrey GU2 7XH UNITED KINGDOM E mail: n.mohd.ariffin@surrey.ac.uk

#### APPENDIX 4B: Version 2 SURVEY ON 'ENHANCING TRANSPARENCY – RISK REPORTING ISSUES' WITHIN THE CONTEXT OF ISLAMIC BANKS

Section A: Information that the bank supervisors require most to monitor risk profile of Islamic banks.

Q1 As the bank supervisors of Islamic banks, how important is the disclosure of each item of information listed below to your organisation in order for you to monitor the risk profile of an Islamic bank. Please **tick**  $(\sqrt{})$  the appropriate box.

SCALE								
Very Unimportant	Unimportant	Neutral	Important	Very Important				
1	2	3	4	5				

Scale	1	2	3	4	5
Type of risks faced by the Islamic bank.					
2. Severity of various types of risks in different financial instruments.					
3. Risk management system process employed by the Islamic bank.					
4. Breakdown of risks based on operating segments.					
5. Breakdown of risks based on geographical segments.					
6. Calculation of capital adequacy ratio and the bank's capital ratio.					
7. Liquidity and funding of the Islamic bank.					
8. Maturity matching of the Islamic banks' liabilities.					
9. Profitability of the Islamic bank.					
10. Asset quality by asset category related to credit risk, market risk, liquidity risk and operational risk.					
11. Compliance with relevant accounting standards.					
12. Compliance with Shari'a requirement.					
13. The Shari'a committee's view on the permissibility of taking on certain risks (eg. no gharar or maysir).				_	
14. The <i>Shari'a</i> committee's view on risk mitigation methods (eg. futures transactions and derivative contracts).					

Q2 Please write down any other **non-public information** which you feel important in order to monitor risk profile of Islamic banks.

1.		
2.		
3.		
4.		
5.		

## Q3 Please rank the importance of these risk assessments' approaches in supervising Islamic banks.

SCALE							
Very Unimportant	Unimportant	Neutral	Important	Very Important			
11	2	3	4	5			

Sc	ale	1	2	3	4	5
1.	Supervisory bank rating systems	1	1			
2.	Financial ratios	1	1			
3.	Peer group analysis systems	1				
4.	Comprehensive bank risk assessment systems	1				
5.	Statistical methods					
6.	Other (please specify here)					

## Section B: Information on the issue of market discipline<sup>4</sup> in Islamic banks.

Q4 The following statements refer to your perceptions on the issue of market discipline in Islamic banks. Respond to each statement by ticking ( $\sqrt{}$ ) the appropriate box.

SCALE							
Strongly Disagree Disagree		Neutral	Agree	Strongly Agree			
1	2	3	4	5			

Scale		1	2	3	4	5
1.	Transparency <sup>5</sup> is a pre-requisite for achieving market discipline.					
2.	Market discipline can work effectively only on the basis of adequate and accurate information disclosure and transparency.					
3.	Lack of transparency in financial reporting on risks could lead to difficulties in assessing the bank's performance.					
4.	Effective disclosure is essential to ensure that market participants have a better understanding of the banks' risk profiles.					
5.	All the inherent risks in Islamic banks (credit, rate of return, price, foreign exchange, liquidity and operational risks) have been disclosed in the annual reports.					
6.	Investment account holders in Islamic banks need more information on all risks faced by the banks than conventional depositors.	_				
7.	Market discipline can effectively reduce the need for official supervision of Islamic banks.					
8.	Market discipline reduces the need for supervisory oversight in maintaining capital in Islamic banks.					
9.	Effective market discipline can lower the supervision costs by Islamic banks' supervisors.					
10.	The most effective way to ensure the Islamic bank adheres to public risk disclosure requirements as required by accounting standards is to impose penalties for non-disclosure.					
11.	Sufficient attention has been given by bank supervisors to ensure public risk disclosure requirements are proportionate to the nature and scale of the Islamic bank.					

<sup>&</sup>lt;sup>4</sup> Market discipline = an environment in which market participants can take actions to 'discipline' the bank with the effect of improving its management practices (Pillar 3 of Basel II).

<sup>&</sup>lt;sup>5</sup> Transparency = public disclosure of reliable and timely information that enables users of that information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices.

Strongly Disagree	Disagree Neutral Agree			Stron	gly Agre	
1	2	2 3 4				5
12. Bank supervi discipline in	sors have a strong int Islamic banks.	erest in facilitating effe	ctive market			
13. Bank superv assess the risl	isors have adequate s inherent in Islamic I	information that enab banks.	les them to			
14. Bank supervise that improve	sors impose Islamic ba bank's transparency.	anks rules for public ris	k disclosure			
15. A low rate of Islamic banks	return on deposits wi	ll lead to withdrawal of	f funds from			
16. The rate of commensurate offered by oth	return on deposits with the rate of retu er banks (conventiona	s in Islamic banks ırn of similar financial l and Islamic).	should be instrument			
17. Greater risk d holders of the	isclosure in Islamic t potential risks to whic	banks informs investme h their investments are	ent account exposed.			
18. Greater risk d holders of the	isclosure in Islamic b potential risks to whic	banks informs investme h their investments are	ent account exposed.			
19. Greater risk di	sclosure encourages no	ew investments in Islam	nic banks.			
20. The more risk banks, the more	information disclosed e is market participant	in the annual report of s able to monitor the ba	Islamic anks.			
21. It is necessary highlight the Is	to have a separate s lamic banks' risks and	tatement in the annua I risk management tech	l report to niques.			
22. The New Basel	Accord is a welcome	development for Islam	ic banks.			
23. There is a ne uniqueness of Is	ed to adapt the Ne slamic banks.	w Basel Accord to	cover the			
24. Islamic Financi the New Basel	al Services Board (IFS Accord in Islamic bank	SB) can facilitate the a <s.< td=""><td>doption of</td><td></td><td></td><td></td></s.<>	doption of			
25. Information inte to reduce inform	ermediaries are suffici national asymmetries.	ent in the case of Islan	mic banks			
26. The Islamic ban banks to access	k credit ratings are ba the capital market to ra	used on the ability of that a set and the ability of the aise funds.	ne Islamic			
27. The external cre investment fund	dit ratings affect the a s for the following yea	bility of Islamic banks r.	to attract			
28. The release of the market confident	ne Islamic bank credit ce.	ratings to the public a	ffects the			

		SCALE					
Strongly Disagree	ngly Disagree Disagree Neutral Agree				Stro	ngly A	gree
1	2	3	4			5	
29. The release disclose less	of the credit ratings to information in the ann	o the public leads Islan ual reports.	nic banks to				
30. If the perfor disclose mo management	30. If the performance of the Islamic bank is good, the bank tends to disclose more information to the market on its risks and risk management techniques.						
31. The benefits outweigh the	to Islamic banks for costs incurred.	signalling more risk	information				

Section C: Adequacy of public risk disclosures in order to enhance transparency in Islamic banks.

Q5 Please rank the adequacy of the following risk disclosures in existing Islamic banks' annual reports by ticking  $(\sqrt{})$  the appropriate box.

Scale							
Very Inadequate	Inadequate	Don't know	Adequate	Very Adequate			
1	2	3	4	5			

s	cale	1	2	3	4	5
1.	Disclosure of credit risks faced by Islamic banks.					
2.	Disclosure of qualitative information on market risk faced by Islamic banks.					
3.	Disclosure of quantitative information on market risk faced by Islamic banks.					
4.	Disclosure of operational risk faced by Islamic banks.				_	
5.	Disclosure of liquidity and funding risks faced by Islamic banks.					
6.	Disclosure of capital adequacy position of Islamic banks.					
7.	Disclosure of solvency of Islamic banks.					
8.	Disclosure of profitability of Islamic banks.					
9.	Disclosure of risk measurement and evaluation for each category of risk.					

		Scale		
Very Inadequate	Inadequate	Don't know	Adequate	Very Adequate
1	2	3	4	5

Scale	1	2	3	4	5
10. Disclosure of risk management strategies and practices used by Islamic banks for each category of risk.					
11. Disclosure of significant accounting policies.					
12. Disclosure of corporate governance information.					
13. Disclosure of other qualitative risk information on Islamic banks.					

Section D: Demographic Information About You

I would appreciate if you could complete the following short answers about yourself. All information will be held in strict confidence and used for research purposes only.

## Please tick ( $\sqrt{}$ ) the appropriate $\Box$ .

Q6	What is your	gender?		
	Male			Female
Q7	Which of thes	e age ranges do you fa	all into?	
	25-34	-		35-44
	45-54			55-64
	65 +			
Q8	What is the hig	shest level of educatio	on that you	have achieved?
	High school di	ploma		Bachelor's degree
	Master's degre	e		PhD
	Professional ac	counting qualification	าร	
Q9	What is your jo	b title and departmen	t?	
	Job title	:		
	Department	:		
Q10	How many year	rs have you worked ir	n your orga	nisation?
	Write number o	of years here :		

Q11 Approximately how many years have you been in full-time employment? Write number of years here:

s	ection D: Contact Details			
•	Would you be willing, if necessary, to	grant an inter	rview?	
	Yes		No	
•	If the answer is 'Yes', please provide u	ıs with your n	name, and contact number/address:	

Name	:
Contact Number	:
Contact Address	:
E mail Address	:

## THANK YOU FOR YOUR COOPERATION

Please place this completed questionnaire in the enclosed self-addressed envelope and return to:

Noraini Mohd Ariffin PhD Researcher Room 35 MS 02 School of Management University of Surrey Guildford, Surrey, GU2 7XH UNITED KINGDOM E mail: n.mohd.ariffin@surrey.ac.uk

## APPENDIX 4C: Version 3 SURVEY ON 'ENHANCING TRANSPARENCY – RISK REPORTING ISSUES' WITHIN THE CONTEXT OF ISLAMIC BANKS

Section A: General information on Islamic banks' transparency.

Q1 In order to assess the transparency<sup>6</sup> of an Islamic bank, how important of each item of risk information listed below to your organisation. Please tick ( $\sqrt{}$ ) the appropriate box.

		SCALE		
Very Unimportant	Unimportant	Neutral	Important	Very Important
1	2	3	4	5

Scale	1	2	3	4	5
1. Type of risks faced by the Islamic bank.					
2. Severity of various types of risks in different financial instrument	nts.	1	1		
3. Risk management system process employed by the Islamic bank	<u>.</u>		-		
4. Breakdown of risks based on operating segments.			1		
5. Breakdown of risks based on geographical segments.		1			
6. Calculation of capital adequacy ratio and the bank's capital ratio	).	1	1		
7. Liquidity and funding of the Islamic bank.	-				
8. Maturity matching of the Islamic banks' liabilities.		1			
9. Profitability of the Islamic bank.		1			
10. Asset quality by asset category related to credit risk, market ri liquidity risk and operational risk.	sk,	1			
11. Compliance with relevant accounting standards.		1			
12. Compliance with Shari'a requirement.	-				
13. The Shari'a committee's view on the permissibility of taking certain risks (eg. no gharar or maysir).	on				
14. The Shari'a committee's view on risk mitigation methods (a futures transactions and derivative contracts).	eg.				

<sup>&</sup>lt;sup>6</sup> Transparency = public disclosure of reliable and timely information that enables users of that information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices.

## Q2 What other risk information is important in order to assess the transparency of Islamic banks? Please specify below.

1	
2.	
3.	
4.	
5.	

Q3 Does the current reporting of Islamic banks based on the following items is satisfactory? Please tick  $(\sqrt{})$  the appropriate box.

Risk r	eporting	Segm	ent reporting <sup>7</sup>
	Yes		Yes
	No		No

If your answer to Q3 is NO, please give your reasons:

<sup>&</sup>lt;sup>7</sup> Segment reporting = the breakdown of the items in the financial statements according to business activities and geographical locations.

## Section B: Information on the issue of market discipline<sup>8</sup> in Islamic banks.

Q4 The following statements refer to your perceptions on the issue of market discipline in Islamic banks. Respond to each statement by ticking ( $\sqrt{}$ ) the appropriate box.

		SCALE		
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Scale		1	2	3	4	5
1.	Transparency <sup>9</sup> is a pre-requisite for achieving market discipline.					_
2.	Market discipline can work effectively only on the basis of adequate and accurate information disclosure and transparency.					
3.	Lack of transparency in financial reporting on risks could lead to difficulties in assessing the bank's performance.					
4.	Effective disclosure is essential to ensure that market participants have a better understanding of the banks' risk profiles.					
5.	All the inherent risks in Islamic banks (credit, rate of return, price, foreign exchange, liquidity and operational risks) have been disclosed in the annual reports.					
6.	Investment account holders in Islamic banks need more information on all risks faced by the banks than conventional depositors.					
7.	Market discipline can effectively reduce the need for official supervision of Islamic banks.					
8.	Market discipline reduces the need for supervisory oversight in maintaining capital in Islamic banks.					
9.	Effective market discipline can lower the supervision costs by Islamic banks' supervisors.					
10.	The most effective way to ensure the Islamic bank adheres to public risk disclosure requirements as required by accounting standards is to impose penalties for non-disclosure.					
11.	Sufficient attention has been given by bank supervisors to ensure public risk disclosure requirements are proportionate to the nature and scale of the Islamic bank.					

<sup>&</sup>lt;sup>8</sup> Market discipline = an environment in which market participants can take actions to 'discipline' the bank with the effect of improving its management practices (Pillar 3 of Basel II). <sup>9</sup> Transparency = public disclosure of reliable and timely information that enables users of that

information to make an accurate assessment of a bank's financial condition and performance, business activities, risk profile and risk management practices.

		SCALE	·		
Strongly Disagree	Disagree	Neutral	Agree	St	rongly Agi
1	2 3 4			5	
12. Bank superv discipline in	isors have a strong into Islamic banks.	erest in facilitating effe	ective market		
13. Bank superv assess the ris	isors have adequate ks inherent in Islamic I	information that enab banks.	les them to		
14. Bank supervi that improve	sors impose Islamic ba bank's transparency.	anks rules for public ris	sk disclosure		
15. A low rate of Islamic banks	Freturn on deposits wills.	ll lead to withdrawal of	f funds from		
<ol> <li>The rate of commensurat offered by oth</li> </ol>	f return on deposits e with the rate of retu- ther banks (conventional	s in Islamic banks Irn of similar financial I and Islamic).	should be instrument		
17. Greater risk of holders of the	disclosure in Islamic b potential risks to whic	panks informs investm h their investments are	ent account exposed.		
18. Greater risk of holders of the	lisclosure in Islamic b potential risks to whic	oanks informs investme h their investments are	ent account exposed.		
19. Greater risk di	sclosure encourages no	ew investments in Islan	nic banks.		
20. The more risk banks, the more	information disclosed re is market participant	in the annual report of s able to monitor the ba	Islamic anks.		
21. It is necessary highlight the Is	v to have a separate s slamic banks' risks and	statement in the annua I risk management tech	ll report to niques.		
22. The New Base	l Accord is a welcome	development for Islam	ic banks.		
23. There is a number of l	eed to adapt the Ne Islamic banks.	ew Basel Accord to	cover the		
24. Islamic Financ the New Basel	ial Services Board (IF Accord in Islamic ban	SB) can facilitate the a ks.	doption of		
25. Information int to reduce inform	ermediaries are suffic national asymmetries.	ient in the case of Isla	mic banks		
26. The Islamic bar banks to access	nk credit ratings are b the capital market to r	ased on the ability of t aise funds.	he Islamic		
27. The external cr investment fund	edit ratings affect the ds for the following yes	ability of Islamic bank ar.	s to attract		
28. The release of t market confider	the Islamic bank credince.	t ratings to the public	affects the		

		SCALE						
Strongly Disagree	Disagree	Neutral	Agree		Strong	gly A	gree	
1	2	3	4		3 4 5		5	
29. The release disclose less	of the credit ratings to information in the ann	o the public leads Islar ual reports.	nic banks to					
30. If the perfor disclose mo management	rmance of the Islamic ore information to th techniques.	bank is good, the ba market on its risk	ink tends to and risk					
31. The benefits outweigh the	to Islamic banks for costs incurred.	signalling more risk	information					

Section C: Adequacy of public risk disclosures in order to enhance transparency in Islamic banks.

Q5 Please rank the adequacy of the following risk disclosures in Islamic banks' annual reports by ticking  $(\sqrt{})$  the appropriate box.

		SCALE		
Very Inadequate	Inadequate	Don't know	Adequate	Very Adequate
1	2	3	4	5

Scale	1	2	3	4	5
1. Disclosure of credit risks faced by Islamic banks.		1			
2. Disclosure of qualitative information on market risk faced by Islamic banks.					
<ol> <li>Disclosure of quantitative information on market risk faced by Islamic banks.</li> </ol>					
4. Disclosure of operational risk faced by Islamic banks.					
5. Disclosure of liquidity and funding risks faced by Islamic banks.					
6. Disclosure of capital adequacy position of Islamic banks.					
7. Disclosure of solvency of Islamic banks.					
8. Disclosure of profitability of Islamic banks.					
9. Disclosure of risk measurement and evaluation for each category of risk.					

		Scale		
Very Inadequate	Inadequate	Don't know	Adequate	Very Adequate
1	2	3	4	5

Scale	1	2	3	4	5
10. Disclosure of risk management strategies and practices used by Islamic banks for each category of risk.					
11. Disclosure of significant accounting policies.					
12. Disclosure of corporate governance information.					
13. Disclosure of other qualitative risk information on Islamic banks.					

Section D:	Demographic	Information About You	
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I would appreciate if you could complete the following short answers about yourself. All information will be held in strict confidence and used for research purposes only.

## Please tick ( $\sqrt{}$ ) the appropriate $\Box$ .

Q6	What is your	gender?		
	Male			Female
Q7	Which of the	se age ranges do you f	fall into?	
	25-34			35-44
	45-54			55-64
	65 +			
Q8	What is the h	ighest level of educati	on that you	have achieved?
	High school d	liploma		Bachelor's degree
	Master's degr	ee		PhD
	Professional a	ccounting qualification	ons	
Q9	What is your j	ob title and department	nt?	
	Job title	:		
	Department	:		

- Q10 How many years have you worked in your organisation? Write number of years here :
- Q11 Approximately how many years have you been in full-time employment? Write number of years here:

Sec	tion D: Contact Details		
• V	Vould you be willing, if necessary, to grant a	in inte	erview?
	Yes		No

• If the answer is 'Yes', please provide us with your name, and contact number/address:

Name	:
Contact Number	:
Contact Address	:
E mail Address	:

## THANK YOU FOR YOUR COOPERATION

Please place this completed questionnaire in the enclosed self-addressed envelope and return to:

Noraini Mohd Ariffin PhD Researcher Room 35 MS 02 School of Management University of Surrey Guildford, Surrey, GU2 7XH UNITED KINGDOM E mail: n.mohd.ariffin@surrey.ac.uk

#### Advantages and Disadvantages of Non-Parametric Tests

#### **ADVANTAGES**

- If the sample size is very small, threw may be no alternative to using a nonparametric test unless the nature of the population distribution is known exactly.
- Non-parametric tests typically make fewer assumptions about the data and may be more relevant to a particular situation. In addition, the hypotheses or propositions tested by the non-parametric test may be more appropriate for the research investigation.
- Non-parametric tests are available to analyse data which are inherently in ranks as well as data whose seemingly numerical scores have the strength of ranks. That is, the researcher may only be able to say of his or her subjects that one has more or less of the characteristics than another, without being able to say how much more or less.
- Non-parametric methods are available to treat data which are simply classificatory or categorical, i.e. are measured in a nominal scale. No parametric technique applies to such data.
- There are suitable non-parametric tests for treating samples made up of observations from several different populations. Parametric tests often cannot handle such data without requiring unrealistic assumptions or cumbersome computation.
- Non-parametric tests typically are much easier to learn and to apply than are parametric tests. In addition, their interpretation often is more direct than the interpretation of parametric tests.

#### DISADVANTAGES

- If all the assumptions of a parametric test are met in the data and the research hypothesis or propositions could be tested with a parametric test, then non-parametric test is wasteful. The degree of wastefulness is expressed by the power-efficiency of the non-parametric test.
- Another objection to non-parametric tests is that they are not systematic.

• Another objection to non-parametric test has to do with convenience. Tables necessary to implement non-parametric tests are scattered widely and appear in different formats.

(Sources: Siegel, S. and N.J. Castellan, Jr., (1988), 'Nonparametric Statistics for the Behavioral Sciences, London: McGraw-Hill, Inc.)

#### Assessing Normality

#### 1. The Kolmogorov-Smirnov Test for Normality

The Kolmogorov-Smirnov statistical test (K-S1) has been used in this study to assess normality of data distribution. This test is used to examine whether the survey data are normally distributed. If the significance level from the test is greater than 0.05, then the data are assumed to be normally distributed. On the other hand, if the significance level is lower than 0.05, then it is assumed that those data are not normally distributed (Bryman and Cramer, 1990).

As discussed earlier in Chapter 7, an approximately normal distribution is considered to be one of the generic assumptions that must be met prior to use of parametric statistical tests. If the distributions of variables depart from normality, these variables may need to be transformed before further analysis. When the normal distributions still deviate dramatically after the transformation, non-parametric test must be applied. The following sections show summaries the results of the K-S1 test.

a) Assessing Normality of Data in	n Q1, Version 1	using K-S1 Test
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Items	K-S1	Normality
1. Credit risk (n = 29)	0.000	NO
2. Rate of return risk (n = 29)	0.025	NO
3.Price risk (n = 28)	0.153	YES
4.Foreign exchange risk (n =	0.039	NO
28)		
5. Liquidity risk ( n = 27)	0.082	YES
6. Operational risk	0.013	NO
(n = 29)		
7. Shari'a non-compliance	0.054	YES
risk (n = 27)		

Table 1: K-S1 Test for each type of risks (overall) in Section A (Version 1)

For each type of risk in different financial instrument, the significance level of the K-S1 test is smaller than 0.05. This indicates that the data here are not normally distributed. This conclusion is also supported by the descriptive statistics results

where the mean, median and mode are not equal, and there is a negative coefficient of skewness of the data distribution.

Table 2: K-S1	Test of Q1	in Version 1
---------------	------------	--------------

	Risks in <i>Murabaha</i>	Risks in Salam	Risks in Istisna'a	Risks in <i>Ijarah</i>	Risks in <i>Mudaraba</i>	Risks in Musharaka	Risks in Diminishing <i>Musharaka</i>
K-S1	.000	.000	.000	.000	.000	.000	.000

With a Kolmogorov-Smirnov test, the significance levels for each of the dichotomous groups must be >0.05 to give normality of distribution. It can be seen from Table 2 that the significance score for the risks in each financial instrument is <0.05. This means that our test does not have normality of distribution.

b) Assessing Normality of Data in Q10, Version 1, Q4 in Version 2 and 3

The results of the K-S1 test show that the significance level is lower than 0.05. Therefore, from the above results, it can be concluded that the collected data from this part are not normally distributed. This is supported by the results of mean, mode and median which are not equal.

Table 3: Descriptive statistics of Q10 in Version 1 and Q4 in Version 2 and 3

Statement	1	2	3	4	5	6	7	8	9	10	11	12
K-S1	0.000	0.000	0.000	0.000	0.037	0.002	0.001	0.001	0.002	0.000	0.000	0.000
				_								
Statement	13	14	15	16	17	18	19	20	21	22	23	24
			_									
K-S1	0.001	0.000	0.002	0.002	0.006	0.000	0.000	0.000	0.000	0.001	0.001	0.000

Statement	25	26	27	28	29	30	31
K-S1	0.001	0.006	0.000	0.000	0.001	0.003	0.000

c) Assessing Normality of Data in Q1 and Q3 Version 2

## Table 4: Descriptive Statistics of Q1 in Version 2

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14
K-SI	0.000	0.003	0.000	0.013	0.042	0.000	0.001	0.003	0.038	0.000	0.003	0.000	0.034	0.

## Table 5: Descriptive Statistics of Q3 in Version 2

Statement	1	2	3	4	5
K-S1	0.001	0.122	0.004	0.008	0.071

d) Assessing Normality of Data in Q5 in Version 2 and 3

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13
K-S1	0.011	0.002	0.001	0.001	0.001	0.001	0.003	0.000	0.001	0.000	0.000	0.005	0.001

## Table 6: Descriptive statistics of Q5 in Version 2 and 3

## Variable Transformation for Normality Testing

Generally, variables rarely conform to a classic normal distribution. In fact, distributions are normally skewed and display varying degree of kurtosis. When the values of the skewness are extreme, variable transformation is required (Coakes and Steed, 2001). As discussed earlier, parametric statistical tests are more powerful than non-parametric tests. However, in order to apply parametric tests to research data, there are some certain assumptions that need to be met. One of those assumptions is that the data has to be approximately normally distributed. If the departure from normality is severe, it is necessary to transform the values of variables in order to satisfy the distribution requirements for the use of parametric tests.

The above results suggested that the data used in this study are not normally distributed. Therefore, the logarithmic transformation was applied in this study, in an attempt to make variables conform to normal distribution. The following tables show the results of the Kolmogorov-Smirnov statistical test.

Items	K-S1
1. Credit risk (n = 29)	0.000
2. Rate of return risk $(n = 29)$	0.006
3.Price risk (n = 28)	0.050
4.Foreign exchange risk (n =	0.036
28)	
5. Liquidity risk ( n = 27)	0.033
6. Operational risk	0.023
(n = 29)	
7. Shari'a non-compliance	0.098
risk (n = 27)	

 Table 7: Logarithmic Transformed K-S1 of Q1

0.000

## Table 8: Logarithmic Transformed K-S1 of Q1 in Version 1

	Risks in <i>Murabaha</i>	Risks in Salam	Risks in Istisna'a	Risks in <i>Ijarah</i>	Risks in <i>Mudaraba</i>	Risks in <i>Musharaka</i>	Risks in Diminishing <i>Musharaka</i>
K-S1	.000	.000	.000	.000	.000	.000	.000

## Table 9: Logarithmic Transformed K-S1 of Q10 in Version 1 and Q4 in Version 2 and 3

Statement	1	2	3	4	5	6	7	8	9	10	11	12
K-S1	0.000	0.000	0.000	0.000	0.037	0.002	0.021	0.002	0.001	0.000	0.000	0.000
Statement	13	14	15	16	17	18	19	20	21	22	23	24

K-S1	0.001	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
						_					
Statement	25	26	27	28	29	30	31				

Statement	25	26	27	28	29	30	31
K-S1	0.000	0.000	0.000	0.000	0.002	0.000	0.000

## Table 10: Logarithmic Transformed K-S1 of Q1 in Version 2

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14
K-S1	0.000	0 003	0 000	0.022	0.021	0.001	0.001	0.004	0.048	0.000	0.004	0.000	0.040	0.

## Table 11: Logarithmic Transformed K-S1 of Q3 in Version 2

Statement	1	2	3	4	5	
K-S1	0.001	0.153	0.002	0.009	0.037	

## Table 12: Logarithmic Transformed K-S1 of Q5 in Version 2 and 3

Statement	1	2	3	4	5	6	7	8	9	10	11	12	13
K-S1	0.008	0.015	0.001	0.015	0.001	0.000	0.000	0.001	0.000	0.005	0.000	0.008	0.001

The above results indicate that even though the variables have been logarithmically transformed, the distribution of this study's data is still far from normal. Therefore, it can be concluded that the distribution assumptions of parametric tests have been seriously violated. Thus, non-parametric tests seem to be appropriate techniques for this research study. In addition, a small sample size justifies the use of the non-parametric test in this study.
## APPENDIX 7

## Basel II – Pillar 3: Source: BIS (June 2004)

## Part 4: The Third Pillar – Market Discipline

#### I. General considerations

### A. Disclosure requirements

808. The Committee believes that the rationale for Pillar 3 is sufficiently strong to warrant the introduction of disclosure requirements for banks using the Framework. Supervisors have an array of measures that they can use to require banks to make such disclosures. Some of these disclosures will be qualifying criteria for the use of particular methodologies or the recognition of particular instruments and transactions.

## **B.** Guiding principles

809. The purpose of Pillar 3 — market discipline is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2). The Committee aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution. The Committee believes that such disclosures have particular relevance under the Framework, where reliance on internal methodologies gives banks more discretion in assessing capital requirements.

810. In principle, banks' disclosures should be consistent with how senior management and the board of directors assess and manage the risks of the bank. Under Pillar 1, banks use specified approaches/methodologies for measuring the various risks they face and the resulting capital requirements. The Committee believes that providing disclosures that are based on this common framework is an effective means of informing the market about a bank's exposure to those risks and provides a consistent and understandable disclosure framework that enhances comparability.

#### C. Achieving appropriate disclosure

811. The Committee is aware that supervisors have different powers available to them to achieve the disclosure requirements. Market discipline can contribute to a safe and sound banking environment, and supervisors require firms to operate in a safe and sound manner. Under safety and soundness grounds, supervisors could require banks to disclose information. Alternatively, supervisors have the authority to require banks to provide information in regulatory reports. Some supervisors could make some or all of the information in these reports publicly available. Further, there are a number of existing mechanisms by which supervisors may enforce requirements. These vary from country to country and range from "moral suasion" through dialogue with the bank's management (in order to change the latter's behaviour), to reprimands or financial penalties. The nature of the exact measures used will depend on the legal powers of the supervisor and the seriousness of the disclosure deficiency. However, it is not intended that direct additional capital requirements would be a response to non-disclosure, except as indicated below.

812. In addition to the general intervention measures outlined above, the Framework also anticipates a role for specific measures. Where disclosure is a qualifying criterion under Pillar 1 to obtain lower risk weightings and/or to apply specific methodologies, there would be a direct sanction (not being allowed to apply the lower weighting or the specific methodology).

## **D.** Interaction with accounting disclosures

813. The Committee recognises the need for a Pillar 3 disclosure framework that does not conflict with requirements under accounting standards, which are broader in scope. The Committee has made a considerable effort to see that the narrower focus of Pillar 3, which is aimed at disclosure of bank capital adequacy, does not conflict with the broader accounting requirements. Going forward, the Committee intends to maintain an ongoing relationship with the accounting authorities, given that their continuing work may have implications for the disclosures required in Pillar 3. The Committee will consider future modifications to Pillar 3 as necessary in light of its ongoing monitoring of this area and industry developments.

814. Management should use its discretion in determining the appropriate medium and location of the disclosure. In situations where the disclosures are made under accounting requirements or are made to satisfy listing requirements promulgated by securities regulators, banks may rely on them to fulfil the applicable Pillar 3 expectations. In these situations, banks should explain material differences between the accounting or other disclosure and the supervisory basis of disclosure. This explanation does not have to take the form of a line by line reconciliation.

815. For those disclosures that are not mandatory under accounting or other requirements, management may choose to provide the Pillar 3 information through other means (such as on a publicly accessible internet website or in public regulatory reports filed with bank supervisors), consistent with requirements of national supervisory authorities. However, institutions are encouraged to provide all related information in one location to the degree feasible. In addition, if information is not provided with the accounting disclosure, institutions should indicate where the additional information can be found.

816. The recognition of accounting or other mandated disclosure in this manner is also expected to help clarify the requirements for validation of disclosures. For example, information in the annual financial statements would generally be audited and additional material published with such statements must be consistent with the audited statements. In addition, supplementary material (such as Management's Discussion and Analysis) that is published to satisfy other disclosure regimes (e.g. listing requirements promulgated by securities regulators) is generally subject to sufficient scrutiny (e.g. internal control assessments, etc.) to satisfy the validation issue. If material is not published under a validation regime, for instance in a stand alone report or as a section on a website, then management should ensure that appropriate verification of the information takes place, in accordance with the general disclosure principle set out below. Accordingly, Pillar 3 disclosures will not be required to be audited by an external auditor, unless otherwise required by accounting standards setters, securities regulators or other authorities.

## E. Materiality

817. A bank should decide which disclosures are relevant for it based on the materiality concept. Information would be regarded as material if its omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions. This definition is consistent with International Accounting Standards and with many national accounting frameworks. The Committee recognises the need for a qualitative judgement of whether, in light of the particular circumstances, a user of financial information would consider the item to be material (user test). The Committee is not setting specific thresholds for disclosure as these can be open to manipulation and are difficult to determine, and it believes that the user test is a useful benchmark for achieving sufficient disclosure.

## F. Frequency

818. The disclosures set out in Pillar 3 should be made on a semi-annual basis, subject to the following exceptions. Qualitative disclosures that provide a general summary of a bank's risk management objectives and policies, reporting system and definitions may be published on an annual basis. In recognition of the increased risk sensitivity of the Framework and the general trend towards more frequent reporting in capital markets, large internationally active banks and other significant banks (and their significant bank subsidiaries) must disclose their Tier 1 and total capital adequacy ratios, and their

components,<sup>113</sup> on a quarterly basis. Furthermore, if information on risk exposure or other items is prone to rapid change, then banks should also disclose information on a quarterly basis. In all cases, banks should publish material information as soon as practicable and not later than deadlines set by like requirements in national laws.

## G. Proprietary and confidential information

819. Proprietary information encompasses information (for example on products or systems), that if shared with competitors would render a bank's investment in these products/systems less valuable, and hence would undermine its competitive position. Information about customers is often confidential, in that it is provided under the terms of a legal agreement or counterparty relationship. This has an impact on what banks should reveal in terms of information about their customer base, as well as details on their internal arrangements, for instance methodologies used, parameter estimates, data etc. The Committee believes that the requirements set out below strike an appropriate balance between the need for meaningful disclosure and the protection of proprietary and confidential information. In exceptional cases, disclosure of certain items of information that is either proprietary or confidential in nature. In such cases, a bank need not disclose those specific items, but must disclose more general information about the subject matter of the requirement, together with the fact that, and the reason why, the specific items of information is not intended to conflict with the disclosure requirements under the accounting standards.

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## II. The disclosure requirements

820. The following sections set out in tabular form the disclosure requirements under Pillar 3. Additional definitions and explanations are provided in a series of footnotes.

## A. General disclosure principle

821. Banks should have a formal disclosure policy approved by the board of directors that addresses the bank's approach for determining what disclosures it will make and the internal controls over the disclosure process. In addition, banks should implement a process for assessing the appropriateness of their disclosures, including validation and frequency of them.

## **B.** Scope of application

822. Pillar 3 applies at the top consolidated level of the banking group to which the Framework applies (as indicated above in Part 1: Scope of Application). Disclosures related to individual banks within the groups would not generally be required to fulfil the disclosure requirements set out below. An exception to this arises in the disclosure of Total and Tier 1 Capital Ratios by the top consolidated entity where an analysis of significant bank subsidiaries within the group is appropriate, in order to recognise the need for these subsidiaries to comply with the Framework and other applicable limitations on the transfer of funds or capital within the group.

#### Table 1

Qualitative Disclosures	(a)	The name of the top corporate entity in the group to which the Framework applies.
	(b)	An outline of differences in the basis of consolidation for accounting and regulatory purposes, with a brief description of the entities within the group (a) that are fully consolidated; (b) that are pro-rata consolidated; (c) that are given a deduction treatment; and (d) from which surplus capital is recognised plus (e) that are neither consolidated nor deducted (e.g. where the investment is risk-weighted).

#### Scope of application

	(c)	Any restrictions, or other major impediments, on transfer of funds or regulatory capital within the group.
Quantitative Disclosures	(d)	The aggregate amount of surplus capital $^{120}$ of insurance subsidiaries (whether deducted or subjected to an alternative method $^{121}$ ) included in the capital of the consolidated group.
	(e)	The aggregate amount of capital deficiencies $^{122}$ in all subsidiaries not included in the consolidation i.e. that are deducted and the name(s) of such subsidiaries.
	(f)	The aggregate amounts (e.g. current book value) of the firm's total interests in insurance entities, which are risk-weighted <sup>123</sup> rather than deducted from capital or subjected to an alternate group-wide method, <sup>124</sup> as well as their name, their country of incorporation or residence, the proportion of ownership interest and, if different, the proportion of voting power in these entities. In addition, indicate the quantitative impact on regulatory capital of using this method versus using the deduction or alternate group-wide method.

## C. Capital

## Table 2

## Summary information on the terms and conditions of the main features of all (a) Qualitative capital instruments, especially in the case of innovative, complex or hybrid Disclosures capital instruments. Quantitative (b) The amount of Tier 1 capital, with separate disclosure of: Disclosures • paid-up share capital/common stock; • reserves; • minority interests in the equity of subsidiaries; 125 • innovative instruments; • other capital instruments; • surplus capital from insurance companies; • regulatory calculation differences deducted from Tier 1 capital;<sup>127</sup> and • other amounts deducted from Tier 1 capital, including goodwill and investments. The total amount of Tier 2 and Tier 3 capital. (c) Other deductions from capital.<sup>128</sup> (d)

## Capital structure

Total eligible capital.

(e)

(a)

(b)

Qualitative

disclosures

Quantitative

disclosures

# Capital Adequacy A summary discussion of the bank's approach to assessing the adequacy of its capital to support current and future activities. Capital requirements for credit risk: • Portfolios subject to standardised or simplified standardised approach,

	disclosed separately for each portfolio;					
	• Portfolios subject to the IRB approaches, disclosed separately for each portfolio under the foundation IRB approach and for each portfolio under the advanced IRB approach:					
	<ul> <li>Corporate (including SL not subject to supervisory slotting criteria), sovereign and bank;</li> </ul>					
	• Residential mortgage;					
	• Qualifying revolving retail; <sup>129</sup> and					
	• Other retail;					
	• Securitisation exposures.					
(c)	Capital requirements for equity exposures in the IRB approach:					
	• Equity portfolios subject to the market-based approaches;					
	• Equity portfolios subject to simple risk weight method; and					
	• Equities in the banking book under the internal models approach (for banks using IMA for banking book equity exposures).					
	• Equity portfolios subject to PD/LGD approaches.					
(d)	Capital requirements for market risk <sup>130</sup> :					
	• Standardised approach;					
	• Internal models approach Trading book.					
(e)	Capital requirements for operational risk:					
	Basic indicator approach;					
	• Standardised approach;					
	Advanced measurement approach (AMA).					
(f)	Total and Tier 1 <sup>131</sup> capital ratio:					
	• For the top consolidated group; and					

## Table 3

• For significant bank subsidiaries (stand alone or sub-consolidated depending on how the Framework is applied).

### D. Risk exposure and assessment

823. The risks to which banks are exposed and the techniques that banks use to identify, measure, monitor and control those risks are important factors market participants consider in their assessment of an institution. In this section, several key banking risks are considered: credit risk, market risk, interest rate risk and equity risk in the banking book and operational risk. Also included in this section are disclosures relating to credit risk mitigation and asset securitisation, both of which alter the risk profile of the institution. Where applicable, separate disclosures are set out for banks using different approaches to the assessment of regulatory capital.

## 1. General qualitative disclosure requirement

824. For each separate risk area (e.g. credit, market, operational, banking book interest rate risk, equity) banks must describe their risk management objectives and policies, including: ••••

## strategies and processes;

the structure and organisation of the relevant risk management function;

the scope and nature of risk reporting and/or measurement systems;

policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

## 2. Credit risk

825. General disclosures of credit risk provide market participants with a range of information about overall credit exposure and need not necessarily be based on information prepared for regulatory purposes. Disclosures on the capital assessment techniques give information on the specific nature of the exposures, the means of capital assessment and data to assess the reliability of the information disclosed.

## Table 4

	(a)	The general qualitative disclosure requirement (paragraph 824) with respect to credit risk, including:	
		• Definitions of past due and impaired (for accounting purposes);	
Qualitative		<ul> <li>Description of approaches followed for specific and general allowances and statistical methods;</li> </ul>	
Disclosures		• Discussion of the bank's credit risk management policy; and	
		• For banks that have partly, but not fully adopted either the foundation IRB or the advanced IRB approach, a description of the nature of exposures within each portfolio that are subject to the 1) standardised, 2) foundation IRB, and 3) advanced IRB approaches and of management's plans and timing for migrating exposures to full implementation of the applicable approach.	

## Credit risk: general disclosures for all banks

Quantitative Disclosures	(b)	Total gross credit risk exposures, <sup>133</sup> plus average gross exposure <sup>134</sup> over the period <sup>135</sup> broken down by major types of credit exposure. <sup>136</sup>
	(c)	Geographic <sup>137</sup> distribution of exposures, broken down in significant areas by major types of credit exposure.

(d)	Industry or counterparty type distribution of exposures, broken down by major types of credit exposure.
(e)	Residual contractual maturity breakdown of the whole portfolio, <sup>138</sup> broken down by major types of credit exposure.
(f)	<ul> <li>By major industry or counterparty type:</li> <li>Amount of impaired loans and if available, past due loans, provided separately;<sup>139</sup></li> <li>Specific and general allowances; and</li> <li>Charges for specific allowances and charge-offs during the period.</li> </ul>
(g)	Amount of impaired loans and, if available, past due loans provided separately broken down by significant geographic areas including, if practical, the amounts of specific and general allowances related to each geographical area. <sup>140</sup>
(h)	Reconciliation of changes in the allowances for loan impairment. <sup>141</sup>
(i)	For each portfolio, the amount of exposures (for IRB banks, drawn plus EAD on undrawn) subject to the 1) standardised, 2) foundation IRB, and 3) advanced IRB approaches.

## Table 5

## Credit risk: disclosures for portfolios subject to the standardised approach and supervisory risk weights in the IRB approaches

Qualitative Disclosures	(a)	For portfolios under the standardised approach:
Disclosures		• Names of ECAIs and ECAs used, plus reasons for any changes;*
		• Types of exposure for which each agency is used;
		<ul> <li>A description of the process used to transfer public issue ratings onto comparable assets in the banking book; and</li> </ul>
		• The alignment of the alphanumerical scale of each agency used with risk buckets.

Ouantitative	(b)	• For exposure amounts after risk mitigation subject to the standardised approach, amount of a bank's outstandings (rated and unrated) in each risk bucket as well as those that are deducted; and
Disclosures		• For exposures subject to the supervisory risk weights in IRB (HVCRE, any SL products subject to supervisory slotting criteria and equities under the simple risk weight method) the aggregate amount of a bank's outstandings in each risk bucket.

## Credit risk: disclosures for portfolios subject to IRB approaches

826. An important part of the Framework is the introduction of an IRB approach for the assessment of regulatory capital for credit risk. To varying degrees, banks will have discretion to use internal inputs in their regulatory capital calculations. In this sub-section, the IRB approach is used as the basis for a set of disclosures intended to provide market participants with information about asset quality. In addition, these disclosures are important to allow market participants to assess the resulting capital in light of the exposures. There are two categories of quantitative disclosures: those focussing on an analysis of risk exposure and assessment (i.e. the inputs) and those focussing on the actual outcomes (as the basis for providing an indication of the likely reliability of the disclosed information). These are supplemented by a qualitative disclosure regime which provides background information on the assumptions underlying the IRB framework, the use of the IRB system as part of a risk management framework and the means for validating the results of the IRB system. The disclosure regime is intended to enable market participants to assess the credit risk exposure of IRB banks and the overall application and suitability of the IRB framework, without revealing proprietary information or duplicating the role of the supervisor in validating the detail of the IRB framework in place.

#### Table 6

Qualitative disclosures*	(a)	Supervisor's acceptance of approach/ supervisory approved transition
	(b)	Explanation and review of the:
		• Structure of internal rating systems and relation between internal and external ratings;
		• use of internal estimates other than for IRB capital purposes;
		• process for managing and recognising credit risk mitigation; and
		<ul> <li>Control mechanisms for the rating system including discussion of independence, accountability, and rating systems review.</li> </ul>

#### Credit risk: disclosures for portfolios subject to IRB approaches

(c)	Description of the internal ratings process, provided separately for five distinct portfolios:
	• Corporate (including SMEs, specialised lending and purchased corporate receivables), sovereign and bank;
	• Equities;
	Residential mortgages;
	• Qualifying revolving retail; <sup>145</sup> and
	• Other retail.
	The description should include, for each portfolio:
	• The types of exposure included in the portfolio;
	• The definitions, methods and data for estimation and validation of PD, and (for portfolios subject to the IRB advanced approach) LGD and/or EAD, including assumptions employed
	in the derivation of these variables; $^{140}$ and
	• Description of deviations as permitted under paragraph 456 and footnote 82 from the reference definition of default where determined to be material, including the broad segments
	of the portfolio(s) affected by such deviations. <sup>147</sup>

Quantitative disclosures: risk assessment*	(d)	For each portfolio (as defined above) except retail, present the following information across a sufficient number of PD grades (including default) to allow for a meaningful differentiation of credit risk:
		• Total exposures (for corporate, sovereign and bank, outstanding loans and EAD on undrawn commitments; <sup>149</sup> for equities, outstanding amount);
		• For banks on the IRB advanced approach, exposure-weighted average LGD (percentage); and
		• Exposure weighted-average risk-weight.
		For banks on the IRB advanced approach, amount of undrawn commitments and exposure-weighted average EAD for each portfolio; <sup>150</sup>
		For each retail portfolio (as defined above), either:
		<ul> <li>Disclosures as outlined above on a pool basis (i.e. same as for non-retail portfolios); or</li> </ul>
		• Analysis of exposures on a pool basis (outstanding loans and EAD on commitments) against a sufficient number of EL grades to allow for a meaningful differentiation of credit risk.

Quantitative disclosures: historical results*	(e)	Actual losses (e.g. charge-offs and specific provisions) in the preceding period for each portfolio (as defined above) and how this differs from past experience. A discussion of the factors that impacted on the loss experience in the preceding period – for example, has the bank experienced higher than average default rates, or higher than average LGDs and EADs.
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(f) Banks' estimates against actual outcomes over a longer period. <sup>152</sup> At a minimum, the should include information on estimates of losses against actual losses in each portfolio (as defined above) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each portfolio. <sup>153</sup> Where appropriate, banks should further decompose this to provide analysis of PD and, for banks on the advanced IRB approach, LGD and EAD outcomes against estimates provided in the quantitative risk assessment disclosures above.		
	(f)	Banks' estimates against actual outcomes over a longer period. <sup>152</sup> At a minimum, this should include information on estimates of losses against actual losses in each portfolio (as defined above) over a period sufficient to allow for a meaningful assessment of the performance of the internal rating processes for each portfolio. <sup>153</sup> Where appropriate, banks should further decompose this to provide analysis of PD and, for banks on the advanced IRB approach, LGD and EAD outcomes against estimates provided in the quantitative risk assessment disclosures above.

## Table 7

Credit risk mitigation: disclosures for standardised and IRB approaches			
Qualitative Disclosures*	(a)	<ul> <li>The general qualitative disclosure requirement (paragraph 824) with respect to credit risk mitigation including:</li> <li>policies and processes for, and an indication of the extent to which the bank makes use of, on- and off-balance sheet netting;</li> <li>policies and processes for collateral valuation and management;</li> <li>a description of the main types of collateral taken by the bank;</li> <li>the main types of guarantor/credit derivative counterparty and their creditworthiness; and</li> </ul>	
		<ul> <li>information about (market or credit) risk concentrations within the mitigation taken.</li> </ul>	
Quantitative Disclosures*	(b)	For each separately disclosed credit risk portfolio under the standardised and/or foundation IRB approach, the total exposure (after, where applicable, on- or off- balance sheet netting) that is covered by: • eligible financial collateral; and • other eligible IRB collateral;	
		after the application of haircuts. <sup>157</sup>	

(c) For each separately disclosed portfolio under the standardised and/or IRB approach, the total exposure (after, where applicable, on- or off-balance sheet netting) that is covered by guarantees/credit derivatives.

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Qualitative disclosures*	(a	) The general qualitative disclosure requirement (paragraph 824) with respect to securitisation (including synthetics), including a discussion of:
		• the bank's objectives in relation to securitisation activity, including the extent to which these activities transfer credit risk of the underlying securitised exposures away from the bank to other entities;
		• the roles played by the bank in the securitisation process <sup>158</sup> and an indication of the extent of the bank's involvement in each of them; and
		• the regulatory capital approaches (e.g. RBA, IAA and SFA) that the bank follows for its securitisation activities.
	(b)	Summary of the bank's accounting policies for securitisation activities, including:
		• whether the transactions are treated as sales or financings;
		• recognition of gain on sale;
		<ul> <li>key assumptions for valuing retained interests, including any significant changes since the last reporting period and the impact of such changes; and</li> </ul>
		• treatment of synthetic securitisations if this is not covered by other accounting policies (e.g. on derivatives).
	(c)	Names of ECAIs used for securitisations and the types of securitisation exposure for which each agency is used.
Quantitative disclosures*	(d)	The total outstanding exposures securitised by the bank and subject to the securitisation framework (broken down into traditional/synthetic), by exposure 159,160,161 type.
	(e)	For exposures securitised by the bank and subject to the securitisation framework:
		• amount of impaired/past due assets securitised; and
		<ul> <li>losses recognised by the bank during the current period<sup>162</sup> broken down by exposure type.</li> </ul>
	(f)	Aggregate amount of securitisation exposures retained or purchased <sup>163</sup> broken down by exposure type.

## Table 8

Securitisation: disclosure for standardised and IRB approaches

(g)	Aggregate amount of securitisation exposures retained or purchased and the associated IRB capital charges for these exposures broken down into a meaningful number of risk weight bands. Exposures that have been deducted entirely from Tier 1 capital, credit enhancing I/Os deducted from Total Capital, and other exposures deducted from total capital should be disclosed separately by type of underlying asset.
(h)	For securitisations subject to the early amortisation treatment, the following items by underlying asset type for securitised facilities:
	• the aggregate drawn exposures attributed to the seller's and investors' interests;
	• the aggregate IRB capital charges incurred by the bank against its retained (i.e. the seller's) shares of the drawn balances and undrawn lines; and
Γ.	• the aggregate IRB capital charges incurred by the bank against the investor's shares of drawn balances and undrawn lines.
(i)	Banks using the standardised approach are also subject to disclosures (g) and (h), but should use the capital charges for the standardised approach.
(j)	Summary of current year's securitisation activity, including the amount of exposures securitised (by exposure type), and recognised gain or loss on sale by asset type.

## 3. Market risk

## Table 9

## Market risk: disclosures for banks using the standardised approach

Qualitative disclosures	(a)	The general qualitative disclosure requirement (paragraph 824) for market risk including the portfolios covered by the standardised approach.
Quantitative disclosures	(b)	<ul> <li>The capital requirements for:</li> <li>interest rate risk;</li> <li>equity position risk;</li> <li>foreign exchange risk; and</li> <li>commodity risk.</li> </ul>

## Table 10

## Market risk: disclosures for banks using the internal models approach (IMA) for trading portfolios

Qualitative disclosures	(a)	The general qualitative disclosure requirement (paragraph 824) for market risk including the portfolios covered by the IMA.	
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	(b)	For each portfolio covered by the IMA:
		• the characteristics of the models used;
		• a description of stress testing applied to the portfolio; and
		<ul> <li>a description of the approach used for backtesting/validating the accuracy and consistency of the internal models and modelling processes.</li> </ul>
	(c)	The scope of acceptance by the supervisor.
Quantitative	(d)	For trading portfolios under the IMA:
disclosures		• The high, mean and low VaR values over the reporting period and period-end; and
		• A comparison of VaR estimates with actual gains/losses experienced by the bank, with analysis of important "outliers" in backtest results.

## 4. Operational risk

## Table 11

## **Operational risk**

Qualitative disclosures	(a)	In addition to the general qualitative disclosure requirement (paragraph 824), the approach(es) for operational risk capital assessment for which the bank qualifies.
	(b)	Description of the AMA, if used by the bank, including a discussion of relevant internal and external factors considered in the bank's measurement approach. In the case of partial use, the scope and coverage of the different approaches used.
(c) *	For banks using the AMA, a description of the use of insurance for the purpose of mitigating operational risk.	

## 5. Equities

## Table 12

## Equities: disclosures for banking book positions

Qualitative Disclosures	(a)	The general qualitative disclosure requirement (paragraph 824) with respect to equity risk, including:
		<ul> <li>differentiation between holdings on which capital gains are expected and those taken under other objectives including for relationship and strategic reasons; and</li> </ul>

		<ul> <li>discussion of important policies covering the valuation and accounting of equity holdings in the banking book. This includes the accounting techniques and valuation methodologies used, including key assumptions and practices affecting valuation as well as significant changes in these practices.</li> </ul>
Quantitative Disclosures*	(b)	Value disclosed in the balance sheet of investments, as well as the fair value of those investments; for quoted securities, a comparison to publicly quoted share values where the share price is materially different from fair value.
	(c)	The types and nature of investments, including the amount that can be classified as:
		• Publicly traded; and
		• Privately held.
	(d)	The cumulative realised gains (losses) arising from sales and liquidations in the reporting period
	(0)	
		• Total unrealised gains (losses) <sup>165</sup>
		• Total latent revaluation gains (losses) <sup>166</sup>
		• any amounts of the above included in Tier 1 and/or Tier 2 capital.
	(f)	Capital requirements broken down by appropriate equity groupings, consistent with the bank's methodology, as well as the aggregate amounts and the type of equity investments subject to any supervisory transition or grandfathering provisions regarding regulatory capital requirements.

## 6. Interest rate risk in the banking book

Table 13

Qualitative disclosures	(a)	The general qualitative disclosure requirement (paragraph 824), including the nature of IRRBB and key assumptions, including assumptions regarding loan prepayments and behaviour of non-maturity deposits, and frequency of IRRBB measurement.
Quantitative disclosures	(b)	The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring IRRBB, broken down by currency (as relevant).

Interest rate risk in the banking book (IRRBB)

## **Endnotes:**

<sup>113</sup> These components include Tier 1 capital, total capital and total required capital.

<sup>114</sup> For some small banks with stable risk profiles, annual reporting may be acceptable. Where a bank publishes information on only an annual basis, it should state clearly why this is appropriate.

In this section of this Framework, disclosures marked with an asterisk are conditions for use of a particular approach or methodology for the calculation of regulatory capital.

Entity = securities, insurance and other financial subsidiaries, commercial subsidiaries, significant minority equity investments in insurance, financial and commercial entities.

<sup>117</sup> Following the listing of significant subsidiaries in consolidated accounting, e.g. IAS 27.

Following the listing of subsidiaries in consolidated accounting, e.g. IAS 31.

May be provided as an extension (extension of entities only if they are significant for the consolidating bank) to the listing of significant subsidiaries in consolidated accounting, e.g. IAS 27 and 32.

Surplus capital in unconsolidated regulated subsidiaries is the difference between the amount of the investment in those entities and their regulatory capital requirements.

<sup>121</sup> See paragraphs 30 and 33.

A capital deficiency is the amount by which actual capital is less than the regulatory capital requirement. Any deficiencies which have been deducted on a group level in addition to the investment in such subsidiaries are not to be included in the aggregate capital deficiency.

See paragraph 31.

See paragraph 30.

Innovative instruments are covered under the Committee's press release, Instruments eligible for inclusion in Tier 1 capital (27 October 1998).

See paragraph 33.

Representing 50% of the difference (when expected losses as calculated within the IRB approach exceed total provisions) to be deducted from Tier 1 capital.

<sup>129</sup> Including 50% of the difference (when expected losses as calculated within the IRB approach exceed total provisions) to be deducted from Tier 2 capital.

Banks should distinguish between the separate non-mortgage retail portfolios used for the Pillar 1 capital calculation (i.e. qualifying revolving retail exposures and other retail exposures) unless these portfolios are insignificant in size (relative to overall credit exposures) and the risk profile of each portfolio is sufficiently similar such that separate disclosure would not help users' understanding of the risk profile of the banks' retail business.

Capital requirements are to be disclosed only for the approaches used.

Including proportion of innovative capital instruments.

<sup>132</sup> Table 4 does not include equities.

<sup>133</sup> That is, after accounting offsets in accordance with the applicable accounting regime and without taking into account the effects of credit risk mitigation techniques, e.g. collateral and netting.

<sup>134</sup> Where the period end position is representative of the risk positions of the bank during the period, average gross exposures need not be disclosed.

Where average amounts are disclosed in accordance with an accounting standard or other requirement which specifies the calculation method to be used, that method should be followed. Otherwise, the average exposures should be calculated using the most frequent interval that an entity's systems generate for management, regulatory or other reasons, provided that the resulting averages are representative of the bank's operations. The basis used for calculating averages need be stated only if not on a daily average basis.

This breakdown could be that applied under accounting rules, and might, for instance, be (a) loans, commitments and other non-derivative off balance sheet exposures, (b) debt securities, and (c) OTC derivative.

Geographical areas may comprise individual countries, groups of countries or regions within countries. Banks might choose to define the geographical areas based on the way the bank's portfolio is geographically managed. The criteria used to allocate the loans to geographical areas should be specified. <sup>138</sup> This may already be covered by accounting standards, in which case banks may wish to use the same maturity groupings used in accounting.

Banks are encouraged also to provide an analysis of the ageing of past-due loans.

<sup>140</sup> The portion of general allowance that is not allocated to a geographical area should be disclosed separately.

The reconciliation shows separately specific and general allowances; the information comprises: a description of the type of allowance; the opening balance of the allowance; charge-offs taken against the allowance during the period; amounts set aside (or reversed) for estimated probable loan losses during the period, any other adjustments (e.g. exchange rate differences, business combinations, acquisitions and disposals of subsidiaries), including transfers between allowances; and the closing of the allowance. Charge-offs and recoveries that have been recorded directly to the income statement should be disclosed separately.

A de minimis exception would apply where ratings are used for less than 1% of the total loan portfolio. <sup>143</sup> This is for a standard matrix is the formula of the total loan to the standard matrix is the standard matrix in the standard matrix in the standard matrix is the standard matrix in the standard matrix in the standard matrix is the standard matrix in the standard matrix in the standard matrix is the standard matrix in the standard matrix in the standard matrix is the standard matrix in the standard matrix in the standard matrix is the standard matrix in the s

This information need not be disclosed if the bank complies with a standard mapping which is published by the relevant supervisor

Equities need only be disclosed here as a separate portfolio where the bank uses the PD/LGD approach for equities held in the banking book.

In both the qualitative disclosures and quantitative disclosures that follow, banks should distinguish between the qualifying revolving retail exposures and other retail exposures unless these portfolios are insignificant in size (relative to overall credit exposures) and the risk profile of each portfolio is sufficiently similar such that separate disclosure would not help users' understanding of the risk profile of the banks' retail business.

<sup>146</sup> This disclosure does not require a detailed description of the model in full – it should provide the reader with a broad overview of the model approach, describing definitions of the variables, and methods for estimating and validating those variables set out in the quantitative risk disclosures below. This should be done for each of the five portfolios. Banks should draw out any significant differences in approach to estimating these variables within each portfolio.

This is to provide the reader with context for the quantitative disclosures that follow. Banks need only describe main areas where there has been material divergence from the reference definition of default such that it would affect the readers' ability to compare and understand the disclosure of exposures by PD grade.

The PD, LGD and EAD disclosures below should reflect the effects of collateral, netting and guarantees/credit derivatives, where recognised under Part 2. Disclosure of each PD grade should include the exposure weighted-average PD for each grade. Where banks are aggregating PD grades for the purposes of disclosure, this should be a representative breakdown of the distribution of PD grades used in the IRB approach.

<sup>149</sup> Outstanding loans and EAD on undrawn commitments can be presented on a combined basis for these disclosures.

Banks need only provide one estimate of EAD for each portfolio. However, where banks believe it is helpful, in order to give a more meaningful assessment of risk, they may also disclose EAD estimates across a number of EAD categories, against the undrawn exposures to which these relate.

Banks would normally be expected to follow the disclosures provided for the non-retail portfolios. However, banks may choose to adopt EL grades as the basis of disclosure where they believe this can provide the reader with a meaningful differentiation of credit risk. Where banks are aggregating internal grades (either PD/LGD or EL) for the purposes of disclosure, this should be a representative breakdown of the distribution of those grades used in the IRB approach.

These disclosures are a way of further informing the reader about the reliability of the information provided in the "quantitative disclosures: risk assessment" over the long run. The disclosures are requirements from year-end 2009; In the meantime, early adoption would be encouraged. The phased implementation is to allow banks sufficient time to build up a longer run of data that will make these disclosures meaningful.

The Committee will not be prescriptive about the period used for this assessment. Upon implementation, it might be expected that banks would provide these disclosures for as long run of data as possible – for example, if banks have 10 years of data, they might choose to disclose the average default rates for each PD grade over that 10-year period. Annual amounts need not be disclosed.

<sup>154</sup> Banks should provide this further decomposition where it will allow users greater insight into the reliability of the estimates provided in the 'quantitative disclosures: risk assessment'. In particular, banks should provide this information where there are material differences between the PD, LGD or EAD estimates given by banks compared to actual outcomes over the long run. Banks should also provide explanations for such differences.

At a minimum, banks must give the disclosures below in relation to credit risk mitigation that has been recognised for the purposes of reducing capital requirements under this Framework. Where relevant, banks are encouraged to give further information about mitigants that have not been recognised for that purpose.

Credit derivatives that are treated, for the purposes of this Framework, as part of synthetic securitisation structures should be excluded from the credit risk mitigation disclosures and included within those relating to securitisation.

<sup>137</sup> If the comprehensive approach is applied, where applicable, the total exposure covered by collateral after haircuts should be reduced further to remove any positive adjustments that were applied to the exposure, as permitted under Part 2.

For example: originator, investor, servicer, provider of credit enhancement, sponsor of asset backed commercial paper facility, liquidity provider, swap provider.

For example, credit cards, home equity, auto, etc.

Securitisation transactions in which the originating bank does not retain any securitisation exposure should be shown separately but need only be reported for the year of inception.

Where relevant, banks are encouraged to differentiate between exposures resulting from activities in which they act only as sponsors, and exposures that result from all other bank securitisation activities that are subject to the securitisation framework.

<sup>162</sup> For example, charge-offs/allowances (if the assets remain on the bank's balance sheet) or writedowns of I/O strips and other residual interests.

<sup>163</sup> Securitisation exposures, as noted in Part 2, Section IV, include, but are not restricted to, securities, liquidity facilities, other commitments and credit enhancements such as I/O strips, cash collateral accounts and other subordinated assets.

<sup>164</sup> The standardised approach here refers to the "standardised measurement method" as defined in the Market Risk Amendment.

<sup>165</sup> Unrealised gains (losses) recognised in the balance sheet but not through the profit and loss account.

<sup>166</sup> Unrealised gains (losses) not recognised either in the balance sheet or through the profit and loss account.