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Measurement, Management and Disclosure of Risk and Return in Islamic Banks

By

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ABSTRACT

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MEASUREMENT, MANAGEMENT AND DISCLOSURE OF RISK AND RETURN IN ISLAMIC BANKS.

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The main objective of this study is to evaluate three issues that are of great importance to modern Islamic banking. The first issue is on the problem of extending financing under the concept of Mudarabah. The second issue is on the measurement and management of non- performing loans in Islamic banks in Malaysia as compared to conventional banks in the United Kingdom and Japan and what lessons can be learned from their policy on non-performing loans. The third issue is on the potential of asset-backed securitization as a tool for obtaining funds and managing risk in modern Islamic banking. It is important to study these three issues because these issues could impede the further develop of Islamic banking. By addressing these three issues it is hoped that it would help Islamic banks to be efficient in its operations thus ensuring its survival.

CONTENTS

This thesis is dedicated to the memory of my beloved mother, Hajjah Che Tam binti Mohd Ali who passed away on the 14th of September 2005.

CHAPTER 1

INTRODUCTION

Islamic banking began to take root about twenty years ago and has developed to a level where it can be measured and compared against the conventional banking system. Islamic banking has reached a stage where its performances, difficulties, problems, advantages and disadvantages need to be evaluated. The main objective of this thesis is to evaluate three issues that are of great importance to modern Islamic banking. The first issue is on the problem of extending financing under the concept of profit and loss sharing. The second issue is on the measurement and management of non- performing loans in Islamic banks in Malaysia as compared to conventional banks in the United Kingdom and Japan. The United Kingdom is chosen because it is one of the few countries selected in surveys for public disclosures by banks (Basel Committee, 2003, 2001, 2000 and 1999). It is shown in these papers that the disclosure is more transparent and consequently lessons may be learned with respect to examples of good disclosure policy. Japan is chosen, as there are lessons to learn from its forbearance policy that has placed the country in financial crisis since 1990 with a huge amount of non-performing loans. The third issue is on the potential of asset-backed securitization as a tool for obtaining funds and managing risk in modern Islamic banking.

Islamic banking is a system that does not condone riba[1] or interest. The prohibition of interest has led Islamic banks to use other modes of financing. The modes of financing are profit and loss sharing (PLS) and cost-plus or mark-up. The PLS mode of financing is divided into Mudarabah (Profit Sharing) and Musyarakah (Profit and Loss Sharing). The Mudarabah is a partnership between the bank and the entrepreneur. The bank provides 100% of the amount of capital needed for the business while the entrepreneur gives his or her expertise. The profit from the business will be shared between the bank and the entrepreneur based on a pre –agreed ratio. The Musyarakah is a joint-venture contract in which both the bank and entrepreneur(s) contribute the capital and share in the profit. The cost-plus or Murabahah is a buy and sale contract and is widely used by Islamic banks

(IAIB, 1997). The bank will purchase the identified asset and a certain profit is added to the purchased price. The payment method can either be lump sum or on a deferred instalment basis. However, the ideal mode of financing that has been identified by Islamic economists is the PLS mode of financing. Scholars like Al Harran (1996), Al Omar & Abdel Haq (1996); Khan (1996) promote the concept as a mechanism that encourages profitable economic activity, allocative efficiency and economic stability and growth, as it enables the owner of capital and the entrepreneur with no capital to form a successful business. The PLS mode is able to facilitate allocative efficiency because the repayments of loans are no longer fixed but depend on the return of the business (Siddiqi, 1983). The PLS mode of financing encourages the entrepreneur to work harder as this will increase the profit of the business thus increasing their income too (Al Harran, 1986). A fair ratio of distribution of profit and loss between the financier and the entrepreneur should help to promote an efficient allocation of resources (Zarqa (1982), Chapra (1985) and Presley and Session (1994). Savers are turned into entrepreneurs and this can help the risks of a business to be distributed equitably thus improving the investment environment (Karsten, 1982).

However, the current scenario of Islamic banking shows only a minor percentage of financings are on the PLS basis. The mudarabah is the mode of financing least used by Islamic banks. The data from the International Association of Islamic Banks (1997) shows that 46% of financings are on the cost-plus modes of financing. Islamic banks are more comfortable with the cost plus mode of financing. Why? The moral hazard problem in mudarabah appears to be a hindrance to the implementation of the mudarabah mode of financing. The entrepreneur has an incentive to shirk if he or she is given only a share of the marginal production. This problem is similar to a sharecropping contract. The sharecropping contract involves an agreement between the landowner who provides the land and the tenant who provides the labour over the percentage in which the agricultural output will be shared. The risk of agricultural production is shared and the output is shared based on the actual yield of production. The prevailing impression of sharecropping contract is that it is inefficient because the tenant has the incentive to shirk as the tenant only retains a fraction of the production. Using a model of sharecropping

[1] An increase or excess. In a loan transaction, riba is the increment on the principle of a loan payable by the borrower.

Chapter 2 suggests that monitoring the project and imposing a penalty on the shirking entrepreneur, can help to overcome the problem.

The prohibition of interest has also led Islamic banks to source deposits from depositors using the principle of PLS. Funds from depositors mingle with shareholders' funds. The depositors that share in the net profit and loss of the bank are called the investment account depositors (IADs). In Malaysia, the IADs are the major contributors of deposits in Islamic banks (Bank Negara, 2001). However, unlike depositors in conventional banks, deposits placed under the PLS are not guaranteed. In case of loss from the activities of giving out financing, the IADs can lose all of their investments. Even though data shows that 46% of financing extended by Islamic banks is on the cost plus mode of financing, this does not mean that there is less risk. Any mode of financing has its own risk especially credit risk (Please refer to Table 1 8). Any types of financing may shift the direct credit risk of Islamic banks to their IADs. This unique position of IADs has posed some degree of risks for them. The IADs do not enjoy the same rights as equity investors but they share the same risks. The IADs should be well informed of the risk that their investment is exposed to, especially on the non-performing loans because non-performing loans are the most common cause of bank failures (Beattie.et.al, 1995). The existence of the IADs in Islamic banks should call for a rigorous policy on measurement and management of non-performing loans to protect the IADs from losses. The IADs should also be well informed of the risks that they are facing. The measurement and management of non-performing loans in Islamic banks should in fact be superior to those in conventional banks. This is to ensure that the well being of IADs is looked after. There should be adequate loan loss provisioning to avoid excessive erosion of investment deposits in the event of losses. However, little is known on the measurement and management of non-performing loans in Islamic banks. Are there any differences in the policy of non-performing loans in Islamic banks so that the IADs are protected? Are there appropriate policies on the measurement and management of non-performing loans? Are there transparencies in the disclosure of non-performing loans to the IADs? Chapter 3 of this thesis seeks to answer these questions by looking at the policy on the measurement and management of non-performing loans in Islamic banks in Malaysia and comparing them with the policy in the United Kingdom and Japan. The United Kingdom is chosen because it is one of the few countries selected in surveys for public disclosures by banks

(Basel Committee, 2003, 2001, 2000 and 1999) and it is mentioned that in these papers that their public disclosure is more transparent. Consequently lessons may be learned with respect to examples of good disclosure policy. Japan is discussed in this chapter because lessons may be learned from their forbearance policy that has resulted in substantial amount of non-performing loans and how the policy is changed to control the crisis.

Islamic banks are expanding progressively these past few years and as they grow they have to face a lot of problems and challenges. The Islamic banking system involves some sharing or distributing of risk in its operations. This would require Islamic banks to have a conducive and supportive environment in the form of jurisdiction and framework. Like conventional banks, Islamic banks are also exposed to banking risks like non-performing loans, credit risks, market risks, operational risks and liquidity risks. They also have to adhere to regulatory requirements like capital adequacy and reserve requirements. Asset backed securitisation (ABS) is a new and innovative method used by conventional banks to obtain funds and manage risk. Through ABS, loans and non-performing loans can be securitised thus reducing risk. It can also help to diversify the portfolio of loans, and the money received from ABS can be used to fund new assets, and operations of a bank (Henderson and Scott (1988), Pavel and Philis (1987)). Conventional banks have been using ABS to manage their credit risks, regulatory requirement, non-performing loans and liquidity, thus enabling them to operate efficiently in terms of cost especially and compete with Islamic banks. ABS provides a cheaper source of funding compared to traditional funding by way of deposits. It allows conventional banks to adjust their balance sheets as it made assets more liquid. The conversion of illiquid assets into cash can be used to finance business growth. Conventional banks do not have to keep loan assets on their balance sheet. This advantage has made conventional banks find it easier to offer similar products to Islamic banks. As a result there is strong competition from conventional banks that have experience and technology on their side. This puts them at a greater advantage as compared to Islamic banks. Islamic banks could also benefit from ABS but are having problems in using the ABS due to shariah and technical issues. The shariah issues are issues on the ownership of the assets to be securitised, the restriction on the trading of debt and the type of credit enhancement that must be structured in a profit sharing capacity. The rating of Islamic banks is a technical issue whereby there are arguments that rating agencies do not understand the operations and their assets thus

giving an unfair rating. The rating of an Islamic bank that is interested in originating ABS is important, as is the quality of assets that the bank has. A good rating would enhance the creditworthiness of the bank thus allowing the ABS issued by the originating bank to be competitive.

Chapter 4 argues that ABS as a potential tool for Islamic banks and a solution that complies with both shariah and technical requirements would help promote Islamic ABS thus help improve the Islamic banking system. This chapter investigates how ABS can help to improve the efficiency and effectiveness of Islamic banks and the assets in Islamic banks and their characteristics. It also discusses the shariah and technical hindrances and suggests an Islamic ABS that conforms with both shariah and technical issues.

CHAPTER 2

PROFIT SHARING AS A MODE OF ISLAMIC FINANCING

2.1 Introduction

An Islamic banking institution must conduct its business in ways that are consistent with Islamic teaching. This includes practice in respect of lending activities. Islamic scholars and economists like Al Omar and Abdel Haq (1996) and Khan (1988) have argued that a Mudarabah or profit sharing system is preferred because of its characteristics of reward and risk sharing. However, in practice, most Islamic banks have preferred to use a Murabahah or cost plus mode of financing for projects. The main reason is that the banks fail to achieve profits in contracts using the Mudarabah mode of financing because it is vulnerable to incentive problems. The entrepreneur has an incentive to put in less effort. This is based on the argument that the entrepreneur has an incentive to shirk if the entrepreneur is given only a share of the marginal production. The problem faced by the Mudarabah is similar to the problem of sharecropping contract in agriculture. Using a model of sharecropping, we suggest that this problem could be overcome by monitoring and imposing penalty to the entrepreneur. The main result is that the Mudarabah mode of financing can be efficient if it is monitored and the entrepreneur is penalized should he or she be found to be negligent.

To understand the problem underlying the Mudarabah system, one would need to have an understanding of the Islamic banking system. Section 2.2 provides a brief overview of Islamic banking, the prohibition of interest and explains the modes of operations of Islamic bank and the problems in implementing Mudarabah and its similarities to sharecropping. The section also highlights the previous literature on the modeling of PLS in Islamic banking, monitoring and penalty and the Muslim's view on penalty. Section 2.3 analyses the incentive problems of Mudarabah and presents the model of Mudarabah that includes a penalty and its effects on the effort of the entrepreneur.

2.2 Overview of Islamic Banking

Over the last fifteen years there has been a rapid development of Islamic financial institutions. An important issue for an Islamic bank is that it must conduct its business without any element of interest. This is because Islam prohibits interest. Since Islamic banks are not permitted to pay and receive interest, modern Islamic banks operate on the basis of profit. Profits are earned through banking services provided by Islamic banks that might include activities like trading, investment, leasing or financing. These activities must conform to the Shariah rules. However, profits alone should not be the main objective of Islamic banks. Nienhaus (1988) said that theoretically, Islamic banks should provide capital to entrepreneurs who have good projects but no collateral, and are capable of managing the projects. This would then create a new business and can contribute to the development of the economy and society. Financial instruments should emphasize profit and loss sharing as it helps to accomplish goals in a fair and efficient manner (Chapra 1992 and Siddiqi 1983). The International Association of Islamic Banks (IAB) statement on the duty of Islamic banks towards the society is that;

The Islamic banking system involves a social implication, which is necessarily connected with the Islamic order itself, and represents a special characteristic that distinguishes Islamic banks from other banks based on other philosophies. In exercising all its banking or developmental activities, the Islamic bank takes into prime consideration the social implications that may be brought about by any decision or action taken by the bank. Profitability- despite its importance and priority- is not therefore the sole criterion or the prime element in evaluating the performance of Islamic banks, since they have to match both between the material and the social objectives that would serve the interest of community as a whole and help achieve their role in the sphere of social mutual guarantee. Social goals are understood to form an inseparable element of the Islamic banking system that cannot be dispensed with or neglected. (IAIB, 1990)

The statement from IAIB indicates that the existence of Islamic banks is to provide help to the society in order to help achieve social and economic objectives. Therefore, if an entrepreneur goes to Islamic bank with a project to seek financing, the Islamic bank should analyse the project based on the cost-benefit of the project and not look at the collateral that the entrepreneur has to provide. In general, Islamic banks have two major

responsibilities. One is to ensure that depositors are safe; the second is to ensure that they would be able to help achieve the Islamic economic goals of providing socio economic justice for all.

The first attempt to establish an Islamic financial institution began in Pakistan in the late 1950's in a rural area (Wilson, 1983). Some pious landlords deposited funds at no interest to provide credit facilities to small landowners. However, this experiment failed because of two factors. First, the huge gap between credit available and credit demanded. The deposits made by the landlords were for once only. Second, the bank staff was not given the full authority to allocate the deposits. The depositors were concerned to know how their deposits were being used.

The second attempt was in 1963, in Egypt. The Mit Ghamir Savings Bank was established in a rural area of the Nile Delta. The people in the Mit Ghamir area were quite religious and did not place their savings in any bank because of the interest factor. Other than putting aside the income for social reasons and emergencies, their income could not be used for productive investment.

In the Mit Ghamir project, three types of accounts were accepted. They were savings, investment and zakat. No interest was paid to depositors with savings accounts but they were allowed to make withdrawals on demand. The depositors were also eligible for interest free credits for productive purposes. The funds deposited in investment accounts on the basis of profit and loss and withdrawals were restricted. The zakat accounts were for redistribution amongst the poor. The experiment became successful and more branches were open. It was reported that the investment deposits rose from 35,000 to 75,000 Egyptian pounds but the bank was cautious in giving out loans.

However, owing to political reasons the experiment was abandoned. The project was revived in 1971 under Sadat's regime and given a new name, Nasser Social Bank. Nasser Social Bank was considered the first Islamic bank in an urban area funded by the state. The objectives of the bank were to give out interest free loans on a profit sharing basis, to provide assistance to the poor and needy and to make loans to students for higher education.

As at 2001, there are 267 financial institutions all over the world as compared to 176 Islamic financial institutions in 1997. As in Table 1, leading Islamic financial institutions showed a substantial growth rates. The total assets of these leading Islamic financial institutions have grown from 13.37 US billion to 27.36 US billion. Deposits increased from 158.2 US billion to 285.1 US billion.

Table 1. Leading Islamic financial institutions in the Middle East: assets and growth rates

	Leading Islamic financial institution					All deposit money banks		
Country		Assets, US$ million			Growth rate % p.a. [2]	Assets, US$ million		Growth rate % p.a. [3]
		1991	Latest year			1991	2001	
Bahrain	Shamil Bank of Bahrain	188	1,316	(2000)	25.1%	4,240	8,441	7.1%
Egypt	Faisal Islamic Bank of Egypt	1,950	2,474	(2000)	3.1%	40,242	86,135	7.9%
Jordan	Jordan Islamic Bank	529	965	(2000)	10.1%	7,231	17,382	9.2%
Kuwait	Kuwait Finance House	3,949 [1]	7,674	(2001)	7.7%	34,424	40,374	1.6%
Qatar	Qatar Islamic Bank	563	1,115	(2000)	7.1%	6,385	15,241	9.1%
Saudi Arabia	Al Rajhi Banking & Investment Corp.	6,199	13,816	(2001)	8.3%	65,683	117,543	6.0%

Total		13,378	27,360			158,205	285,116	

Sources: HSBC Bank Middle East Economic Bulletin, 2002

Notes: 1. Data are for 1992. 2. Growth rates are annual averages for latest 10 years for which data are available. 3. Growth rates are annual averages for the period end-1991 to end-2001.

In the UK, Islamic Bank of Britain is the first Islamic bank to be given the permission to operate Islamic banking by the Financial Services Authority in August 2004 (BBC, 2004).

2.2.1 The framework of Islamic banking and Finance

Islamic banking is based on Shariah or the Islamic Divine Law of Guidance. Islam itself is the religion that was revealed by God to Muhammad (pbuh). The teaching of Islam consists of economic well being and development of the Muslims that begins with individual, family, society, state and universal community levels (BIMB, 1994). Three basic elements of Islam are Aqidah (Faith and Belief), Shariah (Practices and Activities) and Akhlaq (Moralities and Ethics). Under Shariah we have Ibadat (Man to God Worship) and Muamalat (Man to Man Activities). The Islamic banking and financial system falls under Muamalat.

Unlike conventional banks, Islamic banks operate without interest. This is because the Shariah law prohibits interest. These laws or values are not man-made but are ordained by God. The two primary sources are the Al Quran (Holy Book) and As Sunnah (recorded stories or narrations of Muhammad (pbuh)). The prohibition of riba is revealed in the Quran but is also reinforced by the Muhammad (pbuh) in his Sunnah. Since Islamic banks cannot pay or receive interest, Islamic banks operate on the basis of profit. Islamic banks are free to create any instruments to earn profit as long as they are not against the Shariah and can fulfill the banks' objectives (Al Omar and Abdel –Haq, 1996). The reason for prohibiting of interest can be traced from the practices of the pre Islamic times. It was customary to charge compound interest on all debts. Some historical practices of interest that could be found during the pre Islamic times could be found in the types of interest transactions in Ta'if, Mecca and Medina. In Ta'if, a tribe known as Banu Thaqif used to advance loans to Banu Mughira. The Banu Mughira would indicate their willingness to

pay an additional sum if some extension was granted at the time the debt was supposed to be paid by them (Qureshi, 1991)[2].

In Pagan times the Banu Thaqif used to advance loans to another person for a fixed period. At the expiry of the fixed time the creditor demanded from the debtor either his principal or an additional sum for the extension. The debtor either repaid the debt if he had money with him, or requested an extension in the period of repayment, with the result that if a one year old female camel became due, at the expiry of the extended period, he would be required to give a two year old female camel; at the second extension, he would return a female camel which has passed her third year but was not four years old. If this was impossible, for the third year, the creditor demanded a camel which has passed its fourth year, but within its fifth year. And so on, and so forth.

The same thing prevailed in transactions of gold or silver. The debtor, on the failure to repay his debt after one year, was bound to pay double the principal loaned out. For instance, if a sum of Rs.100 were borrowed, in the second year the creditor demanded Rs.200, in the third year Rs.400, and so on, until the debtor discharged his complete debt.

The citizens of Mecca and Medina had business transactions done by way of interest. Some of the practices of interest could be found in the dealing of dates and barley where at the time of plucking the cultivators who borrowed money would allow the creditors a double quantity of dates the next year if the creditors would only take half of the cultivation and leave the other half to him this year. In the following year the creditor would get their additional quantity according to their agreement.

Imam Razi wrote (Qureshi, 1991,p.59):

The creditor who has loaned out a certain amount to another person for a stated time goes to his debtor when the time of repayment arrives. If the debtor had no means for repayment of his debt, he requested for an extension in the time of payment on certain "addition". The creditor agreed. This is what we call compound interest, strictly prohibited in Islam. In Pagan times, if a debtor owed a hundred dirhams to his creditor, if the former has no means to repay the debt at the expiry of the stated time, the creditors stipulated a certain" increase" or "addition" in his principal, on consideration of which

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[2] Qureshi (1991 had referred to Tabard, Jami'ul-Bayan (Tafsir Tabard),(Cairo Edition),Chapter IV. Tabard is considered to be the highest authority on this point.

the creditor would agree to extend the time of repayment. Many a time it so happened that instead of one hundred the added sum became two hundred: when the time extended also expired, there was another "addition" to the principal sum advanced. This would be repeated for a number of times, with result that for one hundred dirhams so originally loaned out, the creditor would received many times more than his principal. This is what we mean by compound interest.

There has been some dispute in the past between Islamic scholars on the interpretation on prohibition of riba. Some said that only usury and not interest is prohibited. Their argument was that interest paid for productive purposes would not contradict the Quran. Only the usury charged on non-productive loans was prohibited. Interest charged on commercial loans did not come under the religious definition of usury because this interest is necessary to support the world economy. Ahmad (1992) pointed out that there should not be any two opinions on the category of riba that is prohibited. The difference is only on the interpretation of scope, term and meaning. Furthermore, the prohibition of interest is not only revealed in various chapters of Al Quran but also in the Hadith. A conclusion was reached by the highest levels of scholars that commercial interest was against the principles of Islam, as mentioned by the Quran and Hadith (IIBI, London). This point has been confirmed over and over again by the Islamic Research Academy affiliated to Al-Azhar in 1965 and later by the Islamic Fiqh Academy affiliated to the Organization of Islamic Conference (Decision No. 10 in its plenary Session of 1406 H = 1985 CE). There is now a general consensus among Islamic scholars and theologians that the word Riba covers both interest and usury (Khan, 1987).

Many discussions have been made on the reasons for prohibition against interest. According to Imam Fakhruddin A Razi (Qureshi, 1991), the word Riba means and indicates 'increase or addition". However, not all kind of increase is unlawful and what is illegal is the contract that the Arabs called riba. This type of contract is called riba nasia and this is the contract that has been declared unlawful in the Holy Quran. He explained that this contract is unlawful because it extracts a person's wealth without lawful consideration of the return on the amount borrowed. This is considered as exploitation and could place the debtor into poverty. This is because the borrower might not get any return from the borrowed amount but still the borrower has to pay the principal and the interest charged. If it is argued that the additional money is for compensation to the

creditor in return for the use of the creditor's money, it would still be unlawful because say if he was to invest the money in some other business instead of lending the money, it is not always necessary that he would derive profit from it. There may be chances that his investment would suffer loss. Therefore, the chances of the creditor getting profit from his investment are uncertain as where the additional amount from the debtor to the creditor is certain. He also said that the prohibition of interest would also prevent treating interest as a means of income. If a person treats interest as means of income, this would discourage any involvement in a productive profession, as it is easier to earn by charging interest. Prohibiting interest would deter people from borrowing and squandering money. People would borrow at any rate to fulfill their growing needs if interest is made lawful and this would bring to an end to social and human well- beings and that a person will become malicious and hard hearted from this activity. His final reason for the prohibition of interest was that the Holy Quran that is the highest authority on Islamic Law has written orders against all Riba and we might not know all the reasons behind the prohibitions.

Ahmed (1987) explained that there are two motives in the abolition of interest, moral and economic. Morally it is to prevent exploitation and extortion of the poor or needy. Economically, the abolition is for the reasons of providing justice. It is only fair to divide both gains and losses between two parties in a business deal. However, if money is lent with no intention to participate in the business, than the lender is only entitled to the amount that he has lent out and not more. If money is lent with the intention also to participate in the business, then the lender is not only entitled to any profits made from his principal investment but to also share the losses.

Ahmed (1987) further explained that prohibition of interest would encourage hard work and positive participation from those with capital. This would encourage economic activities when capital is invested into businesses. Prohibition of interest would also discourage accumulation of wealth by way of interest.

Mohsin, Mirakhor (1987) explained the prohibition of interest in the context of rights and obligations to property and economic justice. ' *Money represents the monetized claim of its owner to property rights created by assets that were obtained through work or transfer. Lending money, in effect, is a transfer of this right, and all that can be claimed*

in return is its equivalent and no more. Thus, interest on money is regarded as representing unjustified creation of instantaneous property rights: unjustified, because interest is a property right claimed outside the legitimate framework of recognized property rights; instantaneous, because as soon as the contract for lending upon interest is concluded, a right to the borrower's property is created for the lender. On the other hand, when the financial capital of the entrepreneur is used in partnership with the human capital and labour of the entrepreneur, the lender's right to his property is not transferred and he shares, as co owner, the final product his money has helped to create. He will be remunerated in proportion to his financial investment ensuing incremental wealth. This emphasis on profit sharing provides the basis for the development of Islamic financing system.'

However, there are also controversial scholars like Dawalibi, a Muslim politician and journalist from Syria who believed that interest should be allowed for loans of production. It was reported that during a Scientific Conference of Islamic Jurisprudence in Paris, 1951 he said, " *The banned usury takes place in loans meant for consumption not for production, where in the former sector the usurers take advantage of the poor and destitute to exhaust them with exorbitant usury they impose on them. Nowadays, as the economic systems have been developed and many companies have been established, where most loans are being granted for production not for consumption, it is necessary to consider what development must be introduced to the stipulation's in consequences of this development of civilization'.* (Houmoud, 1985)

The Islamic banking system suggested by Muslim scholars and economists that satisfies the requirement of Shariah is based on two- tier Mudarabah (Profit Sharing) that integrates the asset and liability side of the balance sheet in an Islamic bank. On the liability side, the depositors enter into a contract with the Islamic bank to share profits generated from the businesses of the Islamic bank. On the asset side, the entrepreneurs who seek financing enter into a contract with the Islamic bank to share the profit generated from the projects financed by the Islamic bank. The profits will be pooled together and shared with the shareholders and depositors.

2.2.2 An Overview of the Modes of Operation of Islamic Banking

Having explained the framework of Islamic Banking and the reason for prohibiting interest, the modes of operations of an Islamic bank will now be examined. For this purpose the Bank Islam Malaysia Berhad (BIMB), the biggest Islamic bank in Malaysia will be used as an example.

2.2.2.1 Sources of Funds

The sources of funds for BIMB come from shareholders' equity, customers' deposits in current accounts, customers' deposits in savings accounts, customers' deposits in general investment accounts and customers' deposits in special investment accounts. The shareholders' equity is on joint- venture profit sharing (Musyarakah). The customers' deposits in current accounts and savings accounts are on guaranteed custody. The bank accepts deposits from customers looking for safe custody of their funds. The bank will request permission to use their funds. The customers may withdraw their funds at any time and the bank guarantees the refund of balances. Profits generated from customers' deposits in current accounts belong to the bank. The customers of these types of accounts are provided with chequebooks and other services connected with the current accounts. The profits generated from customers' deposits in savings accounts also belongs to the bank but the bank at its own discretion may reward the customers for the use of their funds by giving a portion of the profits from time to time. Although this might not seem much of an incentive to encourage savings but customers still deposit in these types of accounts because there is no element of interest.

The customers' deposits in general investment accounts are on Mudarabah or Profit sharing. These accounts are for customers looking for investment opportunities. The deposits will be placed for specified period from 1 month to 60 months and over. In the event of a loss of investment the customer bears all the loss. The customer does not participate in the management of the investment of the funds. The bank acts as entrepreneur for the customers. The bank and the customers agree on how to distribute the profits. At present BIMB offers the distribution ratio of 70% to the customers and 30% to the bank. The customers' deposits in special investment accounts are also on

Mudarabah. This account permits the negotiation of the modes of investment of the funds and the ratio of distribution of profit.

2.2.2.2 Application of Funds

The application of funds is firstly, for the statutory reserve requirement from the Central Bank in relation to saving accounts on guaranteed custody and liquidity requirements to be maintained in certain ratios of defined liquid assets to its various types of deposits. The remainder of the funds is for financing, investments and treasury functions.

2.2.3 Modes of Financing under Islamic Banking

The modes of financing that are being practiced by Islamic banks are Mudarabah, Musyarakah and Murabahah. The Mudarabah is a Profit Sharing contract and the Musyarakah is a joint venture contract where the profit and loss is shared according to an agreed ratio). Murabahah is a cost plus contract there are several arrangements like Bai Bithaman Ajil (Deferred Payment Sales), Bai Salam or Bai Salaf (Purchased With Deferred Delivery), Istisna and Ijarah (Leasing). Other than these two modes, Islamic banks are obligated to set aside a certain percentage of the fund for no cost loans to the needy. The arrangements of financing under the two modes will now be explained.

2.2.4.1 Mudarabah (Profit Sharing)

Under the Mudarabah arrangements, a bank will enter into a contract with the entrepreneur. Within the contract, the bank will supply the funds for a project and the entrepreneur provides labour. The bank is the provider of the capital and will provide 100% financing. The money will be invested in a productive economic activity and the profit that is derived will be shared in accordance to the percentage share agreed. The percentage share is predetermined at the inception of the financing contract. If the project fails, the loss will be borne by the bank and the entrepreneur's loss is restricted to the labour that he has put into the project. However, this is subject to a condition that the entrepreneur has worked with due diligence and has not committed any dishonesty. The profit can be shared in equal proportions or different proportions. A lump sum of amount of profit could not be allocated to any party or tied up to the rate of capital invested

(Usmani, 1999). Therefore, if A and B enter into a contract and both agreed that A will be paid £10000 per month as A's share of profit and whatever remaining of profit will be B's, then this contract is invalid. Usmani (1999) also said that the contract is also not valid if it is agreed that A will get 20% of A's investment in the project. For example, if A invested 20,000 and it is agreed that A will get 20% of the invested amount. The basis of distribution of profit should be on the actual profit of the business.

2.2.4.2 Musyarakah (Joint Venture)

A Musyarakah transaction is when there is more than one single contributor of funds. For example, when there is a huge project and one contributor to the project is not enough, several banks and the entrepreneur can get together and become contributors to the project. Musyarakah is similar to a syndicated loan in conventional banking. These parties can invest in varying percentages. The percentage of share in the profit for each contributor is normally related to the percentage of investment. The percentage of share in the profit must be determined at inception of the contract and the distribution of profit should be on the actual profit of business. It is not permitted to fix a lump sum for any of the partners or to tie the rate of the profit to the investment made. In the case of loss, the loss suffered by the partners is in accordance to their ratio of investment. Therefore, if a partner invested 30% in the project, the loss that will be suffered is 30% of the total loss. As for the management of Musyarakah, every partner can take part in the management of the project. However, the partners may also decide on the partner that will manage the project.

2.2.4.3 Murabahah (Cost- Plus)

Murabahah or cost plus is the most widely used by Islamic banks. Murabahah is actually a type of sale and not a mode of financing (Usmani, 1999). This mode has been allowed by the Shariah to be used as a mode of financing in cases where Mudarabah and Musyarakah are not practicable. In this arrangement, the bank agrees to buy a specific good for the purchaser (borrower). A certain profit is added to the bank's cost and the purchaser knows the actual cost incurred by the bank for acquiring the good. The payment of this mode of financing may be on the spot or on a subsequent date agreed

upon by the parties. The use of Murabahah on this basis is often used as a mode of financing.

Other arrangements using the Murabahah mode of financing are the Salam and Istisna. The Salam is where the seller undertakes to supply a specific good to the buyer at a future date but the price is paid in full immediately. Istisna is a transaction made before the good comes into existence. It is like ordering from a manufacturer to produce a specific good for a purchaser. Unlike Salam, it is not necessary for the price to be paid in full under Istisna.

2.2.4.4 Ijarah

Ijarah is an arrangement permitted by the Shariah to be used by Islamic banks for leasing. The bank will purchase the identified asset and lease the asset to the customer.

2.2.5 Mudarabah As Mode of Financing

The ideal mode of financing that has been identified by Islamic economists is the PLS. The PLS system is important because an owner of capital may not be able to find a way to turn that capital into profitable economic activity, whereas the person with expertise may not have the capital. According to Al Harran (1996), this contract enables the goals of the owner of capital and the person without capital to be achieved especially in the position of the entrepreneurs where they will work harder because every increase in the profit increases their income too. He also said that in relation to the banks and entrepreneurs relationship, the PLS system encourages direct involvement from the Islamic bank. This is because the Islamic bank is expected to know more about the activities of the project and is likely to influence the decision of the borrower. This is good for small businesses especially because the bank's expertise and knowledge could improve the profitability of the investment. According to Al Omar & Abdel Haq (1996), the PLS is a fair and just system because of the risk sharing between the person who provides capital and the entrepreneur. Also, the PLS system ensures allocative efficiency, economic stability and growth because in the financial system today, financing only goes to the most creditworthy borrower and not necessarily to the most productive and potentially profitable projects. They also claim that any interest- based system is said to have a tendency towards inflation because the creation of money is not linked to productive investment. Khan (1988) demonstrates that the PLS system is better in adjusting to shocks such as banking crises and disruption of payments mechanism of the country. Siddiqi (1983) also said that the profit sharing system allocate efficiency because the returns and repayment of loans are no longer fixed but depend entirely on the productivity of the project. He suggested that the bank would have to take care in examining and assessing the project's productivity and selecting the projects that promise the highest rate of return.

As mentioned before Muslim scholars and economists have suggested that Islamic banks should operate on a two- tier Mudarabah system. The Islamic banks are encouraged to engage in financing using the PLS modes of financing. This is where the bank's income should come from and also the income of the investment depositors should come from. However, based on the current scenario of Islamic banking activities shows otherwise.

2.2.6 Current scenario of Financing

As explained previously, the PLS is preferred by most Islamic economists as PLS fulfills the Shariah requirements. However, the current scenario of financing is far from this. The latest reported figure available on the modes of financing is only from 1994 to 1997. The report shows below:

Table 2: Modes Of Financing (Percent of total)

Year	Murabahah/ Cost-Plus	Musyarakah/ Joint Venture	Mudarabah/ Profit sharing	Ijarah/Leasing	Others*
1994	41.54	8.17	12.56	8.70	26.79
1995	45.58	8.72	15.25	9.72	21.06
1996	40.30	7.2	12.70	11.50	28.30
1997	37.00	19.00	6.00	9.00	29.00

* Financing under Qardhul Hassan and Staff Loans

Source: International Association of Islamic Banks (IAIB)(1997)

Table 3: Percentage Of Financing Divided Under Two Modes Of Financing

Year	Murabahah/ Cost-Plus	Musyarakah& Mudarabah	Others
1994	50.24	20.73	26.79
1995	55.30	23.97	21.06
1996	51.80	19.90	28.30
1997	46.00	25.00	29.00

Source: IAIB (1997)

Table 3 clearly showed that an average of 50.8% of the total financing went to cost- plus and only an average of 22.4% were on PLS financing and 26.8% to other modes of financing. The Mudarabah mode of financing went down from 12.7% in 1996 to 6.0% in 1997. In Malaysia, the same pattern of financing can be seen from the financial reports of two Islamic financial institutions in the country. They are of Bank Islam Malaysia Berhad

(BIMB) and Bank Kerjasama Rakyat Malaysia. Most of the financing given was on the cost-plus mode rather than PLS. Please refer to the table 4 and 5 below.

Table 4: Financing by Concept at Bank Islam Malaysia Berhad (BIMB) As At 30th June

RM 000'

Year	PLS (Musyarakah & Mudarabah)	%	Cost-Plus	%	Others*	%
2001	195,845	4.0	4,373,418	80.0	883,622	16.0
2002	253,741	4.0	5,106,193	83.0	784,390	13.0
2003	258,202	3.0	6,139,225	85.0	796959	11.0

* Staff Loans and Qardhul Hassan

(BIMB's Annual Report (2001)(2002) and (2003))

Table 5: Financing by Concept at Bank Kerjasama Rakyat Malaysia Berhad As at December

RM 000'

Year	PLS (Musyarakah & Mudarabah)	%	Cost-Plus	%	Others*	%
2000	0	0	5,632,977	99.0	70,298	1.0
2001	0	0	6,639,911	99.0	85,148	1.0
2002	0	0	7,805,950	92.0	711,233	8.0

* Staff Loans

(Bank Rakyat's Annual Report (2000), (2001and (2002))

Even though the theoretical models of Islamic banking are either based on Mudarabah or Musyarakah it seems that nearly all Islamic banks offer financing mainly on cost-plus or leasing bases. In other words, the Islamic banks have so far failed to adopt the profit and loss based modes of financing in their business. What is the problem?

2.2.7 Problems In Exercising PLS

The experience of Al-Baraka International Bank Limited (AIBL) in London provided an example of why Islamic banks shy away from PLS financing. Al Omar and Abdel Haq (1996) in their publication studied AIBL. AIBL was a subsidiary of Al-Baraka Group whose major shareholder is Mr. Saleh Kamel. The objectives of AIBL were to invest its capital and depositors' funds in the best Islamic manner to achieve the best possible level of halal profit compatible with the acceptable risk, to provide services to individuals and corporate clients with banking services that conform with the Shariah requirement and to develop trading relationships with other Islamic countries. In the early stages of their operations, AIBL had dealt with PLS, but after a failure to achieve profit on PLS contracts, dealings with PLS contracts was stopped. Al-Baraka's chief executive explained:

The depositors wanted an Islamic deal without risk. They liked, at least, to guarantee their capital. The problem with PLS is that they (the Islamic economists) assume the scenario of the entrepreneur being a good Muslim. Bearing in mind that murabaha does not fulfill the idea behind Islamic banks we should concentrate on finding a way to promote PLS transactions as viable contracts.

Clearly, from the above statement, the uncertainty in achieving profit and the expectations of the depositors are why financing under PLS is quite impractical. Islamic banks must ensure that financing is given to honest entrepreneurs and the projects must be profitable and viable projects. The profit from the projects should be sufficient to cover not only transaction costs but also provide a return to investment depositors. Furthermore, the returns must be at least equivalent to returns given by the conventional banks.

As investors, depositors must understand that there is no profit sharing without risk sharing. Perhaps, depositors are so used to the conventional system of banking where every single dollar they deposit is guaranteed by the banks. If Islamic banks want to promote financing under the PLS then they must find honest entrepreneurs who will work hard and ensure that projects will not fail, and would provide a satisfactory return to the

bank in order to give the required return wanted by the depositors. Alternatively, they must design contracts in such a way as to provide appropriate incentives.

At the moment the information on the entrepreneur is obtained from the loan application form. The application form contains personal information of the entrepreneur, borrowings (if any) and details on the proposed project. Normally, the details on the project would include the forecast of the cash flow and profit and loss statement. What the bank could do is a credit checking on the entrepreneur. However, such information would not be sufficient for the bank to decide if the entrepreneur is honest and hard working. The bank is also unable to be sure that the project is feasible because the cash flow and profit and loss statements are only forecasted information. The entrepreneur is the only person who has inside information on the entrepreneur's own personal activities and also on the feasibility of the project. The entrepreneur knows whether the project will be less successful, successful or even not successful at all. This information could not be channeled to the bank. Knowing the limitation of information on the side of the bank the entrepreneur on the other hand has an incentive to inflate expected profits hoping that the bank would give financing and also hoping that the bank would quote a lower profit sharing ratio (Nienhaus, 1983).

The Islamic bank now faces difficulties from ex-ante information limitation concerning the capacity of the entrepreneur and the feasibility of the project. Once the bank has invested in the project, the bank would also face ex- post asymmetric information. The entrepreneur has the incentive to under report or artificially reduces the declared profit. This can be done by misrepresentation of the financial statement or by resorting to accounting subterfuges (Mills and Presley, 1999). In the next section, the mudarabah mode of financing will be studied in terms of its similarities to sharecropping and the incentive problems faced.

2.2.8 Similarities of Mudarabah with Sharecropping

How is Mudarabah similar to share cropping? First let us consider sharecropping.

Sharecropping involves an agreement between the landowner who provides the land and the tenant who provides the labour over the percentage in which the agricultural output will be shared. Cheung (1968) defined share cropping as *two or more parties combining privately owned resources for the production of certain mutually agreed output, the actual output to be shared according to certain mutually accepted percentages as returns to the contracting parties for their productive resources forsaken.*

A sharecropping contract enables the tenant to share risks of agricultural production with the landlord rather than bearing all the risk alone. In a share contract, the output shared is based on the actual yield produced. The prevailing impression of sharecropping is that it is inefficient. The tenant has the incentive to shirk because the tenant retains only some fraction of the production. Tenants are less eager to put labour effort or investment because a fraction of the return will go to the landlord (Dasgupta, 1993).

Like sharecropping, Mudarabah also involves a sharing of profit of a project between the Islamic bank and the entrepreneur. Mudarabah mode of financing in the Islamic banking system also faces the same incentive problem. This is because the entrepreneur does not retain the whole production of the marginal level of effort. As a result the entrepreneur has an incentive to put in less effort and to report less profit. There is always a possibility of shirking on the part of the entrepreneur. The Islamic bank is the equivalent of the landlord and the entrepreneur who runs the project fulfils the role of the tenant. In sharecropping where the landowner provides land to the tenant, the bank provides capital. Like the tenant who provides labour in sharecropping, the entrepreneur provides the skill and management expertise to ensure the project is successful. Similar to sharecropping where the production output is shared in a portion agreed by both parties, the profit from this project will be shared at a pre -determined level before the beginning of the project. The only difference with sharecropping is that the landowner still has the land if anything is to happen to the project.

In sharecropping and Mudarabah there is the problem of ex -ante and ex- post asymmetric information. Adverse selection may result from ex-ante information limitations whereby the entrepreneur (tenant) may not act in the interest of the banker (landowner). This is because the entrepreneur (tenant) has inside information on their ability and the feasibility of the production. This information could not be signaled because the entrepreneur (tenant) can claim that they can manage the project or land efficiently and provide a profit for the bank (landowner). In banking this limited information is worse because there is a possibility that the entrepreneur will inflate declared profit expectations for the purpose of obtaining a lower ratio of profit sharing from the bank.

The ex-post information in banking could expose the banker to moral hazard problems whereby the entrepreneur may artificially reduce actual profit (Sarker, 1999) if this is not monitored. This is because a proportion of the incremental profit goes to the banker. The entrepreneur's incentive to maximize profit will be lessened. The entrepreneur will under report or over-indulge in personal spending (Mills and Presley, 1999).

The objective of the Islamic bank (landowner) is to get the highest production possible in order to achieve a higher income. The Islamic bank (landowner) could not do this by simply increasing the bank's (landowner's) share in the production output because then the entrepreneur (tenant) would not be interested in working together with the bank. One way is to push the entrepreneur (tenant) to provide more effort to achieve the expected production, and to penalise the entrepreneur (tenant) if caught not doing so.

2.2.9 Previous Literature of the Modeling of Profit and Loss Sharing of Islamic Banking

There have been many studies attempting to model profit and loss sharing in Islamic banking. Khan (1986) modeled profit and loss sharing based on a macroeconomic model developed by Meltzer (1951) and Fernandez (1914). The model is considered to be consistent with the principles of Islam. The model shows that Islamic banking system can be rationalized in a neoclassical framework. The model is not totally different from Western economic thinking as it bears a striking resemblance to equity participation and proposals made in the literature on the reform of the banking system in most countries and especially in the United States. His model also shows that in response to certain

shocks the Islamic banking system could be relatively more stable than the conventional banking system because unlike a conventional bank, the nominal value of shares is not guaranteed. He proposed for Islamic banking to have two windows. The first window is where the depositors are not entitled to any return and this should have a 100% reserve. The other window is for profit and loss accounts and the depositors are treated as if they are the shareholders of the bank with no guarantee on the nominal value of the share. The shortcoming of this is that it concentrates on the liability side of banking operations. Even though the nominal value of investment made by the depositors in the profit and loss sharing is not guaranteed, the bank is still being pressured to make a profit in order to give returns to investments made by the depositors. Not only that, the bank would still pay some return to the depositors from the first window to attract new depositors. This is because of the competition that the Islamic bank is facing with conventional banks where depositors earn interest from their savings accounts.

Khan (1987) compares two systems in his model. A fixed return scheme (FRS) and a variable return scheme (VRS). The FRS is the traditional banking system and VRS is the Islamic banking system. The model assumed that the lender is not risk neutral and the expected payoff of a project determines the type of contract that the lender will prefer. However, if the lender is risk neutral, the choice of contract is irrelevant. It is only when the lender is risk averse that the lender prefers VRS. The model was extended to include the problem of asymmetric information. He assumes that there is a possibility of monitoring the performance of the entrepreneur by the lender. His results are that monitoring is costly in VRS as compared to FRS. However, since the FRS does not spread risk optimally, the lenders who are risk averse will still prefer VRS despite the cost. He went on by concluding that the Islamic system is superior to non-Islamic system provided that there is no dishonesty. This finding however does not reflect the current Islamic banking scenario. As mentioned in previous section, Islamic banks are not comfortable using the profit and loss contract because of the incentive problems in the contract. This indicates that they are risk averse and would like to avoid the incentive problems in PLS by concentrating more on cost plus contracts that give a fixed return.

Ul Haque and Mirakhor (1987) develop a model of profit and loss sharing to analyse cases of certainty and uncertainty with complete information. The moral hazard problem in Islamic profit sharing is considered in the model. The model shows that in the case of

perfect certainty and full information, investment decisions based on profit sharing and a fixed rate of return are not an issue. However, when there is uncertainty or imperfect information the level of investment may increase under certain conditions. This is because a fixed cost for capital no longer needs to be met as part of the firm's profit calculation. The marginal product of capital can be taken up where maximum profits are obtained without the constraint of meeting a fixed cost of capital. In order to overcome the problem of asymmetric information, they suggested that the profit and loss sharing contract should include all relevant information. This should be supported with an efficient domestic legal system to enforce the contract. Ul Haque's and Mirakhor's suggestion that a profit and loss sharing contract can be successful if all relevant information is included means that when there is perfect information (all relevant information) only then can the contract be successful. Getting all relevant information is quite impossible because one does not know how much information is enough for the profit and loss contract to be efficient. Furthermore, human behaviour is very difficult to predict and when it comes to moral hazard, information on an individual may never be enough to predict if that individual is responsible enough as to not to cheat.

A model by Khan (1987) shows that risk is more critical in a profit and loss financial system. This is because of the lack of guarantee that there will be comparable quantity of funds for financing under this system, as there are no risk free assets.

Presley and Sessions (1994) presented a model that focuses on a single project undertaken by a single manager and examines situations where capital is financed through riba (interest) and Mudarabah. The outcome of the project depends on the level of capital investment, managerial effort and the state of nature where there is a random shock to demand and technology. Two states of nature, good or bad are assumed with a production technology that provides higher total and marginal revenue in the good state than in the bad state. The key assumption in this model is asymmetric information. The manager has more information than the investors because the manager observes the demand and productivity of the project before making any decision. The manager alone will observe the level of effort. Even though the manager's expertise would enable him or her to make decisions for the project, a revelation problem may arise because the manager's decision on the production input may not coincide with those of investors unless the manager also shares the risk of the project. In order to avoid this, an incentive –compatible contract can

be specified where the cost of misinformation by the manager is so high that the manager needs to be honest. It was found that the Mudarabah contract helps to control the effort of the manager because effort will affect the relationship between capital investment and the project's outcome. A riba contract ties compensation to the input of capital. The manager in a riba contract is free to set the level of effort in any state. The incentive compatibility would require the manager to invest at low levels of capital in the bad state and allow the manager to set effort. Under a Mudarabah contract the manager is free to choose the optimal level of investment in each state with the contractual specified level of effort. This improves the mean variance in capital investment and reduces inefficient large fluctuations.

Aggarwal and Yousef (2000) presented a model of investment and capital structure based on incomplete contracts. It showed that equity financing could be optimal when the cost of the project is low or when the rate of diversion is low. If the agency problem is high such that the project cannot be funded through equity, then debt becomes the pre-dominant instrument of finance. They also examined the social welfare implications of the debt and equity contracts. The social welfare improves when there is a ban on debt because of the high cost in liquidation and default. However, the ban on debt would be too costly for an Islamic government even if the banning would improve social welfare.

In the past half decade the problems in implementing profit and loss sharing have begun to show up and as a result the Islamic banks have resorted to giving out financing using other modes of financing and not Mudarabah or Musyarakah. The major setback of the implementation of these two modes is on the honesty of entrepreneurs. If Islamic banks want to provide financing under these two modes they must be willing to monitor the entrepreneurs. According to Diamond (1991) a bank will only monitor if the expected return of monitoring is at least equal to the monitoring cost and if the monitored loans offer an expected return of at least the required return plus the monitoring cost.

2.2.10 Previous Literature on Monitoring and Penalty

Harris and Raviv (1979) try to develop a theory of contracts in situations characterized by a divergence of incentives between owners and managers of a firm, governments and contractors and asymmetric information. The possibilities on how information affects the structure of the contract are also included. Harris and Raviv (1979) conclude that except in the case where the agent is risk neutral, the inclusion of monitoring can motivate the agent to take action that could make both agent and principal better off. They also state that when a decision that involves costs or benefits is delegated from one agent to another, incentive problems or moral hazard would arise. They investigated how the results of supervising can be optimally incorporated in the contract. The contract stipulates that the agent's share of the payoff would depend on the monitoring result that determines whether the agent's action is acceptable. If the agent's action were found to be unacceptable, the agent would receive a constant payment, which results in lower payoff. A well-known paper by Alchian and Demsetz (1972) argues that introducing a principal who monitors the agent's inputs would restore efficiency. Holstrom (1982) studies moral hazard with many agents. He states that performance evaluation is helpful in reducing moral hazard. Incentives like penalties for wasted output and bonus could eliminate the problem of free rider in a group. He ends his paper by exploring a question of what determines the choice of monitors and how output should be shared so as to provide all with the best incentives to perform. Holstrom (1979) also states that the remedy for moral hazard or the incentive problem is by investing in the monitoring of actions and to use the information in the contract. Employing a contract that penalises dysfunctional behaviour and providing observation help to alleviate moral hazard.

Shavell (1979) studies arrangements of fee by a principal to his agent. He finds that where the agent is paid a fee by the principal for the agent's effort, it would be an advantage to give the agent a fee that depends on the agent's effort, provided that effort is observed with complete accuracy rather than solely observing the outcome. Grossman and Hart (1983) develop a method for analyzing the principal-agent problem where the agent's attitudes to income risk are independent of action. They break up the principal's problem into a computation of the costs and benefits accruing to the principal when the agent takes a particular action. They stated that more complicated principal agent problems arise

when not only the principal is unable to monitor the agent but also when only the agent possesses the information on the environment.

Studies of monitoring and penalty can also be found in the sharecropping literature. A model of sharecropping by Alston, Datta and Nugent (1984) showed how the marginal product of land is positive when there is monitoring and a penalty is imposed on the tenant. Another study of how monitoring affects output is by Nabi (1985). His paper is purely empirical and based on sharecroppers in Pakistan. His findings are that cost sharing and supervision will ensure efficient resource use in sharecropping contracts. Landlords also intervene to ensure that sharecroppers use land productively as if they are owners. Penalty in the form of threat of evictions if cultivation is poor suggested that the landowners attempted to push the tenant to provide more effort. This resulted in a return that is higher than the average payment for labour. Gale (1950) suggested 3 techniques for a landlord to protect his interest and achieve a reasonable level of rent. The first is to enter into a lease contract that specifies in detail what the tenant is required to do. The second technique is to share in the payment of expenses to the same extent as in the sharing of output. Finally, Gale (1950) suggested that the best is to grant a short-term lease that makes possible a periodic review of the performance of the tenant. However, this may not be applicable to profit sharing mode of financing as a project could take years before it generates profit.

Cheung (1968), in his study to examine the impression that sharecropping results in inefficient allocation of resources, finds that the landlord must make an effort to ascertain the harvest yield since the sharing of output is based on the actual yield. If the actual yield is low, the share of the landlord will be low. He suggested that the landlord could induce efficiency of the tenant by monitoring inputs.

2.2.11 Summary

Islamic financial institutions must refer any actions or ideas to the Shariah Advisory before the actions or ideas can be implemented so as not to do anything against the teachings of Islam. A Shariah Advisory is an authority on Islamic banking and takaful. It harmonises Shariah interpretations. Monitoring is permissible, as it is a way to ensure that the borrower repays financing. Previously, there have been arguments on charging a penalty to borrowers for making late payments and also for defaulting. Some Syariah bodies of some countries do not allow a penalty to be charged to the borrower if the borrower defaults, the reason being that the borrower may have difficulty in paying because of some events that could not be avoided. For example, if the borrower does not have any money because the borrower is sick or a member of the family is sick and instead of paying the loan, the money is used to pay for medicines. As a result some immoral borrowers decided to take advantage of the whole situation by delaying or defaulting on their repayments. In view of the severity of the problem, all Shariah bodies like Islamic Fiqh Academy of the OIC, allows a penalty to be imposed on entrepreneurs if it is proven that the action is deliberate. This penalty only applies to murabaha modes of financing. However, the penalty proceeds would be used for charity because penalty on default in repayment cannot become an automatic source of income for the creditor.

Previous literature by Harris and Raviv (1979), Alchian and Demsetz (1972), Holstrom(1982 and 1979),Shavell (1979), Grossman and Hart (1983), , Nabi (1985) and Cheung (1968) shows the importance of monitoring and how penalizing is effective in reducing moral hazard. The next section explains the incentive problem in Mudarabah using the work of Alston, Datta and Nugent (1984) and Nabi (1985) as the background of the model.

2.3 Objective

The objective of the paper is to develop an economic model of Mudarabah financing in the Islamic banking that incorporates the incentive scheme using a model drawn from the sharecropping literature. The model aims to demonstrate that effort of entrepreneur could be improved through penalty. Section 2.3.2 investigates the effects on effort if penalty is imposed for shirking. The emphasis here is to show how profit can be maximized under the Mudarabah mode of financing using penalty to induce the entrepreneur to apply the required input in order to ensure the required production is achieved. Section 2.4 suggests various forms of penalty that could induce the entrepreneur to perform his or her role diligently

2.3.1 Incentive Problems in Mudarabah

It is assumed that output *(Y)* from a project is a function of the entrepreneur's effort *(E)*:

$$Y = f(E) \qquad (1)$$

From the entrepreneur's perspective, effort is costly. For simplicity, it is assumed that the cost to the entrepreneur of undertaking production is proportional to the level of effort.

$$C = cE \qquad (2)$$

The return say R, to the entrepreneur would be where:

$$R = Y - C \qquad (3)$$
$$= f(E) - cE$$

The entrepreneur's level of effort that would maximize the return is at,

$$f'(E) = c \qquad (4)$$

Output

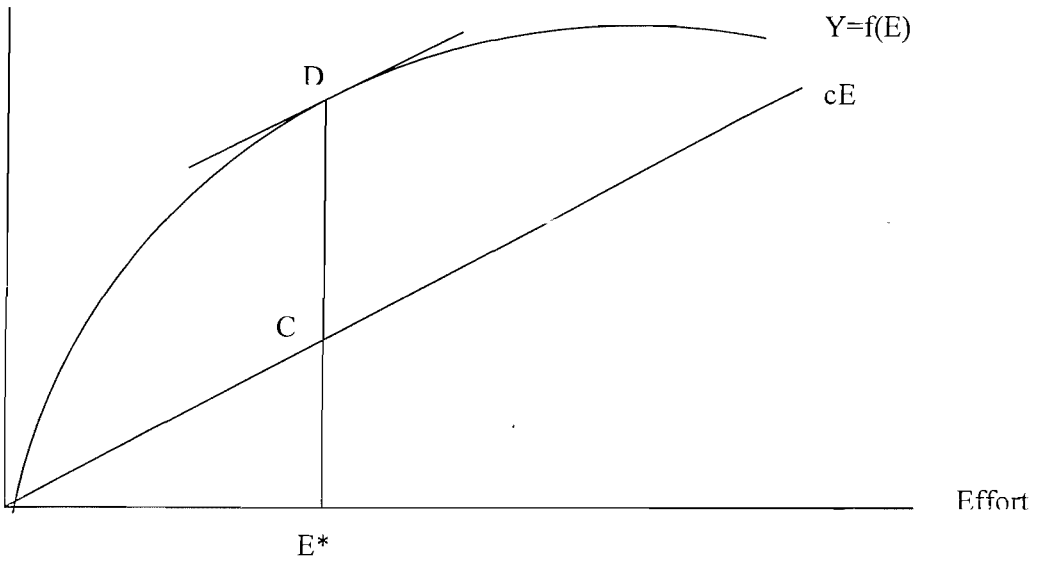


Diagram 1

In Diagram 1 we plot the production and cost functions. The maximum return to effort is depicted by the vertical difference between point D and C. The surplus is thus maximized at effort E^*. At this point, the value of marginal product of effort equals the marginal cost of effort.

Assume that the project is financed by the bank using a Murabahah /cost plus contract. In this contract the entrepreneur will make a fixed payment say B, to the bank over a certain period of time as agreed in the contract of financing. The fixed payment includes the repayment of principal and payment of profit. No matter what the outcome of the production is, the entrepreneur will pay this fixed amount to the bank. Therefore the return to the entrepreneur would be:

$$f(E) - cE - B \qquad (4)$$

The entrepreneur chooses the level of effort to maximize the return to effort:

$$f'(E) = c \qquad (5)$$

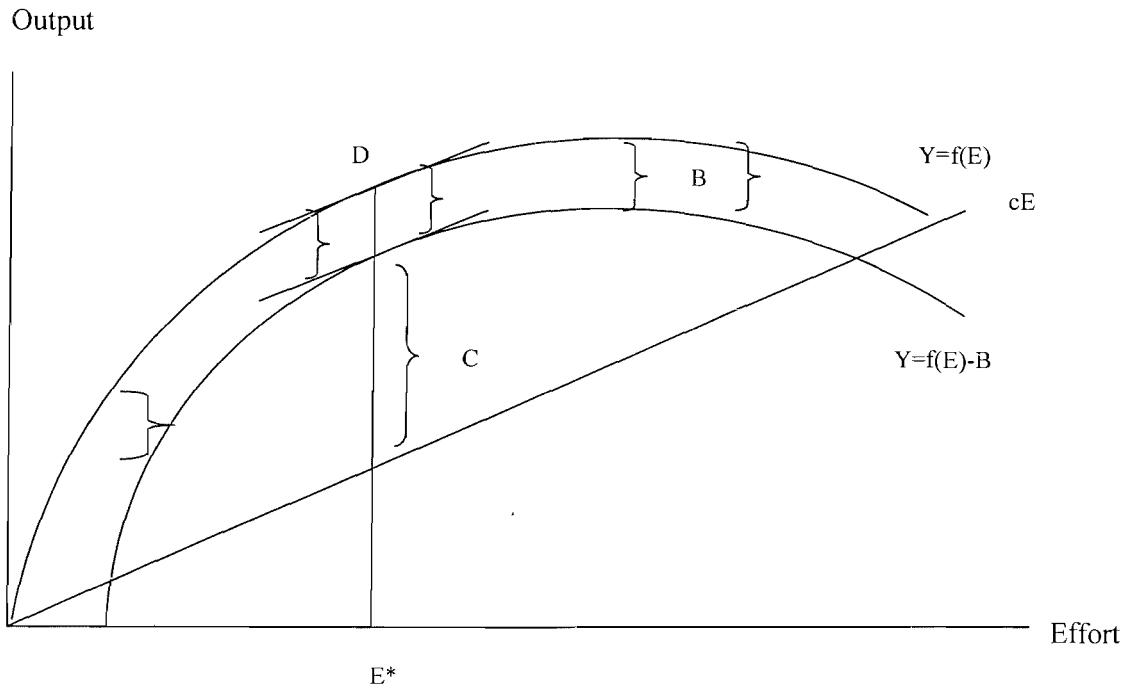


Diagram 2

The entrepreneur's return is depicted by a parallel downshift of the production function that is obtained by subtracting the fixed payment of B to the Islamic bank. The entrepreneur still seeks to maximise the return to effort. The return continues to be maximized at effort E^*, with the bank receiving B and the entrepreneur getting C.

Now, assume that financing is under Mudarabah contract. Both parties agree through negotiation on the ratio of the distribution of the profits generated from the project. The output of the project is still *Y*. The return of *Y* is shared between the bank and the entrepreneur. The bank will get $(1-\alpha)(R)$, and the entrepreneur's share is $\alpha(R)$.

Under this contract the entrepreneur's return to effort is;

$$\alpha f(E) - cE \qquad (6)$$

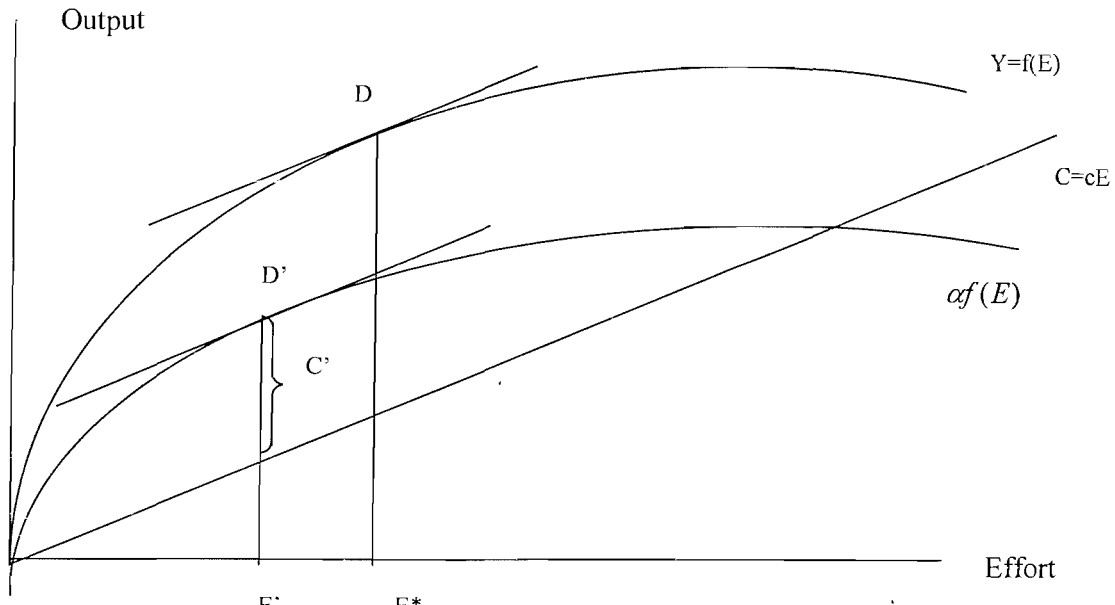


Diagram 3

The production function shifts down because entrepreneur is only getting a percentage (α) of R

The entrepreneur chooses the level of effort to maximise:

$$\alpha f'(E) = c \qquad (7)$$

The entrepreneur's return to effort is now maximised at E', where the return is C'. Observe that at this point the effort has shifted downwards to E', which is below E^*.

This is where the inefficiency of Mudarabah arises. The entrepreneur has the incentive to put in less effort (to shirk) because the entrepreneur is getting only a fraction of the production.

The question is can the effort be shifted back to E* by monitoring and imposing a penalty.

2.3.2 Introducing Penalty

Suppose that the bank decided to monitor and penalize the entrepreneur if the bank detected that effort from the entrepreneur is not up to what is expected. Because $Y=f(E)$ we assume that the outcome of production is the indicator of the effort of the entrepreneur. If actual production is the expected production then there is no reason for penalty to be charged to the entrepreneur. The lower the production is, the higher will be the penalty.

For simplicity, it is assumed that the penalty (P) depends on (E).

$$P = P(E) \qquad (7)$$

The entrepreneur's share is αY, subject to cost of effort at $C=c\,E$, and a penalty $P=P(E)$. As a result the inclusion of penalty means an extra cost to the entrepreneur. Therefore the cost to the entrepreneur if effort is below at E<E* would be:

$$Cost = cE + P(E) \qquad (8)$$

The return to entrepreneur's effort below E*, with the inclusion of P would be:

$$\alpha f(E) - cE - P(E) \qquad (8)$$

With penalty, the entrepreneur maximises at:

$$\alpha f'(E) = c + P'(E) \qquad (9)$$

Penalty will be charged and continue to be an extra cost to the entrepreneur until the entrepreneur's effort produced the expected production. If effort is at E* entrepreneur, the penalty will not be charged. The form of penalty must be able to discourage the

entrepreneur from shirking. The next section suggests the forms of penalty that can be used to reduce moral hazard.

2. 4 Objective

The objective of this section is to discuss how the theory can be operationalised. This section suggests forms of penalty that could induce the entrepreneur to apply the required input in order to ensure the required production is achieved.

2.4.1 Penalties

The idea is to devise a financial contract to limit potential moral hazard. Penalties have been known to alleviate moral hazard in financial contracts. The form of penalty introduced should be able to induce the entrepreneur to perform at the essential level of effort, in this case at E*. Gjesdal (1976) found that the threat of large penalty for poor performance is sufficient to prevent the agent from shirking when presented with an optimal risk- sharing contract. Lewis (1980) extending the analysis of Gjesdal (1976) finds that a lump sum penalty of any size based on some measure of performance like output that varies continuously with the agent's effort can improve the contract of risk sharing by reducing the incentive for the agent to shirk when effort is not observable. Lump sum bonuses paid to the agent for high output levels can also alleviate incentive problems. Kemp and Stephen (1999) examine the efficiency of the reward mechanism in the oil industry. The effects of project cost and completion risk are examined with and without bonus/penalty schemes using a Monte Carlo simulation analysis. The contractor will pay the field investor some compensation through the penalty when the costs over-run. The field investors will pay bonus to the contractor when there is a cost reduction. The study shows that the schemes increase the overall risks borne by the contractors but reduces the risk of oil field investors. However, major oil companies are still promoting this reward scheme as it helps them reduce cost.

The penalty scheme could be applicable to reduce moral hazard in the Mudarabah mode of financing. It is generally agreed by Islamic scholars that penalties can be imposed against defaulters who borrowed under the Murabahah form of financing. Islamic banks in Malaysia, Indonesia and Brunei, for example, have practiced imposing penalties on their loan defaulters. However, no penalties to the knowledge of the writer have been

imposed on entrepreneurs if they failed to perform under the contract of profit and loss sharing. Based on the examples and research done by the writers mentioned above, Islamic banks could benefit from imposing penalties on entrepreneurs who fail to perform. The penalties could be a motivational factor to the entrepreneurs to work hard and not to shirk. It should not be seen as trying to discriminate against the entrepreneur. In the first place, Islamic financial institutions must not impose penalties on an entrepreneur who fails to perform without investigating why the project fails. In other words, the Islamic financial institutions must be certain that the entrepreneur has shirked.

This section proposes some forms of penalty that could be implemented under the Mudarabah mode of financing.

2.4.1.1 Paying for the shortfall

Ahmed (2002) suggested the reward or punishment function in the effort to derive incentive-compatible profit-sharing contracts. The reward and punishment (pecuniary and non-pecuniary) is undertaken after auditing. The features of these two should be able to reduce the problem of moral hazard. The threat of collecting the penalty should be costly and credible. For example, the total cost of penalty must be larger than the payment when there is false reporting. Ahmad (2002) suggests that the threat of penalty is more meaningful if the penalty is derived from the assets of the firm. The assets of the firm are assets collaterals given by the entrepreneur in order to obtain the financing. However, in the case of Mudarabah, an Islamic bank is not allowed to request collateral from the entrepreneur as it defeats the concept of Mudarabah. Therefore in the case of Mudarabah, the entrepreneur can be penalised by making him or her pay for the difference between the actual profit and projected profit if it is proven the entrepreneur shirks. In the contract, the entrepreneur must be made aware of his or her liability. This means that in the case of loss, the entrepreneur's liability is not only limited to losing his or her labour and effort not being paid. The entrepreneur will also be responsible for the failure of the project and must be made to pay the losses. Therefore, with this type of penalty, it would only attract genuine and responsible entrepreneurs as this penalty means enormous responsibility. However, Islamic banks need also to consider other factors that might affect the profitability of the project. A company's profit can be affected by other factors like business cycle effects, inflation, deflation and exchange rates. Therefore it is only fair

to recognise the potential impact of these other factors before deciding to penalise the entrepreneur.

However, the effect of such a stringent penalty could have side effects. A risk averse entrepreneur would discourage him or her from entering into a contract. The entrepreneur would only accept the contract if he or she is very confident of the level of production. This is because the entrepreneur is afraid of being penalised if the desired production fails to be achieved.

2.4.1.2 Penalizing through Reputation

Otsuka, Chuma et.al (1992) suggest that by *increasing the options of punishment and reward, long term and interlinked contracts provide incentives to the tiller.* Like in an agrarian community where social interactions are interlinked, the banking community is also interlinked. Islamic banks can set up a body that holds customer's information of each bank. Information on the customer need not be detailed information. Information needed would be like the payment history, the situation of the loans (is it performing or non-performing). Through a uniform customer financial information system, if an entrepreneur breaches the contract, the Islamic bank affected can spread the bad reputation of the entrepreneur to other banks. The entrepreneur will be blacklisted. This would give a bad reputation to the entrepreneur. Since entrepreneurs would want to borrow repeatedly, they would be very worried if their reputation is bad. As a result, if the entrepreneur goes to another bank, he or she would find it difficult to get financing because when the entrepreneur's financial information is run through the special body, it will show that the entrepreneur is a defaulter.

2.4.1.3 Penalising by threat of liquidation

Another way of penalizing would be by threatening to liquidate the whole business venture if the entrepreneur is found to be not putting enough effort to the project. If the outcome of the project is less than what is projected, the project will be liquidated. Borrowers who are caught at any time shirking will have their credit permanently cut off and the business venture liquidated. This will force the entrepreneur to choose the right level of effort to produce the expected outcome. However, Islamic bankers must consider

other contributing factors like inflation, foreign exchange rates and changes in demand that could lead to the failure of achieving projected profit. The projected profit may be through during the time when the borrower submitted in the application. Only after considering those factors would Islamic banks be able to penalise the borrower.

2.4.1.4 Summary

The issue on imposing penalty on PLS mode of financing may be depicted as harsh to some jurists. However, the Shariah council has approved penalty to be charged for late payment for financing under the concept of Murabahah. Some economists have proposed other motivational methods like bonus. Economists like Lewis (1980) suggests lump sum bonus to alleviate the risk of shirking in a risk sharing agreement other than lump sum penalty. Yao (1997) studies the impact of profit sharing and bonus payment on the performance of Chinese state industries in the 1980s. The study shows that over half of the value added growth of these industries could be explained by bonus incentives. Labour quality was another important factor. The profit sharing and bonus payment has a powerful impact on firm's behaviour. The profit sharing and bonus payment have a positive and significant impact on productivity. There is triangular relationship between output, retained profit and bonus payment. With profit sharing and a bonus payment scheme, profitability becomes the main objective of managers and employees. Their personal interests are now tied to the fulfillment of profits instead of production plans.

Kim (1997) explores the nature of incentive contracts between a risk neutral principal and a risk neutral agent under the constraints that the agent's liability is limited. Under this constraint, a bonus-based contract is among the most efficient contracts. The agent takes a lump sum bonus only when the output is greater than the predetermined target level. Baldwin (2000) examined the use of dichotomous incentive contracts where agents are risk averse and have limited liability. The dichotomous contracts conditioned the ex post allocation on the realization of an ex ante uncertain outcome via a linear sharing rule and whether or not the outcome was no less than some pre-specified performance target. The principal punishes the agent by allocating the ex post realized outcome according to the reduced share ratio when he is completely certain that the agent supplied less than the first –best effort. Baldwin (2000) in his paper, *exposed the importance of precise degree*

of risk aversion when technology considerations and too low a performance target preclude the use of dichotomous incentive contract for risk neutral agents, in which the (linear) profit sharing ratio is contingent on the outcome. Baldwin (2000) found that *there exists a critical proportional reduction in share ratio for agents with (constant relative) risk aversion in some range, for which less severe threats of share ration reduction will be counterproductive to the supply of effort by the agent.* In Mudarabah or Musyarakah, one cannot reduce the profit ratio that has been agreed at the inception of the contract. This would render the contract invalid, as there is a change in the agreement. Furthermore, if the entrepreneur has no track record with the bank, it could be difficult to determine if the entrepreneur will not shirk. Therefore, it would be necessary to suggest a form of punishment that could bring to the attention of the entrepreneur the severity of punishment that he or she shirks.

The various forms of penalty suggested above could only be implemented provided that Islamic banks have done their monitoring. Islam does not permit penalizing a person without investigating the real reason for poor performance. Islamic banks should closely monitor and supervise the entrepreneur to reduce moral hazard in financing using the Mudarabah mode of financing. Islamic banks should not consider monitoring and supervision as an extra cost. This is because under the Mudarabah mode of financing, the Islamic bank is an investor and as an investor, it should monitor and supervise its investment. By doing so, Islam banks are helping to promote efficient and knowledgeable entrepreneurs. In addition to this, the quality and the success of the project are ensured. In this way, Islamic banks are helping to provide help to the society to achieve its social and economic objective, the main reason for its existence (IAIB, 1990). Modern finance literature has highlighted many ways of reducing the monitoring cost. Levinthal (1988) Haubrich (1989) said that random monitoring would allow the bank to develop an accurate opinion of the entrepreneur's performance relative to other similar firms. It would enable the bank to check if the lower rate of return is the result of the entrepreneur's inefficiency, cheating or a sectoral downturn. Islamic banks could also employ experts that could help in judging the viability of the projects.

A standard accounting procedure could reduce the cost of monitoring (Dar, Harvey and Presley 1998). Islamic banks should be set to specialize in specific areas or sectors. Mills and Presley (1999) suggested random inspection of the project's accounts. Including

costly useful information, as a covenant in the financing contract is also a way of reducing the cost of monitoring is by (Diamond, 1984). Affirmative and restrictive covenants would help reduce the monitoring cost. A common restrictive covenant would be for the entrepreneur to carry out and operate its business affairs with due diligence and efficiency. Periodic management reports on project performance and detail reports on expenses should be required from the entrepreneur. This is to ensure that funds are used resourcefully. The entrepreneur must supply to the bank all documents and information as the bank shall request. A restrictive covenant would be to decrease the authorized or issued share capital of the company formed in the profit and loss sharing venture. The rights and responsibilities of the entrepreneur must be laid out clearly.

2.5 Conclusion

The asymmetric information problems in the Mudarabah contract limit its usage as a mode of financing by Islamic banks. Data in Table 3 of this chapter clearly showed that an average of 50.8% of the total financing went to cost-plus and only an average of 22.4% were on PLS financing where only 6% went to Mudarabah mode of financing (see Table 2) and 26.8% to other modes of financing. This data is collected by the IAIB from more than 176 financial institutions in the public and private sectors of both Muslim and non-Muslim countries.

Economists like Al Harran(1996), Al Omar and Abdel Haq(1996), Khan (1988) and Siddiqi (1983) however, find that the PLS mode of financing is the ideal mode to ensure allocative efficiency, promote economic stability and growth in the financial system. It is a mode that can meet an owner of capital who may not be able to turn the capital into profitable economic activity with a person who has the expertise but no capital. As a result the goal of both parties can be achieved.

However, moral hazard is not only present in Islamic finance. The conventional banking industry has problems of moral hazard and adverse selection too. However, unlike a conventional bank, in the mudarabah contract, the bank provides the entire capital requirement while the entrepreneur provides effort. The entrepreneur gives no collateral. If there is a loss, the bank will bear the losses while the entrepreneur will only lose the payment for his or her effort. Islamic banks are not comfortable in using this mode of financing in extending their financing as the capital is not guaranteed and return is uncertain. Islamic banks cannot however take an easy way out by avoiding the PLS mode of financing. The asymmetric information problem in the PLS must be overcome so that this mode can be implemented effectively.

This chapter discusses the asymmetric information problem in the mudarabah mode of financing. Using a model of sharecropping, this chapter discusses the ways to deal with it by penalizing the entrepreneur. It suggests various form of penalty that can be used to prevent entrepreneur from putting in less effort.

CHAPTER 3

Analysis and Comparison of the Measurement and Management of Non-Performing Loans in Islamic Banks in Malaysia with the Measurement and Management of Non-Performing Loans in Conventional Banks in the UK and Japan

3.1 Introduction

Unlike conventional banks, Islamic banks do not operate on an interest rate system. In a conventional bank other than funds from its own capital, the bank obtains by borrowing money from its depositors at an interest rate. The bank uses the funds to make profits by extending loans and also by investing in securities. The profit made by the bank is through the differences between the borrowing rate of interest and the lending rate of interest.

However, for Islamic banks, to make profit they must invest the funds by extending financing. Since they are not able to charge interest, Islamic banks use various types of contracts like cost plus and PLS, which are consistent with Islamic principles. (Please see Chapter 2) The funds for the financing comes from the Islamic bank's own equity, customers' deposits in current accounts, customers' deposits in savings accounts and customers' deposits in investment accounts (from hereafter will be called Investment Account Depositors-IAD).

Funds from the depositors mingle with shareholders' funds and the bank uses the funds in the same investment portfolio (see Diagram 4)[3]. However, the shareholders' fund would be used to fulfil legal requirements while most of the deposits will be applied for extending financing (see Diagram 5). Current Accounts and Savings Accounts are guaranteed whereas Investment Accounts do not guarantee capital because they are based on the profit and loss sharing agreement. The IADs are entitled to share in the bank's net

[3] This relationship is also explained in Muljawan, Dar and Hall (2004).

profit or loss and this is based on a profit sharing ratio of a certain pre agreed percentage. In Malaysia, the pre agreed rate of percentage is 50:50(50% to the IADs and 50% to the Islamic bank). In case of loss from the activities of giving out financing, the IADs can lose all of their investments. Since deposits other than IADs are guaranteed, the loss flows to the IADs first, with any remaining flowing to the shareholders of the bank. Only when the loss is major that it will finally flow to the rest of the depositors. The IADs actually act as a cushion for the bank in case of a loss. Diagram 6 illustrates this. The position of IADs in an Islamic bank is quite unique. This is because even though the IADs have invested in the bank and may suffer losses, they are not shareholders[4]. Since they are not shareholders the IADs do not have special rights like voting rights and therefore cannot influence the investment decisions of the Islamic bank.

The nature of profit and sharing loss agreement has made the position of IADs in an Islamic bank unique. However, this uniqueness has posed some degree of risk for the IADs. In cases where the bank incurs a loss, the IADs are liable to share this loss. This has made the investment of IADs very risky and is subject to the potential problem of asymmetric information. The findings of this study are that there is inadequate measurement and management of non-performing loans in Islamic banks in Malaysia. As a result there is inadequate flow of information on the status of investments of IADs; hence information on the bank's performance needs to be made known to IADs especially with regards to the information on the non-performing loans of the bank.

The objective of this paper is to analyse the policy on measurement and management of non-performing loans in Islamic banks in Malaysia. It will compare the policy in measurement and management of non-performing loans in Islamic banks in Malaysia with the policy in the UK and Japan. This study will investigate whether or not the existence of IADs has resulted in a stricter approach to the measurement and management of non-performing loans in Islamic banks in Malaysia.

[4] Shareholders of a bank, because they have interest in the bank through their investment, have voting rights, receive a regular flow of information on the bank and participate in the decision-making.

Diagram 4: Sources and Application of Fund in an Islamic Bank

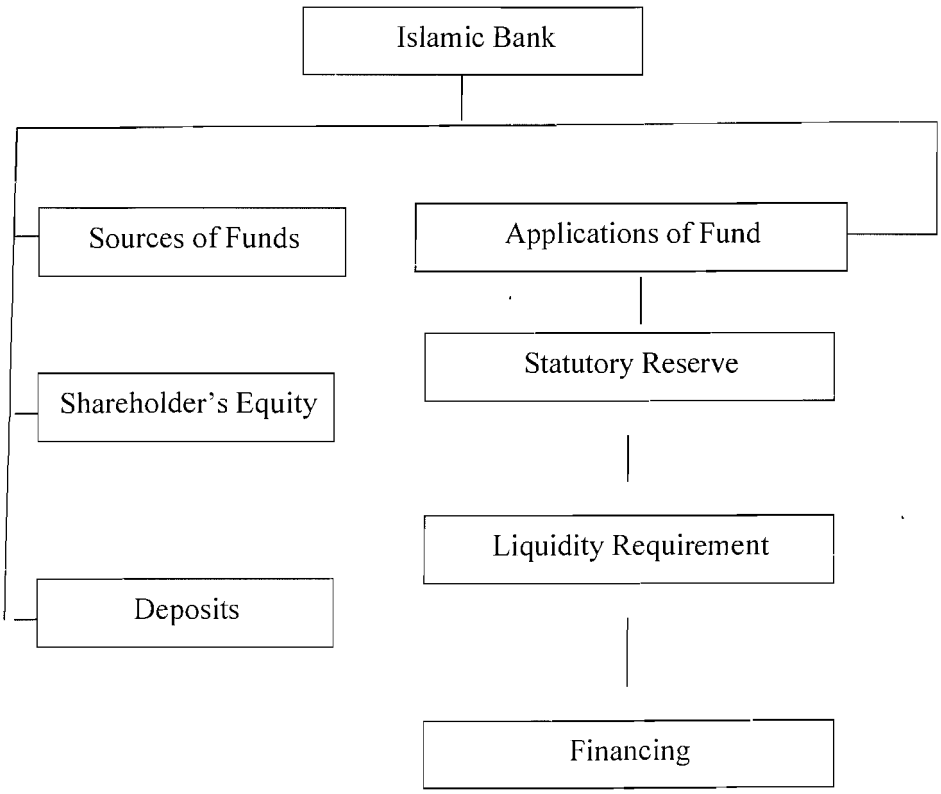


Diagram 5: An Islamic Bank's Main Contractual Relationship with Customers

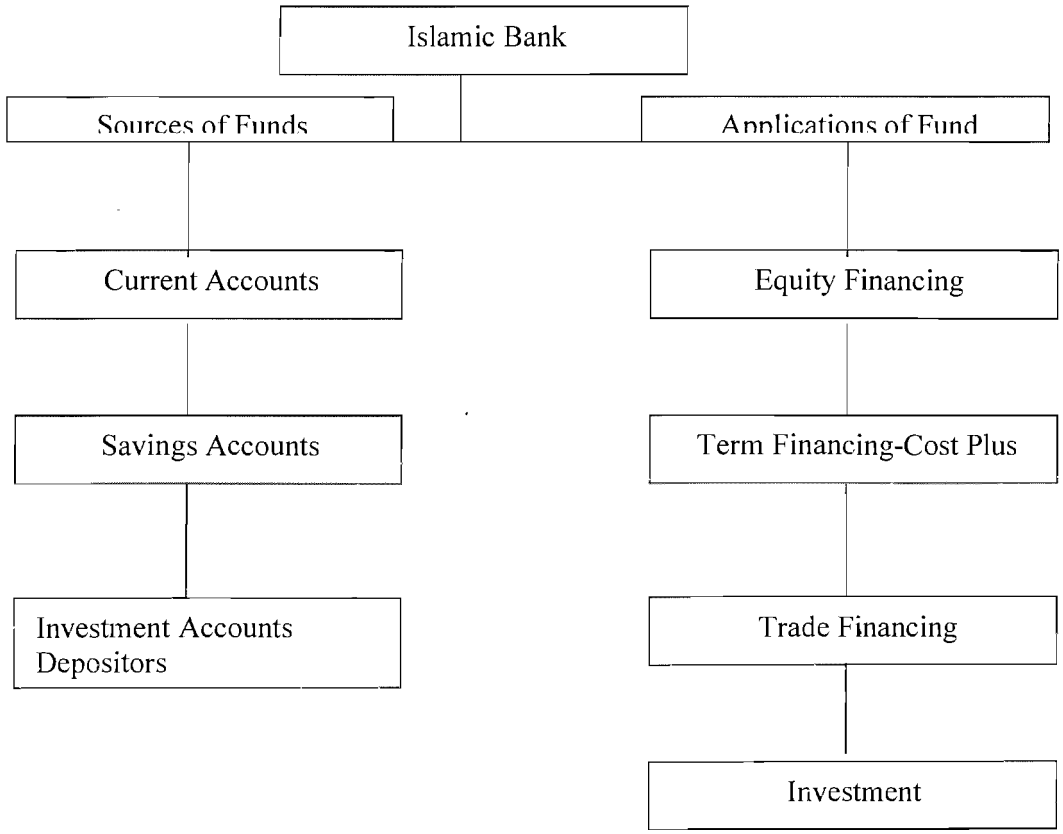


Diagram 6: The Flow of Loss from Financing

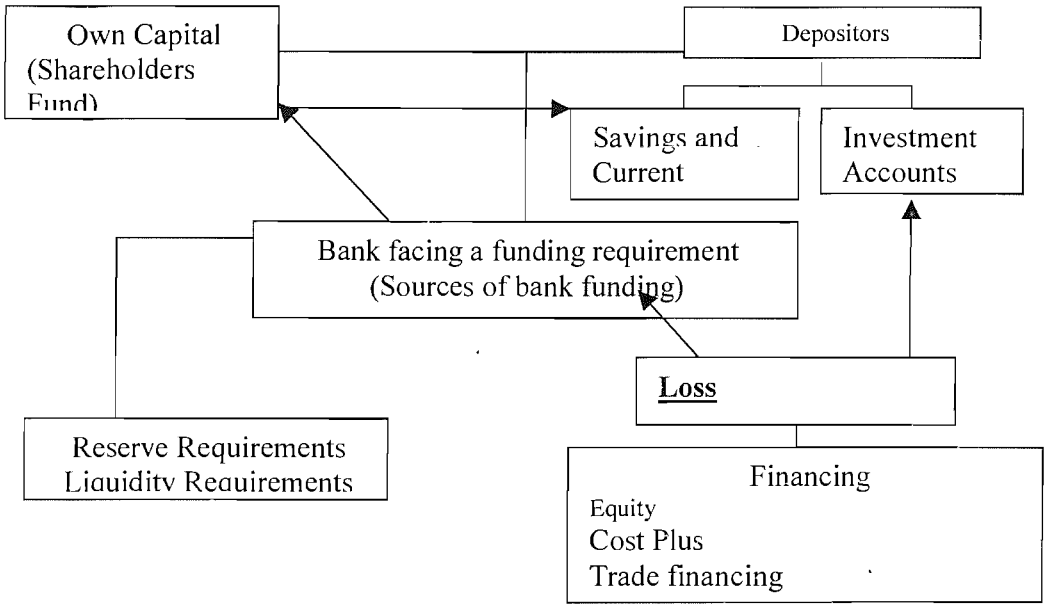


Diagram 4,5 and 6 are adapted from Bank Islam Malaysia Berhad (1999).

The position of IADs in Islamic banks has lead to several questions. Firstly, are there any differences in the policy of non-performing financing in an Islamic bank so that the IADs will be protected from any loss? What are the differences between the approach used by conventional and Islamic banks in Malaysia in measuring and managing their non-performing loans? Secondly, are there adequate disclosures to the IADs on the situation of non-performing loans that the bank has?

Fama (1970) introduces a model of efficient capital markets. An ideal market is a market where prices provide accurate signals for resource allocation. He divided the market into three categories depending on the nature of the information subset of interest. They are the strong- form, semi-strong- form and weak form. A strong-form efficient markets model is where the prices are assumed to fully reflect all available information. A semi-strong-form is where the prices are assumed to fully reflect the publicly available

information and the weak- form where the prices are reflected from available historical information. According to Abalkhail and Presley (2001), the lack of information transfer between investors and entrepreneur expose the investors to the risk of adverse selection and moral hazard. Information seems to be a very important element in a financial market. Stiglitz (1985) suggest that a capital market is informationally efficient when the prices reflect the available information.

In relation to the importance of information, the most important information for the IADs would be on the non-performing financing of the bank that they invested in. This is because as suggested by Beattie. et. al (1995) bad debts are by far the most common cause of bank failures. Bank failures are always viewed to be more damaging than any other types of business failures because it is feared that the failure might be contagious and as result the whole financial system might collapse. Kaufman (1996) suggested that the reason for this is because banks are closely entwined financially with each other through lending to and borrowing from each other, payments clearing system that the failure of one bank is likely to spill to other banks more quickly. The best example currently with regards to the adverse effect of uncontrolled measurement and management of non-performing loans is Japan. Insufficient provisioning and public disclosure has been identified as factors that hid the actual status of the non-performing loans in Japan (Nakaso, BIS Papers, 2001). The issue of non-performing loans in Islamic banks may be thought as not alarming but yet, in some countries like, Pakistan, in September 2000, the country has set up a body called 'Corporate and Industrial Restructuring Corporation (CIRC) to address the issue of non-performing loans and risk aversion (State Bank of Pakistan Annual Report, 2002). A second committee on Revival of Sick Units (RSU) was established to restructure and revived problematic loans. Pakistan has also promulgated the Financial Institutions (Recovery of Finance) Ordinance to ensure expedite recovery of stuck-up loans by foreclosure. In Bangladesh, the amount of bad debts of the Islamic banks grew from 18% in 1996 to 20% in 1997 (Sarker, 1999).

In order for the IADs to be protected, there should be adequate measurement and management of non- performing loans and adequate disclosure on the status of the non-performing loans of the banks to the IADs. This is important because the nature of the relationship between the IADs and the bank entail the sharing of losses. Hence if these two are inadequate, it may lead to potential bank failure and the IADs may risk loosing

their investments. Therefore, a transparent approach to the management of non-performing loans in Islamic banks is very crucial as it may reduce the probability of IADs losing their investments.

The remainder of the chapter is organised as follows. Section 3. 2 provide an overview of Malaysia's Islamic banking industry. Section 3.3 analyses the policy on the measurement and management of non-performing loans of Islamic banks in Malaysia with Japan and the United Kingdom. For Japan, the analysis of its policy is made on its policy before and after the economic crisis. Section 3.4 compares the policy on the measurement and management of non-performing loans. In some cases there are also comparisons made with the ones suggested by Basel Committee on Banking Supervision and finally, Section 3.5 provides the conclusion of the chapter.

Malaysia is chosen because the development of Islamic banking in this country is very interesting. Malaysia operates a dual system where the conventional and Islamic systems operate side by side. Opportunity is given to all banks to practise Islamic banking. The market is well developed with many Islamic financial products. Japan is chosen because there are lessons to learn from its forbearance policy that has placed the country in financial crisis since 1990 with huge amount of non-performing loans. The non-performing loans in Japan have been problematic because of insufficient regulations in respect of the management and measurement of non-performing loans. On the other hand, the United Kingdom is chosen because it is one of the few countries selected in surveys for public disclosures by banks (Basel Committee, 2003, 2001, 2000 and 1999). It is shown in these papers that the disclosure is more transparent and consequently lessons may be learned with respect to examples of good disclosure policy.

3.2 Overview of Islamic Banking in Malaysia

Malaysia operates a dual system of banking whereby the conventional and Islamic systems exist side by side[5]. Both Islamic banks and conventional banks that provide Islamic Banking services in Malaysia are governed by the Islamic Banking Act 1983. It is under this act that the Bank Negara Malaysia[6] (BNM) was given the power to supervise and control Islamic banks.

The first Islamic bank licensed under the IBA was established in July 1983. Bank Islam Malaysia Berhad (BIMB) commenced its operations on the 1st of July 1983 with a paid up capital of RM80 Million with its first branch in Kuala Lumpur. BIMB operates its banking business similar to other commercial banks but along the principles of Syariah. However, a single Islamic bank does not constitute a banking system, as the number of branches and resources are limited. In order to increase the number of players, the BNM introduced the Interest Free Banking System in March 1993. This scheme allows the conventional institutions to offer Islamic banking products and services using their existing infrastructures and staff. In 1998, after the overall review of the Islamic banking system, the BNM replaced the Interest Free Banking Scheme with the Islamic Banking Scheme (IBS), as the former term did not reflect the Islamic banking operations of the banks.

The second Islamic Bank, Bank Muamalat commenced operation on October 1999. As at the end of 2001, the Islamic financial sector was represented by 2 Islamic banks, 14 commercial banks, 10 finance companies, 5 merchant banks and 7 discount houses, an Islamic money market and 2 Takaful[7] companies. There are 122 branches of Islamic banks and 2,065 counters of IBS banks offering Islamic banking products and services. In 2001, the total resources of Islamic banking sector were at RM58.9 billion and 79.9 % of the total resources came from deposits. The types of deposits that represented the resources in accordance to the highest percentage are investment deposits followed by demand deposits, saving deposits and other deposits.

[5] This system is also called a hybrid system.
[6] Bank Negara Malaysia is the central bank of Malaysia.
[7] Takaful is an Arabic word for insurance.

In order to ensure that all dealings and activities of Islamic banking conform to the Syariah requirements, it is required under the Islamic Banking Act 1983 that each Islamic bank establishes a Syariah advisory body. The IBS banks are required to appoint at least one Syariah consultant to assist them in their daily banking operations and the Central Bank has allowed institutions from the same banking group to appoint and maintain only one Syariah consultant(s) to minimize duplications. The National Syariah Advisory Council was set up by the Central Bank to resolve differences in opinions of Islamic scholars. The National Syariah Advisory Council (NSAC) was established in May 1997 and is the highest Syariah authority in Islamic b anking and takaful. The NSAC gives advice to the Central Bank on Islamic banking and finance and is responsible for analysis and evaluation of new Islamic products. Another body that was established to promote the growth of Islamic banking is the Association of Islamic Banking Institutions Malaysia (AIBIM). The association works hand in hand with the Central Bank and other regulatory bodies. The members of the Association comprise of Islamic banks, banks participating under the IBS, non- banking financial intermediaries and also related organizations.

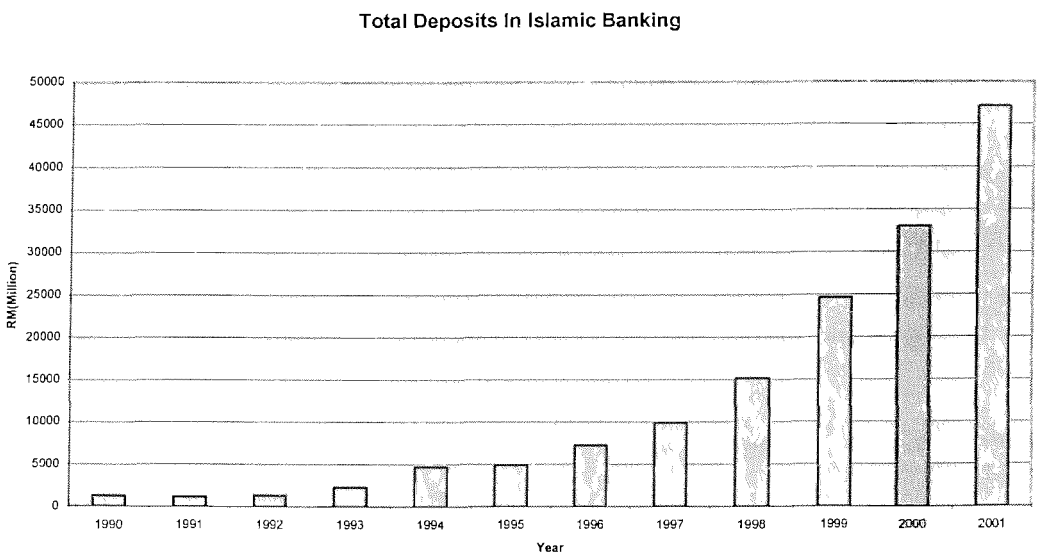
3.2.1 Total Deposits

As can be seen in Diagram 7, the total amount of Islamic banking deposits showed an increasing trend every year. The total deposits grew from RM1.22 billion as at the end of 1990 to RM47.1 billion as at the end of December 2001. This growth was mainly due to the publicity given to Islamic banking, increased awareness in the public on the products available under Islamic banking, the increased number of branches offering Islamic banking and the competitive returns on deposits as compared to returns from conventional deposits. Investment deposits represent a major portion of Islamic banking deposits at a percentage of 71.1% reaching RM33.5 billion as at the end of 2001. As at the end of December 2001 the types of deposits that represented the total of deposits were in Table 6 below:

Table 6: Percentage of The Types of Deposits In Islamic Banks In Malaysia

Types of Deposits As At The End of 2001	Percentage
Investment Deposits	71.1
Savings Deposits	8.7
Demand Deposits	13.69

Diagram 7: Total Deposits in Islamic Banking in Malaysia from 1990- 2001

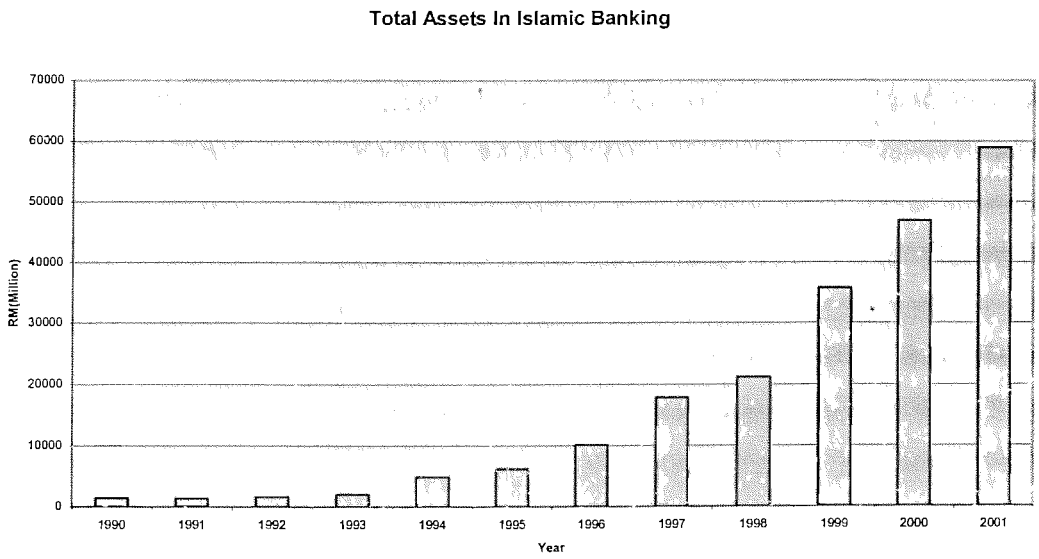


Source: Bank Negara Annual Report 2001

3.2.2 Total Assets

The total assets of Islamic banking had expanded from RM 1.42 billion to RM 58.93 billion in as at the end of year 2001. Diagram 8 shows the graphical illustration of the total assets that expanded rapidly onwards. The conventional banks offering the Islamic banking scheme were the largest players in the Islamic banking system with assets of 64% of the total assets, followed by Islamic banks at 29.4%.

Diagram 8: Total Assets of Islamic Banking in Malaysia from 1990-2001

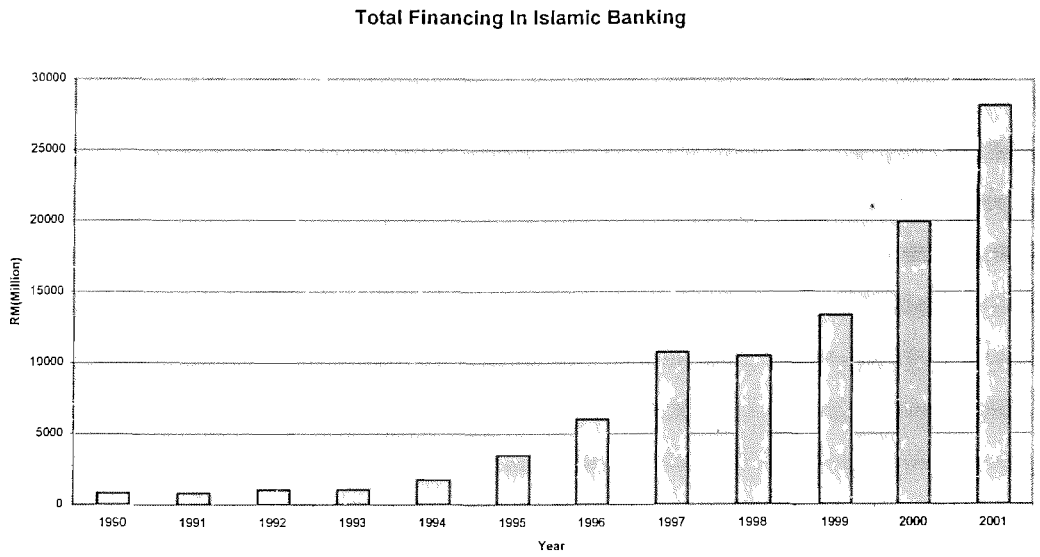


Source: Bank Negara Annual Report 2001

3.2.3 Total Financing[8]

In 1990 the total financing was at RM817.4 million and by the end of 2001 the amount had increased to RM28.20 billion. However, from mid 1997 to 1998, the financial crisis had affected the credit extension because of tight liquidity and risk aversion of banking institutions. Financing given to property sector represent the highest percentage of financing at 38% of the total financing. Diagram 9 shows the growth of total financing in the Islamic banking system.

Diagram 9:The Total Financing of Islamic Banking in Malaysia from 1990-2001



Source: Bank Negara Annual Report, 2001

The financing extended by the Islamic banking is mostly based on Bai Bithaman Ajil (Cost plus Financing) that constituted 48.3% of total financing. Leasing or Al Ijarah follows this.

[8] Total financing is total lending.

According to the BNM Annual Report, 2001, the share of Islamic banking assets and deposits in Malaysia has increased to 8.2 % and 9.5 %. These surpassed the target of 8 % level set for the year 2001. The total financing registered an increased of 6.5 % compared to 5.3 % in the year 2000. The Financial Sector Masterplan has set a 20% target to be achieved by 2010. The BNM requires conventional banks that participate in the IBS to observe the minimum core capital ratio requirement of 4 % and risk-weighted capital ratio of 8 % for their Islamic banking portfolios. They must also maintain a separate disclosure on the capital adequacy of their Islamic banking portfolios in the financial statement.

A standard framework for the computation of the rate of return for Islamic banking institutions was formulated by the BNM. This is to ensure that a level playing field is provided for all Islamic banking players. This framework is also to provide information and enhance transparency between the banks and their depositors. This will ensure the depositors receive a fair share of the return on their investments.

At the international level, Bahrain, Indonesia, Islamic Development Bank, Iran, Malaysia and Sudan signed the Article of Agreement on the establishment of the International Islamic Financial Market (IIFM). The purpose of IIFM is to have an international financial market that adheres to the Islamic principles. Malaysia and Bahrain has entered into a Memorandum of Understanding to promote the development of Islamic banking and finance internationally. It is foreseen that Malaysia will continue to play its role in the development of Islamic banking both at home and at the international level.

3.3 Measurements and Management of Non-Performing Loans in Malaysia, Japan and United Kingdom

The objectives of regulation arise from three broad grounds. They are on the grounds of consumer protection, capital adequacy requirement and conduct of business[9]. Without regulations bankers may have the opportunity to hide information that would affect the performance of the bank. For example, a bank might play with its amount of provision for non-performing loans by provisioning more than necessary for non-performing loans in good times so that in bad times it does not have to increase its amount of provision. The amount of provision is deducted from a bank's total profit, therefore in bad times with a higher amount of non-performing loans; the profit of the bank will not be affected. A bank may also seek to hide its heavy loan losses by under provisioning. Therefore it is important for regulators to provide a level of regulations that can prevent the repercussion of inadequate regulations on the financial system.

The regulations in each country differ and as a result the measurement and management of non-performing loans differs from one jurisdiction to another. The treatment of non-performing loans for example, loss provision and disclosure are different as well. In general, however different the regulations are in every country, the objective of regulations in the end is to ensure bank soundness. In this section, an analysis is made of the measurement and management of loss provision in Malaysia, Japan and the United Kingdom. Cross comparison is also made that would highlight the major differences in the policy. Also highlighted are the relevant regulations suggested by Basel and AAOIFI.

[9] See Richard Dale and Simon Wolfe (1998), "The Structure of financial regulation", Journal of Financial Regulation and Compliance

3.3.1 Definition of Non-performing loans

The Basle Committee on Banking Supervision does not have an exact definition of non-performing loans, but in its Consultative Documents, January 2001 under Rules for Corporate Exposures for minimum requirements for corporate exposures section 272 mentioned;

A default is considered to have occurred with regard to a particular obligor when one or more of the following events have taken place:

- *It is determined that the obligor is unlikely to pay its debt obligations (principal, interest, or fees) in full;*
- *A credit loss event associated with any obligation of the obligor, such as a charge off, specific provision, or distressed restructuring involving forgiveness or postponement of principal, interest or fees;*
- *The obligor is past due more than 90 days on any credit obligation; or*
- *The obligor has filed for bankruptcy or similar protection from creditors*

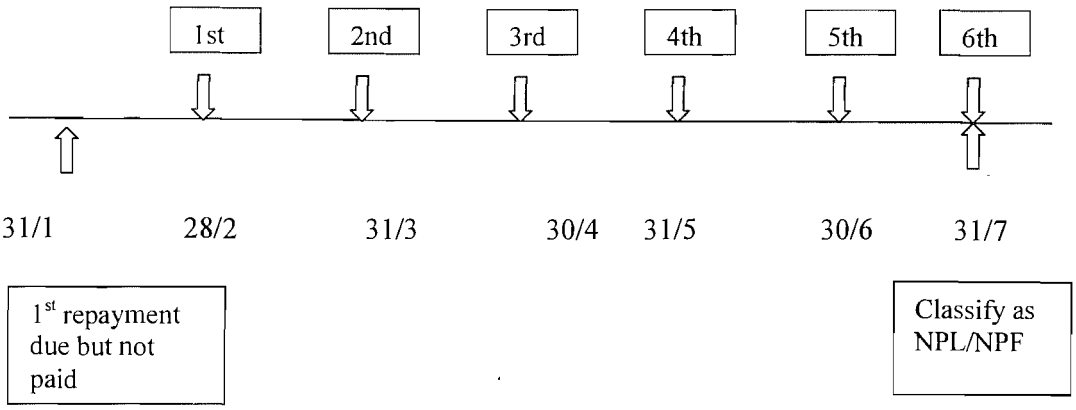
This definition however is not intended to affect the bank's legal rights and remedies should a borrower fail to meet his or her obligations under a credit agreement. It is also not intended to establish or alter accepted accounting standards.

The Accounting, Auditing And Governance Standards For Islamic Financial Institutions (AAOIFI) does not define doubtful receivables. AAOIFI was established in 1991, lead by four major Islamic banking groups and the Islamic Development Bank (IDB). Its objective was to promulgate international accounting and auditing standards to be used by Islamic financial institutions internationally (Ahmed, Euromoney Books and AAOIFI, 2002).

The Central Bank of Malaysia (BNM) defines non –performing loans as "a *loan is described as non-performing loan when the principal or interest is due and unpaid for six months or more from the first day of default*". The same definition is also applicable to Islamic financing. This is illustrated in Diagram 10: -

Diagram 10: Definition of non-performing loans

Months from first day of default



In Malaysia, even though Islamic banks have special characteristics in which it operates on the basis of profit and loss sharing and extend different modes of financing than conventional banks, they still share the same guidelines of measurement and management of its non-performing loans. Both conventional and Islamic banks use the same guidelines known as the Garis Panduan[10] 3 (GP3) for the definition and treatment of non-performing loans or non-performing finance. However, not all of the contents of the GP3 can be applied. For example, there are financing products that are not applicable to the Islamic banks like for example, overdraft facilities.

Other than the GP3, Islamic banks in Malaysia are allowed to use the accounting methods suggested by the Accounting & Auditing Organisation for Islamic Financial Institutions (AAOIFI) for the provision of losses. However, this chapter will only focus on GP3 as the standard guidelines in the measuring and management of non-performing loans for Islamic banks in Malaysia. The guidelines in GP3 given by BNM on the classification of non-performing loans are of minimum standards. Financial institutions are responsible for establishing reliable systems of policies, standard procedures and independent units to review the non-performing loans and the provisions required.

[10] Garis Panduan is a Bahasa Melayu word for guidelines.

Other than the general classification of non-performing loans, there are various categories that have their own non-performing classification.

1. Bankers' acceptances (BA), trust receipts, bills of exchange and other instruments of similar nature will be classified as non-performing loans when the instrument is due and unpaid for 1 month after the maturity date.
2. Credit Cards will be classified as non-performing when the holder fails to settle his minimum monthly repayments for 3 months or more from the first day of default.
3. Term financing, revolving credit facilities, leasing, hire-purchase and other financing is classified as non-performing when it is unpaid for 6 months or more from the first day of default.

In respect of the treatment of financing with quarterly, semi annual, annual or bullet repayments where repayments are scheduled on intervals of 3 months or longer, the loan is classified as non-performing when a repayment is due and unpaid for 3 months or more from the first day of default.

If a loan is fully secured by cash or cash substitutes as to principal and interest and cost of collection, the loan will be classified as non-performing if it is due and unpaid for 12 months or more from the first day of default. Cash or cash substitutes are fixed deposits or sinking funds with set-off rights, securities issued by the Federal Government or irrevocable guarantees or step-in rights by the Federal Government. Where financing is partially secured by the above then split application applies whereby the unsecured portion will be subject to the normal classification of 6 months and above.

In ascertaining the period in arrears, each repayment must be made in full. If the monthly repayment is made partially, the repayment is still deemed to be in arrears.

According to the GP3, a non-performing loan can be reclassified as performing once total instalment in arrears falls below 6 months. For example, if a loan is 8 months in arrears and the borrower pays 3 monthly instalments, the non-performing loan can be reclassified as performing as the total period in arrears is below 6 months.

Similar to Malaysia, Japan's definition of non-performing loans is past due loans in arrears 180 days or more and loans to borrowers in legal bankruptcy (Annual Report on Japan's Economy and Public Finance, 2002). Since the crisis, the definition of non-performing loans was expanded to include to loans where the interest was reduced and later to include loans in arrears by three months or more and restructured loans. In the United Kingdom (UK), the definition of non-performing loans based on Securities and Exchange Commission (SEC) are loans accounted for on a non-accrual basis, accrual loans which are past due 90 days or more and loans not included in the previous two that are troubled debt restructurings or reduced rate loans (Beattie.et al, 1995).

3.3.2 Loss Provision for Bad and Doubtful Debts

Provision for bad and doubtful debts is profit set aside to cover possible loan losses. In a paper by the Basle Committee on Banking Supervision (1999) on sound practices for loan accounting and disclosure, the aggregate amount of specific and general allowances should be adequate to absorb estimated credit losses associated with the loan portfolio[11]. A bank should not understate or overstate loan losses in order to achieve a desired level of earnings in the current or future reporting periods.

AAOIFI (2000) defines provision as a contra-asset and is constituted by charges made as expenses against income. The provisions are of two types: specific and general. A specific provision is an amount set aside to reflect an estimated impairment of value of a specific type of asset. The specific provision shall be deducted from its related receivables assets so that their financial position is at their cash equivalent value. The specific provision related to each of financing and investment assets are also deducted from these assets so that their value is reported at the lower of cost and cash equivalent value. 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 that have already occurred. The general provision shall be deducted from the total value of receivables, financing and investment assets. The Islamic bank must disclose in the notes to the financial statements the total amount of the specific provision and general provision related to receivables, financing and investment assets.

[11] The paper highlights sound practices for loan accounting and disclosure.

In Malaysia, the BNM requires the banking institutions to make two types of provision for bad and doubtful debts. The two types of provision are general provision and a specific provision. Specific provision as defined by the BNM is an amount set aside out of profit to cover losses expected for a specific loan that has been classified as bad or doubtful although the exact amount of loss cannot be confirmed. A general provision is an amount set aside out of profits to meet possible loan losses which are not identifiable to any loan account or known to exist as at the financial reporting date. This is because some losses may arise from loans that are performing as at the financial reporting date. The general provision required is at least at 1.5% of total outstanding loans net of specific provisions for substandard, bad and doubtful debts.

According to the GP3, financial institutions in Malaysia are required to observe the following minimum parameters in respect of specific provisions as outline in Table 7:

Table 7: Guidelines in Respect of Specific Provisions

Period of Default	**Classification**	**Specific Provision on the shortfall in security value over the amount outstanding.**
6 months but less than 9 months	Substandard	20% provisioning unless overall loan loss provisions are adequate
9 months but less than 12 months	Doubtful	50%
12 months and above	Bad	100%

Source: GP3, BNM.

The substandard accounts are credit facilities that involve more than normal risk of loss due to certain factors. These factors could include delays in the servicing of financing, unfavourable financial conditions, insufficient security or other factors that give rise to some doubts in the capacity of the borrower to make repayment. Doubtful accounts are credit facilities or a portion thereof where collection in full is improbable and there is a high risk of ultimate default. Bad accounts are credit facilities that are deemed not collectible on the basis of relevant circumstances.

In determining the specific provision for bad and doubtful debts required for a particular financing consideration must be given to the collateral taken as security. The BNM provides guidelines on the valuation of security. There are guidelines for collaterals in the form of property, deed of assignment, debenture, and shares, quoted or unquoted, plant, machinery and equipment and guarantees. Other collateral will be considered on case-to-case basis.

There is no specific rule on provision for banks in the UK but in the Interim Prudential Sourcebook For Banks, 2002 (IPRU) item 3.3.17 R, issued by the Financial Services Authority (FSA) in the United Kingdom stated that *a UK bank and an overseas bank must maintain adequate provisions for the depreciation or diminution in the value of its assets (including provisions for bad and doubtful debts), for liabilities which will or may fall to be met by it and for losses which it will or may incur*. In item 3.4.5 R of the IPRU there is also a provisioning policy statement whereby *(1) A UK bank and an overseas bank must also set out its policy on making provisions in a written statement and (2) The policy statement must be such that compliance with it would enable the bank to comply with IPRU (Bank) 3.3.17R except that an overseas bank need only cover such provisions as made in the accounts of its operations in the UK*. The FSA provide guidance on what a bank's policy statement should contain. A bank must provide a statement on issues relating to provisioning for credit exposures and other liabilities, issues relating to provisioning for credit exposures only and issues relating to provisioning for other liabilities. Examples of issues relating to provisioning for credit exposures and other liabilities given in the IPRU are, *who in the bank has responsibility for drawing up and monitoring the policy? Who is responsible for reviewing and updating the policies and how often is this done and what are the review processes?* Issues relating to provisioning for credit exposures are like, *for the different types of business that the bank undertakes, what constitutes a non-performing exposure? How are they identified?* The reason for having this stated is banks having different views as to what constitutes a non performing exposure must explain clearly and concisely the definition that the bank uses. In issues relating to provisioning for other liabilities only, a bank must state which accounting standards the bank complies with in terms of providing for other liabilities. Table 8 illustrates the provisioning practices in the UK in terms of criteria, basis and level of provisioning.

Table 8: Provisioning In the UK

i. What criteria must be met before the following provisions are made	
a. Specific Provision	There are no specific rules and the decision is left to management's discretion, based on the financial condition of the borrower, guarantor, security etc. Guidance is given in the Statement of Recommended Accounting Practice (SORP) on Advances published by the British Bankers' Association. Maintenance of adequate debt provision is a requirement for authorisation under the Banking Act. Specific provisions should be made against loans where the creditworthiness of the borrower has undergone a significant deterioration and recovery of the advance is in serious doubt.
b. General provision	The SORP on advances requires a general provision to be made to cover impaired advances not yet identified

ii. What basis is used when assessing loans for the following provisions:	
a. Specific provision	Commercial loans are normally assessed on an individual basis. Retail loans are generally assessed on a pooled basis
b. General provision	Assessment of level of general provision is made with reference to the residual risks in the total loan portfolio, normally after accounting for specific provision
iii. Level of provisioning	
a. Specific provision (except for provisions for country risk).	Loans assessed on an individual basis, where practical. Statistical techniques used on large portfolios of small value loans. No official guidance on calculation of level of provision. The SORP requires that the specific provision should be the bank's estimate of the amount needed to reduce the carrying value to the expected ultimate realisable amount. Banks should consider at least five factors:

	• the amount of the loan and the bank's other commitments to that borrower; • the borrower's(business) prospects and ability to repay; • the security for the loan (if any) and how it could be realised; • the costs that would be incurred in obtaining repayment if security or other rights had to be enforced; and • the income from the loan
b. General provision	Level of general provision is left to the bank's discretion. Normally management has regard to: • identification of usually large, loans for which it is not clear that a specific provision is needed but where sufficient doubt exists for some general provision to be appropriate; • the application of varying percentages to the different categories of loan portfolio and other exposures, weighted towards those industrial and geographical segments that are considered to be particularly at risk; • the application of an absolute percentage to the total risk portfolio, based on past experience of the incidence of bad and doubtful debts, and the current economic climate; • both on and off balance sheet exposures, sometimes using the weighted risk asset data required by the Bank of England
iv. What other provisions are made and how are they determined?	Sovereign and country risk. Setting levels of provision using Bank of England "matrix" to objectively measure the extent of each country's difficulties do the provision. Consideration factors for the provision are country's economic management, activity, political stability, controls over companies and the characteristics of their own portfolio.

v. Are discounted values used in determining the probable loss and the provision required?	No official guidelines but is often used by banks to help determine provisions.
2. What are the rules to prevent capitalisation of interest on non-performing loans? Are there any procedures (other than annual external audit) to prevent circumvention of these rules?	The crediting of interest to the suspense account should cease when there is no longer any realistic prospect of recovering it.
3. What are the policies on the valuation of collateral	No official guidance. It is based on banking industry practice. The value of any security is usually taken at its current realisable value, less any prior charges and costs of realisation. Enforceable of the security will also be taken into account. For listed securities, valuation is at lowest "bid price" allowing for a discount if the shareholding is substantial. For unlisted securities, value is determined based on the financial information. As for guarantees, the reliance on guarantees is only to the extent that the guarantor has the resources and the intention to honour it and the bank is willing to exercise it.
4. Taxation	• General provisions are not tax-deductible • Specific provisions are tax deductible, provided management has reasonable evidence that the portion of the loan provided is irrecoverable. • Tax deductions on country risk provisions are based on the Inland Revenue matrix. This matrix allows lower provisions for tax deductions than those recommended by the Bank of England matrix
What factors determine whether a deferred tax asset is recognised for differences between the tax and accounting treatment of loan losses?	Deferred tax assets are not generally recognised unless they are expected to be recoverable and will not be replaced by equivalent debit balances.

Source; Beattie, et al (1995)

In Japan, before the crisis, the specific provisions may be recorded but subject to the approval from the Ministry of Finance (MoF). The financial institutions are expected to set aside provision for expected losses over a period of three years. Even though the new provisioning policy is in the right direction, it created a financial disruption as it is done in a short period of time. It squeezes banks' profit and banks' capacity to give out loans.

Table 9 shows the policy on loss provisioning in Japan before such changes were made in response to the crisis.

Table 9: Loss Provisioning in Japan before Financial Crisis

i. What criteria must be met before the following provisions is made?	
a. Specific provision	Under the Ministry of Finance (MoF) regulations, specific provisions may be recorded at the management discretion but subjected to the approval of MoF.
b. General provision	Mandatory

ii. What basis is used when assessing loans for the following provisions?	
a. Specific provision	Commercial loans and retail loans are generally assessed on individual basis.
b. General provision	Based on total receivable balance
iii. Level of provisioning	
a. Specific provision (except for provisions for country risk).	The following "tax deductible" provisioning may be approved by MoF: • Up to 100% of uncovered portion of loan if the borrower is insolvent, for more than one year and, at the same time, more than 40% of face value of loan is reckoned unrecoverable. • 50% of uncovered portion of loan once filing has been made for the borrower's bankruptcy or restructuring At the management's discretion, "non tax-deductible" provisioning may be made for up to 100% of face value of loan on MoF's consent.
b. General provision	A general tax deductible provision may be set up using 0.3% of total receivable balance, the statutory basis, or by using the "actual percentage" based upon prior debt experience in the past three years and the level of the loan portfolio.
iv. What other provisions are made and how are they determined?	• For sovereign debt, banks are currently maintaining 30% level (previous ceiling level for sovereign debt provisions). However, they can determine the justified

	level of provisioning subject to the approval of MoF. Some banks however, have moved from 30% to 35%. • Other loan related provisions. It is recorded for book purposes only and after discussion with MoF and the national tax authorities. Formal approval is usually not given and the purpose of this is to enable banks to provide additional reserves due to uncertainty in provisioning.
v. Are discounted values used in determining the probable loss and the provision required?	Not used in determining provision
2. What are the rules to prevent capitalisation of interest on non-performing loans? Are there any procedures (other than annual external audit) to prevent circumvention of these rules?	Management decision on methodology to prevent income recognition non-performing loans, but may be driven by specific rules for tax purposes. MoF must approve the capitalisation of interest in the case of customer liquidation. The retail trust banks account for all interest on a cash basis
3. What are the policies on the valuation of collateral	No specific rules or guidance. It is subject to management's discretion and is usually discussed with MoF representatives when determining loan provision.
4. Taxation	
i. Is there conformity between book and tax accounting?	Book and tax accounting in conformity, except for; • Portion of sovereign debt that is tax deductible is limited to 1% of the increase in loan balance for total outstanding to those countries where a specific reserve is allowable
What factors determine whether a deferred tax asset is recognised for differences between the tax and accounting treatment of loan losses?	Deferred tax are not recorded under Japanese Generally Accepted Accounting Practise (GAAP) in unconsolidated accounts; it is permitted in consolidated accounts

Source: Beattie, et al. (1995)

In response to the crisis, a new policy on loss provision was introduced. The specific provisions are based on self-assessment of the loan portfolio using the Tracing Method (Bank of Japan, 1998). This approach allows flexible provisioning policy based on the

actual quality of the borrower. It observes changes in the condition of individual assets in a time series analysis. Financial institutions classify borrowers into 5 categories-normal borrowers, borrowers requiring caution, borrowers threatened with bankruptcy, potentially bankrupt borrowers and substantially bankrupt borrowers (Refer to Table 15, 16 and 17) . This method is very different from the method in Table 9 as the financial institutions are able to assess and calculate their own provisions that would influence appropriate loan write off.

3.3.3 Write-off of non-performing loans

Regulations by BNM warrant that accounts or portions thereof that are classified as bad or deemed not collectible and worthless should be written-off. To ensure that the health of the institution is not distorted by writing off loan accounts those are deemed still collectible as a guise to suppress the true level of non-performing loans it is the management responsibility to ensure that prudent and proper monitoring of loans is enforced. Before a loan can be written off, the financial institution should seek the approval of the Board of Directors. The Board staff may delegate these powers to a management committee comprising senior management subject to specified limits.

Partial write-offs are permitted under the following circumstances: -

i. The value of security is less than the balance outstanding (including principal and other charges) and topping up of the security deficiency is not forthcoming;
ii. The shortfall in security value over the outstanding balance (including principal and other charges) is not collectible and worthless;
iii. The financial institution is now in the final stage of realising the security/collateral; or
iv. The amount is written down to the value of security i.e. the shortfall in security over the outstanding balance is written off.

In the UK, write-off is up to the discretion of each individual bank. In Japan the write off of a non-performing loan that is irrecoverable would depend on the category of the borrower with respect to asset assessment. Previously, decisions to write-off were made mainly between the Ministry of Finance and the financial institutions. Under the new

regulation, the responsibility of the auditor is increased. In Japan, after the financial crisis, the Japanese Certified Public Accountants (CPA) is given more responsibility. Audits made by the CPAs are on a professional form. An example given by Abiko (1997), *whereby immediately after an audit a financial institution fails and the cause is traced to tardy disposal of a bad loan, then not only the institution but also the auditor who overlooked it most likely will be blamed.* The main guidelines issued by the Japanese Institute of Certified Public Accountants with respect to asset assessment for proper write-off are:

i. *For claims against failing or virtually failing companies, bookings for write-off or reserve for loan losses are after deducting the amount likely to be collected from collateral foreclosure or from the guarantor.*

ii. *Claims against firms that may fail, booking the necessary amount is after deducting the amount to be collected through collateral foreclosure or from the guarantor.*

iii. *Claims against firms requiring caution, booking based on possible loan losses on the bad loan write-off ratio (The amount less the sum that can be collected by foreclosure on collateral.*

iv. *A claim against normal borrowers, booking is based on the bad loan write-off ratio*[12]

Source: Abiko (1997)

Two types of accounting methods are used in writing off; they are direct write-off where the amount of non-performing loan is removed from the balance sheet assets column and indirect write-off to prepare for potential loss where a book entry is made in a specific reserve for possible loans losses to off set bad claim. Currently, Japanese banks are asked to write-off loans from the bank's balance sheets within 2 years for existing bad loans and within 3 years for newly created bad loans (Zenginkyo, 2002).

[12] Amount written off =((Assets claims to failing companies and those on which interest payment is delayed)x (1-coverage by collateral) – amount of specific reserve for possible loan losses) + (assets claims on which interest payment is partially or totally waived x the ratio of either failure or delay x (1-coverge by collateral) Abiko (1997)

3.3.4 The Level of Disclosure of Non-Performing Loans

The Basle Committee on Banking Supervision (1998) recommends that banks provide timely information that can facilitates the market participants' assessment of them. It identifies six categories of information that must be addressed in clear terms and relevant details to achieve transparency in banks. These categories are:

- *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

Under credit quality[13], Basle recommends that;

- *A bank disclose impaired loans and past due loans by major categories of borrowers and the amounts of specific and general allowances established against each category*
- *A bank should disclose geographic information about impaired and past due loans including specific and general allowances*
- *A bank should disclose a reconciliation of changes in the allowances for loan impairment*
- *A bank should disclose balances of loans on which the accrual of interest-in accordance with the terms of the original loan agreement-has eased because of deterioration in credit quality*
- *A bank should disclose summary information about troubled loans that have been restructured during the year*

The BNM provides guidelines called "Guidelines on the Specimen Financial Statements for the Banking Industry" in December 1988. This guideline is referred to as GP8 or Garis Panduan 8. The GP8 prescribes a standard format for financial reports of banks and financial companies. In October 1996, the GP8 was revised to incorporate the interest-

[13] Sound Practices For Loan Accounting and Disclosure, 1999

free banking activities. For this section, Bank Islam Malaysia Berhad's (BIMB) financial report will be taken as an example on disclosure of non-performing loans in financial report of Islamic banks in Malaysia. In the director's report section there are two separate sections on bad and doubtful financing and provisions for bad and doubtful financing and diminution in value of investment. In the first section the public is informed that the directors have taken reasonable steps to ascertain that action has been taken in relation to writing-off and making provision for doubtful financing. They are satisfied that all known bad debt had been written-off and adequate provision had been made. It is also mentioned in the section, that at the date of the report, the directors are not aware of any circumstances that would render the amount written off for bad financing or the amount provided for doubtful financing in the financial statements be inadequate.

In the second section, the treatment on providing provision is set out. As BIMB's provision is made in accordance to the AAOIFI financial accounting standards, the provision during the year is charged against the Profit Payable to Depositors and the balance is shared between the Mudarabah Depositors (IAD) and Shareholders' Fund. The basis of apportionment between these two is the proportion of total deposits in Mudarabah Funds in relation to the total deposits from customers. In respect of the disclosure of non-performing financing not much information can be derived from the financial statements. The information with regard to this are the % of non-performing finance to total financing, the movements in the non-performing finance and movements in the provision for bad and doubtful debts and financing. Table 10 and Table 11 show an example of the report on the movements in the non-performing finance and provision for bad and doubtful debts.

Table 10: Movements in Non-Performing Loans

Current Year and Previous Year
Balance brought forward from previous year
Non-performing during the year
Amount sold to Danaharta[14]
Amount reclassified as performing
Balance as at current year
% of non-performing financing to total financing

Table 11: Movements in the Provision for Bad and Doubtful Debts

Current Year and Previous Year
General Provision; brought forward from previous year
Provisions made during the year
% Of general provision to total financing net of specific provision
Specific provision: Brought forward from previous year
Provision made during the year
Amount write back in respect of recovery
Balance as at current year

Table Adapted From the Financial Statement of Bank Islam Malaysia Berhad 2001

In contrast, the disclosure of non-performing loans in the UK is very different. In the Reporting Requirement, Chapter 16(Financial Services Authority, 2001) clear guidelines are given on the reporting of provisions against bad and doubtful debts and investments. The guidance given is on how to report previous balance of specific and general provisions, adjustments for acquisitions or disposals, adjustments for exchange rate movements, and charge or credit to profit and loss account. It also provides guidelines on

how to report for the amount written off, recoveries of amounts previously written off and any other items including exceptional provisions and transfers between general and specific provision. Banks in the UK are also to show the assets (by risk weights) against which specific provisions have been made. The provision for diminution in value of investments other than trading investments should also be shown. An example of disclosure is a specimen of financial statement of HSBC, an international bank with its headquarters in England. Generally a financial report of a bank in the UK would include a section on its risk management policy. In the case of HSBC, this section provides detailed information on the bank's policy in managing risk. The information is on the design of the policy such that it is able to identify and analyse credit risk, liquidity, market risk, operational risk and other risks. This section also provides detailed description of the bank's policy on the appropriate risk limits and how the risks are monitored and limited by using reliable and up to date administrative and information systems. There is also an explanation of credit risk and how it arises. In HSBC, a special unit is mandated to manage the credit risk and its function is described clearly in the financial statement. As HSBC is an international bank, HSBC has a 5-year analysis of its loans. The analysis is by industry sector and by the location of the principal operations of its lending subsidiary. Please refer to Table 12.

[14] Danaharta was established as a result of the financial crisis in the 1990s. It is a specially designated company that purchases non-performing loans from banks.

Table 12: Analysis of Loans and Advances to Customers by Geographical Region: Europe, Hong Kong, Rest of Asia Pacific, North and Latin America and By Type of Customer, By Type of Customer as a % of Total Gross loans and Provisions for Bad and Doubtful Debts by Type of Customers

Personal:
Residential Mortgage Other Personal
Total Personal
Corporate and Commercial
Commercial, industrial and international trade Commercial real estate Other property-related Government Other commercial
Total corporate and commercial
Financial:
Non-bank financial institutions Settlement accounts

Source: Adapted From HSBC's Financial Report, 2001

As for provisions for bad and doubtful debts, they are disclosed in respect of the type of customers. HSBC outlines its policy that each operating company will make provisions for non-performing loans promptly on a prudent and consistent basis to ensure that the provisioning matches or exceeds the requirements of relevant regulators. It also stated its definition of non-performing debts, *as debts that management has doubts as to the ultimate collectability of principal or interest are 90 days overdue (HSBC's Financial Report 2001).*

Explanations of what specific provisions, general provisions, loans on which interest is suspended[15], non-accrual loans[16], outstanding provisions are also given in the financial report in order for the public to understand. A 5-year analysis is made on the movements for provisions for bad and doubtful debts. The analysis is by location and the information analysed are as in Table 13.

Table 13: An Analysis On The Movements in HSBC's Provisions for bad and doubtful debts by region: Europe, Hong Kong, And the Rest of Asia Pacific, North America and Latin America

Provisions brought forward
Amounts written off:
Banks
Commercial, industrial and international trade
Real Estate
Non-bank financial institutions
Governments
Other commercial
Residential mortgages
Other personal
Total amounts written off
Recoveries of amounts written off in previous years:
Commercial, industrial and international trade
Real Estate

[15] Interest is still charged on the non-performing loans but is not credited to the profit and loss account but to an interest suspense account in the balance sheet and is netted against relevant loan. Only on receiving of payment will the suspended interest be recovered and taken to the profit and loss account.

[16] Non-accrual loans are loans that have no potential of receiving payment of interest. Therefore, interest is no longer accrued and suspended interest is written off.

Non-bank financial institutions
Governments
Other commercial
Residential mortgages
Other personal
Total recoveries
Charge to profit and loss account:
Banks
Commercial, industrial and international trade
Real Estate
Non-bank financial institutions
Governments
Other commercial
Residential mortgages
Other personal
General provisions
Total Charge
Foreign exchange and other movements
Provisions at current year
Provisions against banks:
Specific provisions
General Provisions
Provisions at current year
Provisions against customers as a % of gross loans and advances to customers:
Specific provisions
General provisions
Total Provision

Source: Adapted from HSBC's Financial Report, 2001

The information on the movements of the provision is provided by region and type of customers and is based on a 5-year analysis. The analysis is on the amount written off, recoveries from the amount written off in previous years and provisions for the year.

HSBC classifies loans in accordance with the UK accounting practice as follows:

- Suspended interest
- Assets acquired in exchange for advances
- Troubled debt restructurings

- Potential problem loans

HSBC also provides a 5-year analysis of risk elements in loan portfolios in accordance to geographical location. The essentials information that are analysed are as shown in Table 14. The table shows if there is adequate provision in relation to the total risk elements in HSBC.

Table 14: An Analysis of Risk Elements In The Loan Portfolio by Region

Loans accounted for on a non-accrual basis
Loans on which interest has been accrued but suspended
Assets acquired in exchange for advances
Troubled debt restructurings
Accruing loans contractually past due 90 days or more as to principal or interest
Total risk elements
Provisions for bad and doubtful debts as a % of total risk elements

Source: Adapted from HSBC's Financial Report, 2001

Barclays reporting on its provisions and doubtful debts is also based on geographical analysis even though it does not provide a 5-year analysis in its financial statement. However, it provides a 5-year analysis for its shareholders and the information is available on its website where everybody can see. There is also a section on potential credit risk lending in accordance to the United States Securities Commission guidelines. This section contains information on non –performing lendings that are divided into non-accrual lending, accruing lendings where interest is being suspended, other accruing lendings against which provisions have been made, accruing lendings 90 days overdue against which no provisions have been made and reduced rate lendings. Other than that information, there is also information on potential problem lending, percentage of provision coverage of non-performing lendings and percentage of provision coverage of total potential credit risk lendings. Another disclosure is on the interest forgone on non-performing lendings.

In Japan, the disclosure of non- performing loans became compulsory beginning March 1993. The standards of disclosure on non-performing loans for major banks under the Federation of Bankers Associations of Japan (Zenkoku Ginko Kyokai Rengokai, herein called Zenginkyo are based on four types of asset claims. They are; claims to failing companies, claims regarding delayed interest payments and claims when interest payment is totally or partially waived (Abiko, 1997). Please refer to Table 15. The Zengkiyo standards are for major banks[17].

Table 15: Zenginkyo Uniform Disclosure Standards (Summary)

Type	Outline
Loans to failing companies	Loans to firms subjected to the Corporate Reorganization Law, those in bankruptcy, those subject to composition, those subject to arrangement, or those firms whose settlement by banks is suspended at clearing house.
Loans on which interest payment is delayed	Loans on which interest payment is in arrears six months or more (excluding those to failing companies and those to which interest payment is partially or totally waived)
Loans on which interest payment is partially or totally waived	Loans on which interest rate is reduced to a level equal to or lower than the official discount rate at the time of revision of the loan agreement, those officially approved as loans on which interest payment is totally waived, etc.
Loans to firms whose management includes lending bank participation	Loans to companies in whose management lending institutions take part in a way officially approved by tax authorities and/or in the form of disclaimer as a means to assists restructuring or provide support.

Source: Abiko (1997).

In addition to the major banks, shinkin banks and other financial institutions have been asked to disclose the amounts of loans to failing companies. The MoF in Japan classify debt according to assets assessment method (Abiko, 1997). This system classifies financial institutions assets, including loans and securities, following an itemised review

[17] Major banks are city, long term credit and trusts banks. There are four types of banks in Japan. They are

based on the risk of recovery or based on depreciation. Evaluation is in terms of representing deposited amounts whether total assets are large enough to cover withdrawal of deposits. The evaluation also probes to the extent to which individual assets are exposed to deterioration. Assets are sorted into four different categories in terms of the degree of risk in value of loss. Table 16 illustrates this.

Table 16: The Categorisation in Assets assessment

Category	Description
Category IV	Basically, assets whose recovery is impossible or judged as worthless as of the date of evaluation (relative assets automatically included even if future partial recovery might be possible)
Category III	Assets whose recoverability or eventual value merits serious concern, posing a potential loss the amount which is hard to determine
Category II	Assets such as loans whose recoverability poses greater than average risk (owing to such factors as improper fulfilling of conditions to secure the loan or grave concern about the borrower credit)
Category I	Assets which do not belong to any of the above categories (those which do not entail any risk regarding recovery or loss of value)

Source: Abiko, 1997

The process of listing assets in the above categories is called classification. Assets under Category II to IV are called classified assets and are loans that require attention, are in danger of bankruptcy or are already bankrupt (Zenginkyo, 2002). Assets under Category I are non- classified and they include all loans to normal borrowers (Zenginkyo, 2002). The procedures of loan classification with respect to assets are based on the status of borrower, status of collateral and status of write-off. The status of the borrowers is classified based on the capacity for repayment in terms of financial status, fundraising capability, profitability and others. Table 17 illustrates the categories of borrowers.

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the major banks, regional banks, second regional banks and shinkin banks.

Table 17: Categories of Borrowers

Type	Description
Failing company	Firm wherein legal or formal management has occurred (bankruptcy, liquidation, corporate rearrangement or reorganization, composition, suspension of clearing house bill handling, etc.)
Virtually failing company	Firm whose business is in dire straits and there is little chance of recovery, etc., and management it is all but incompetent (long state of insolvency or loan repayment is long overdue)
Company apt to fail	Firm whose business is in trouble and may well go bankrupt (business performance is very poor and there is little hope of recovery; there is no lender intention to lend support or to reduce loan to the minimum, etc.)
Company requiring caution	Firm with problematic lending condition (interest partially or totally waived), whose payment record is poor (delays, etc.), whose business performance is bad or unstable, whose financial statement is not good, or whose loan management foreseeable will demand caution.
Normal borrower	Company having good business performance and no specific financial statement problems

Source: Abiko, 1997

In addition, the National Association of Shinkins Banks also established a uniform disclosure standard for shinkin banks. The shinkin banks in Japan have been obliged to reveal their loans to failing enterprises, the amount of loans on which interest payments are in arrears, loans on which payment is partially or totally waived and loans to firms whose management includes lending bank participation.

3.4 Cross Comparison Analysis

Despite having the common objectives of controlling non-performing loans, there are significant differences in the policy of the measurement and management of non-performing loans in Islamic banks in Malaysia, Japan and the United Kingdom. This section analyses and compares these differences in the policy of the measurement and management of non-performing loans.

3.4.1 Definition of Non-performing loans

Even though the Basle suggested that loans over 90 days are considered to be in default, the BNM definition's of non-performing loans as loans that have been in default for over 180 days. Since the financial crisis, Japan expanded its definition of non-performing loans from loans past due in arrears by 180 days or more and loans to bankrupt customers, to include loans where interest has been reduced, loans in arrears by three months or more and restructured loans. The UK financial sector even though it is considered as a highly developed financial system (Hall, 1993) defines its non-performing loans as loans that have been in default for over 90 days.

The reclassification of non-performing loans to performing financing of Islamic banks in Malaysia is quite lenient whereby as long as the instalment arrears falls below 6 months or 180 days, the non-performing financing will be reclassified as performing. This is very different than the Basle requirement whereby a non-performing loan would only be classified as performing when all arrears have been paid (Basle, 1999).

3.4.2 Loss Provision

In Malaysia, the loss provision made is based on the percentage specified by the BNM in accordance to their period of default and classification. A loan that has been in default for 6 months but less than 9 months is classified as substandard and is given a 20% provision after deducting its security value. A loan that has been in default for 9 months but less than 12 months is classified as doubtful and the amount of specific provision is 50% after deducting the security value and for loan that has been in default 12 months or more is classified as bad loan and is given a 100% specific provision. (Please refer to Table 7).

The percentage of provision is regardless of the type of loans. General provision is fixed at 1.5% after deducting the amount of specific provision for the purpose of unidentified losses.

In the UK, the decision on how much to provide for specific provision is left to the discretion of the banking institution based on several conditions like the financial condition of the borrower, guarantor and security plus guidance from the Statement of Recommended Accounting Practise (SORP) and for general provision it must be enough to cover the losses not yet identified. Banks in the UK are given the freedom to decide the total amount of provision. However, banks in the UK need to follow the reporting requirement of the Financial Services Authority. Even though loss provisioning is left to the discretion of the management of the banks, the UK appears to have a stricter system on the loss provisioning. This is based on the basis of assessing loans for provision. For example, assessments for specific provision for commercial loans are assessed on individual basis and only retail loans are assessed on a pooled basis.

Banks in the UK should estimate the amount needed to reduce the risk using whatever statistical techniques. This is however subjected to consideration being made by the bank on the amount of loan and the bank's other commitments to the borrower, the borrower's business prospects and the ability to repay, the security, the costs incurred in obtaining repayment if rights of the bank are enforced. As for general provision, in the UK, the management of banking institutions would have to identify the loans that are not clear if specific provision is needed but they are still doubtful. Not only that, consideration for general provision is also based on the industrial and geographical risk, past experiences, current economic climate and on and off balance sheet exposures. The percentage also varies according to the different categories of loan portfolio and other exposures and also weighted towards the degree of risk that are particularly at risk.

Looking at the Japan's policy before the crisis in Table 9, Japan's loss provision was very rigid, as the financial institutions have to satisfy certain criteria such as a high probability of default and to refer to the MoF before provision can be made on non-performing loans. However, after the crisis, loss provision is made using the self-assessment method. With the self-assessment method, banks can now carry out assessment on their own assets and make provisions or write offs for possible loan losses.

3.4.3 Taxation

In the UK, specific provisions are tax deductible, while general provision is not. In Japan, specific provision and general provision is tax deductible but the level of provisioning is intended to cater for the tax deduction. In other words, the levels of provision for both specific and general provision are little since the amounts that are tax deductible are little too. The tax rules are likely to be the reason behind the lack of provision in Japan (Yamawaki, 1996). As a result Japanese banks were faced with large amount of write-off and provisioning during the economic downturn. Specific and general provisions are tax deductible in Malaysia. In the profit and loss statement, both provisions are treated as other expenses and are deducted from the revenue of the bank.

3.4.4 Valuation of Security

In Malaysia, the BNM gives guidelines on the valuation of security for the purpose of provision. While in the UK and Japan no official guidance is given. In the UK the policies on the valuation security is based on the banking industry practice. However, in Japan, the management usually discuss with the representatives of the MoF.

3.4.5 Level of Disclosure

The level of disclosure of non-performing loans by financial institutions in Islamic banks in Malaysia is limited compared to the information on non-performing loans that are disclosed in HSBC's or Barclays's financial statement. This can be seen from the limited information on non-performing loans that can be obtained from the annual report of BIMB as compared to the information provided by HSBC (UK) and Barclays.

In the BIMB report one can only see the movement of non-performing loans and movement of provision for the non-performing loans in the past 12 months. There is a section on the percentage of non-performing loans to performing loans but there is no detailed information on this. The only information one can get is on the amount of non-performing loans for the year. There is no breakdown of the non-performing loans and it is not analysed by either the type loans or customers. This information is only understood by professional and provides no readily understandable information for stakeholders like depositors.

Unlike the method of disclosure by some banks in the UK where the policy on risk management of the financial institution is made known to the public in a special section in the annual report a person reading financial report of Islamic bank in Malaysia would not be provided with such information. There is no information on the bank's policy on analysing credit risk, liquidity risk, market risk and other related risk. There is also no information on how these risks are managed by the bank. The limit of risk that the bank is taking and how these risks are monitored is also not mentioned. This is quite unusual considering that the IADs share with the Islamic banks the profit and loss; they have limited information on the risks to which they are exposed.

Looking at the financial report of HSBC (UK), the total loans are broken down by the type of customers and geographical region. Analysis is for the past 5 years. The types of customer are personal, corporate and commercial and financial. Each type is further broken down into the type of loans like residential, mortgage and etc. Information on amount of recoveries written off is broken down into the type of customers and also for the period of 5 years. One can see clearly if the amount of non-performing loans and

recoveries are increasing or decreasing for the past 5 years. There are detailed explanations on what specific provisions, general provision and other related items on non-performing loans are.

As an international bank, the movement of loss provision reported by HSBC (UK) is by region and is also broken down by the type of customers. Therefore, one can see which type of customers that has a large amount loss provision and how much has been recovered for the past 5 years. Furthermore, there is also information on loans that might be at risk of becoming non-performing loans in the future. This sort of information is disclosed for the public to read. By doing this, not only do the depositors know but it would also encourage the bank to take action, so that these loans will be monitored. Barclays also undertake the same method of disclosure even though the analysis is only for the past 12 months.

Such information is not available in an annual report of an Islamic bank in Malaysia and a depositor will not be able to see if the non-performing loans has been increasing or decreasing for the past 2 years and above. The depositors will not know what type of finance has the highest non-performing loans and how much non-performing loans have been recovered. Therefore, the depositors of an Islamic bank will not know the risk to which they are exposed. There is no explanation of the policy of the Islamic bank on how credit risk, market risk, liquidity risk or other related risk is managed.

As for Japan, there is good progress of disclosure by financial institutions after the economic crisis. In the case of major banks under Zenginkyo, they must disclose the following information: loans to failing companies, loans on which interest payment is delayed, loans on which interest payment is partially or totally waived and loans to firms whose management includes the participation of the lending bank

In addition, the MoF in Japan also provides a classification of debt for disclosure to the public. The information that must be disclosed under the MoF is based on 4 categories of assets. Even though there are two different sets of disclosure, this shows that the Japanese authorities realise the importance of disclosure and is now requesting banks in Japan to disclose information of non-performing loans to the public.

Some of the policy on loss provision that is not applicable to Islamic banks is policy on the capitalisation of interest. While conventional banks can capitalise on the interest of non-performing loans by crediting them to the interest in suspense, Islamic banks are not allowed to capitalise on the profit they are supposed to make if the loan is performing. Profit of Islamic banks can only be recognised as income when it is received.

3.5 Conclusion

In this paper an analysis has been made on the policy of the measurement and management of non-performing loans in Islamic banks in Malaysia, conventional banks in the UK and Japan. It investigates if there are differences in the measurement and management of non-performing loans in Islamic banks in Malaysia as a result of the existence of the IADs. Analysis of the measurement and management of non-performing loans in Islamic banks in Malaysia finds that the Islamic banks define and manage their non-performing loans differently from the conventional banks in the UK and Japan.

The analysis shows that even though Islamic banks have special characteristics whereby they operate using the profit and loss sharing, the measurement and management of its non-performing loans are quite lenient. This is evidenced by the way non-performing loans are defined, the way loss provision is made and the level of disclosure made by an Islamic bank. There is not enough information on the non-performing loans of an Islamic bank when compared to the information provided by conventional banks in the UK or Japan. Japan has learned their lesson and is making a progress in their effort to measure and manage the non-performing loans.

These findings are quite disturbing because unlike conventional banks, an Islamic banking system is largely based on the profit and loss sharing system (PLS). This mode is used widely in its relationship with its customers, depositors (IADs) and entrepreneurs. The PLS mode is more risky because unlike conventional banking system where the rate of return is fixed, the rate of return on IADs may either be positive or negative. If there is loss, it will erode the investment of the IADs. This also applies to the type of financing extended by the Islamic banks. Financing under the PLS mode if not monitored, the return to the Islamic bank may either be less than what is expected or worst may even be a loss. Even with these differences, Islamic banks in Malaysia still share the same guidelines as the conventional banks. Applying the same guidelines designed for conventional banks would make it difficult for Islamic banks to determine the timing to declare the financing as non-performing. For example, the definition of non-performing loans in Malaysia for all banks is when the loan has been in default for 6 months or more. The same classification may be suitable for murabahah (cost-plus) financing, but for profit and loss sharing activities this definition may not be suitable. A proper definition is

needed to determine their classification as non-performing. Projects under the profit and loss sharing provide uncertain return as they depend on the profitability of the projects. The return may be less than expected or even fails. As different projects give different timing of return to investment, a standard definition of non-performing should not be applied. Therefore a suitable regulatory framework is necessary to avoid the unwanted implications of non-performing loans.

In respect of the level of disclosure, IADs share very little knowledge of the non-performing loans faced by the bank. There is little information that can be derived from the annual report of the Islamic banks in Malaysia. They do not know what actions are undertaken by the Islamic bank to control or reduce the amount of non-performing loans. When little information is given, the IADs may not be aware that their investments or savings can be affected by the percentage of non-performing loans. They may not be aware that uncontrolled non-performing loans would lead to the failure of a financial institution. It is only when they are given no return to their investments or when they are informed that their investments are making losses that they will realise the repercussion of non-performing loans. By that time it will be too late to do anything other than face the losses. Lessons must be learned from Japan's forbearance policy in their measurement and management of non-performing loans.

Information disclosure is very important in an Islamic banking system because of the risk sharing characteristics and the absence of protection for IADs. The more reliable is the disclosure, the more are IADs or other users able to make an accurate assessment of the Islamic bank's financial position. A clear information disclosure will allow depositors especially IADs to decide which bank they want to deposit their funds into. Important information, particularly on the non-performing loans is very important because investors would like to know the risks that their investments are exposed to. This will allow depositors to monitor the bank and as a result could help to discipline the bank.

The special characteristic of an Islamic bank calls for an appropriate regulatory framework specially designed to accommodate its characteristics in addition to what has been designed for conventional banks. Appropriate information disclosure will help regulators understand the objectives, strategies and the risks that a bank is exposed to. This will prevent misleading information that can cause the instability of the financial

system. Regulators or policymaker should be concerned if there is lack of control or disclosure from a bank because they act as representative of depositors. There is a need to protect the IADs from potential moral hazards and adverse selection arising from asymmetric information. The IADs do not have voting rights because they do not own the equity of the Islamic bank and therefore cannot participate in the investment decisions. The objectives of regulating banks are to ensure that there is no moral hazard, depositors' protection, avoid systemic risk and investors' protection (Dale And Wolfe, 1998). Therefore, regulators should be concern when any of this is absent. Regulations of Islamic banks must emphasise the measurement and management of non-performing loans. This is to ensure that the risk of failure can be avoided and the welfare of depositors is protected.

CHAPTER 4

The Role of Islamic Asset Backed Securitization in modern Islamic Banking

4.1 Introduction

Asset-backed securitization (ABS) is a new and innovative method used for obtaining funds and managing risk. Conventional banks have been using asset-backed securitization as a tool to deal with many of the opportunities and problems in the financial market. Assets that have been transformed into securities include residential loans, credit card receivables, auto loans, leases and royalties. The objective of this chapter is to explore the viability of asset-backed securitization for Islamic banks and the possibility of structuring an Islamic asset-backed securitization that not only fulfils the requirements of the shariah but also has the ability to attract potential investors.

What is asset-backed securitization (ABS)? According to Kendall (2000), securitization can be defined *as a process of packaging individual loans and other debts instruments, converting the package into a security or securities, enhancing their credit status or rating to further their sale to third party. The process converts illiquid individual loans or debt instruments which cannot be sold readily to third party investors into liquid, marketable securities. These new debts are called asset-backed securitization.*

Literature on conventional ABS such as Henderson and Scott (1988) and Pavel and Philis (1987) suggest that securitization can reduce risk, diversify portfolio of loans, and fund new assets and operations of a bank. If securitization can help conventional banks then it could also be used as a tool by Islamic banks to manage their risk, diversify and fund the assets and operations of a bank.

ABS has brought many positive implications for the conventional banking sector. Through the process of ABS, the conventional banks operate more efficiently and profitably (Phillips, 2000). Most importantly, ABS is used by conventional banks in managing their risk as the financial assets are bundled and sold to a third party thereby

transferring the risks of those assets away from the bank. For instance, if a particular class of lending becomes too large in relation to the bank's balance sheet as a whole, ABS can be used to remove some of these assets from the balance sheet. This helps to reduce a bank's exposure from a particular credit risk.

ABS helps to improve banks' performance because banks can increase their Return on Asset or Return on Equity. This is because ABS can be a cheaper source of funding as compared to traditional funding by way of deposits, tapping the money markets or increasing the shareholder's equity. ABS allows banks to adjust their balance sheets as it has made their assets more liquid. Banks do not have to wait to receive loan payment to obtain funds to continue their business. The loans sold are moved 'off balance sheet' and replaced by cash equivalent.

ABS helps to manage non-performing loans. The non-performing loans can be transferred and sold to a third party who then transforms them into marketable securities. The non-performing loans will no longer be in the balance sheet of the bank but instead are replaced by cash equivalent. The problems arising from the non-performing loans are transferred to the ABS and this helps to reduce the exposure to the risk of non-performing loans away from the bank and its depositors. Over the last 5 years, ABS has been used as a means to manage non-performing loans. In Thailand, Lehman Brothers, a global investment bank, executed the first publicly rated securitization of distressed assets amounting to Bt7.17 billion ($177 million), named GT Stars II. The distressed loan portfolio was bought from a bank under the Financial Restructuring Agency in 1998 and DBS Thai Danu Bank in the year 2000 (Koh, Euromoney, 2002). The Star II involved a pool of mortgages whereby 81% are non-performing, 16% restructured and 3% performing. The government of Taiwan has passed an asset securitization bill to help deal with impaired bank assets (Huang, 2002, www.taipeitimes.com). Korea's first international securitization of non-performing loans was completed in November 2000 (Bulmer, 2002, FinanceAsia.com).

Conventional banks have been using ABS to get relief from regulatory capital requirement and to manage their risks (Albrecht and Smith, 2002). The BIS requires a bank to have a minimum capital requirement of 8% of a bank's total loan (BIS, 2001). The capital requirement is to ensure that banks have sufficient capital available to absorb

risk of losses should their assets fail to perform. The bank's risk weighted assets measure the calculation of capital requirement[18]. For example, suppose a commercial loan is assigned a 100% risk weighting. If a bank's total loan is worth 4 billion pound (assuming they are 100% risk weighted), than the minimum capital requirement needed is 320 million. If the bank securitizes 3 billion pound of its loans, the bank's capital requirement is only 80 million. Therefore 240 million of the capital is freed. This cash can be used to generate new financing or for other purposes. Therefore, removing the loans from the balance sheet through securitization will reduce capital requirements. ABS offers a relief from regulatory capital requirement and also enhances the return on equity of a bank.

Like conventional banks, Islamic banks too could benefit from asset-backed securitization. Islamic banks are exposed to banking risks especially credit risks. In relation to credit risk, the risk comes from the 4 kinds of contracts that are used by an Islamic bank when extending financing. (Please refer to Chapter 2). The risks involve in the contracts are summarized in Table 18. The risks from these contracts (especially the profit and loss sharing) contracts make them more vulnerable to losses therefore making risk management very important in Islamic banks. Furthermore, the way that investment accounts depositors of an Islamic bank share in the loss and profit of the bank makes risk management very important in order to protect them. (Please refer to Chapter 3). If any of this financing becomes too large, ABS can help Islamic banks to reduce these risks by transferring them to the special purpose vehicle that then transfers to the investors.

[18] The weight given to a particular class of risk. In determining a weight of a risk, banks may use assessments by external credit assessment institutions recognized as eligible for capital purposes by national supervisors (Basel Committee on Banking Supervision, Consultive Document, 2001).

Table 18: The Types of Contracts and the Risks Associated

Contract	Risk
Mudarabah	In Mudarabah, the entrepreneur does not pay anything in case of losses provided he or she is not found negligent. The entrepreneur has absolute freedom to conduct the business. The capital provided by the Islamic bank is not guaranteed and the bank does not participate in the management of the project it is funding. The bank cannot request for collateral to reduce its risk. The bank will get back the capital and some profit from the profit made by the project at the end of the period stipulated in the contract, if any. This can lead to moral hazard as described in Chapter 2.
Musyarakah	For Musyarakah (joint venture), party, the customer and the Islamic bank contribute to the project. Similar to Mudarabah, the profit for both parties will depend on the success of the project. Profit is not guaranteed, as it will depend on the performance of the joint venture.
Cost Plus (debt)	This is a buy and sale contract. The bank will purchase a specified item for the customer. It will then sell the item to the customer. The risks involved in this type of contract stem from changes in mark up rates during the period of financing
Leasing	Under this contract, an Islamic bank is not able to transfer any risk associated to the lessee as the leased item belongs to the Islamic bank. The leased item is carried on the balance sheet for the rest of the leasing period. If the leased item is out of order, the Islamic bank bears the risk of loss. All risk and responsibilities are borne by the bank as the owner.

ABS can also be used to solve the problem of liquidity in Islamic banks. Since the early days of Islamic banking, Islamic banks have been facing a liquidity issue that is created by the mismatch of deposits tenure and financing tenure. There is either surplus idle cash position to be invested or a shortage cash position to be funded immediately. The limited tools in liquidity management in Islamic banks make them vulnerable. The predominance of debt-based financial modes is a weakness and due to the shariah requirements, it is difficult to transform these into negotiable financial instruments. If the debt-based mode of financing is securitized, then Islamic banks do not have to wait for payment of the debt before they offer new loans or invest in other businesses. ABS can help turn Islamic banks' illiquid assets to liquid assets. The liquid assets can then be used for new financings or to purchase other assets.

Islamic banks also face the problem of non-performing loans that can affect their performance. The effect of uncontrolled non-performing loans in an Islamic bank will be felt more by depositors (investment account depositors) of an Islamic bank than depositors of conventional banks because they share the profit and loss of the Islamic bank that they invested in. (Please refer to Chapter 3). ABS can be used to manage non-performing loans of Islamic banks by transferring them to the market instead of keeping them on their balance sheets. ABS helps to banks to mange their risk.

Islamic banks are also subjected to capital adequacy and reserve requirements by regulatory bodies to ensure their soundness. Most member countries of the Islamic Development Bank adopt the Basel regulations in determining the capital requirement of an Islamic bank (Chapra and Khan, 2000). This means that they comply with the BIS minimum capital requirement of 8 % of a bank's total loan. Therefore, Islamic banks too would have a problem of adhering to the capital requirement should they expand further. ABS can help to overcome the problem of capital requirement.

Despite the strong cases for ABS, ABS in Islamic world has so far only been limited to the issuance of sukuk[19] (bonds) by companies rather than Islamic financial institutions. For examples, in the Middle East, the government of Dubai launched USD750 million Sukuk Al Ijara (leasing based transactions) to part fund the USD4.1 billion development of the Emirates International Airport (AME Info, 2004). Bahrain based Durrat Sukuk Company issued a USD120 million Islamic bond to part finance a USD1 billion residential and tourism project) AME Info, 2004). In Malaysia, the growth of Islamic Private Debt Securities (IPDS) grew from RM379 million in 1990 to RM RM13.028 billion in 2001 (Ismail, Rating Agency Malaysia, 2002). Malaysia's first IPDS issue was Shell RM 125 million in 1990.

There are difficulties in structuring Islamic ABS because of the Islamic shariah and technical requirements. The problems that have been identified by scholars like AlBahar (1996) and Homoud (1998) in structuring an Islamic asset-backed securitization can be divided into two issues; the shariah and technical issues. The shariah issues are; firstly,

there must also be an element of ownership that must be conveyed to the special purpose vehicle (SPV) and then to the investors. The assets that are associated with the receivables must be sold to the SPV. This means that the originator (Islamic bank) must have the ownership title. The title is then transferred to the SPV, which then transfers it to the investors. This is different from the conventional ABS where only the receivables are sold to the SPV, which then issues securities backed by the assets. It would be possible to securitize Islamic banks' assets that are based on the PLS modes of financing and leasing because the ownership is with the Islamic banks. However, the shariah requirement whereby the ownerships of the assets must be transferred to the investors means it is impossible to securitize financings based on cost-plus or debt based mode of financing. This is because the title of an asset under the cost-plus mode of financing belongs to the borrower and not the bank. Secondly, there is a restriction on the trading of debt. Debt can only be traded at face value. This again makes it difficult to securitize assets based on the cost plus contract as it can only be traded at face value. Thirdly, in Islamic ABS, the credit enhancement must be structured in a profit sharing capacity. Credit enhancement plays an important role in the marketability of the securities as it protects investors from inherent risks. Even though there are many forms of credit enhancements like cash-collateral account method, guarantee, standby letter of credit, over collateralisation and spread account, the type of credit enhancement an Islamic ABS must not be such that the investors do not bear any risk at all. At the same time, a strong credit enhancement would give the securities a higher rating and this attracts potential investors. Therefore what sort of credit enhancement would fulfil the requirement of risk sharing with the investors and at the same time would attract them and give good rating? Finally, there is a technical issue concerning the lack of proper credit ratings of Islamic financial institutions. Even though there are more than 276 financial institutions in the world only a handful of them are rated. There are arguments that rating agencies do not understand the operations and the assets of Islamic banks and as a result Islamic banks are not given a fair rating. The rating of the originator influences the rating of the securities by the rating agency. A low or no rating makes it difficult for Islamic banks to structure an Islamic securitization that can attract investors, as it can be very expensive for the banks.

[19] A sukuk is an Islamic bond structured by bundling leasing or cost plus transactions. It behaves like any highly rated bonds.

A few scholars like AlBahar (1996) and Homoud (1998) have highlighted the limitations in implementing Islamic securitization. Dualeh (1998) and Thomas (2001) write on the possibility of Islamic asset-backed securitization but do not discuss the problems in structuring the securitization. Other economists like Archer (2002) highlighted some of the problems of structuring an Islamic asset-backed securitization without discussion on overcoming them. This chapter is different from previous papers or articles because it looks at ABS from 3 different perspectives. It specifically analyses the importance of ABS to Islamic banks as a tool to manage their risks and operations and then analyses the problems of Islamic ABS. It then proposes ways to overcome them.

It is important that a shariah compliant solution must be established to deal with the issues of the ownership, trading of debt and credit enhancements in order to promote Islamic ABS. In addition, the technical issue of the rating of Islamic banks must be analysed in order to find a possible solution to improve the current issue on the problem of the ratings of Islamic banks.

The paper argues that ABS is an important tool for Islamic banks and a solution that complies with the shariah and technical requirements would help promote Islamic ABS. It also argues that the effectiveness of Islamic banks is important to economies seeking to develop under Islamic rules. The following questions will be investigated:

- How could ABS improve the efficiency and effectiveness of Islamic banks?
- What are the financial assets available in Islamic banks and what are their significant characteristics?
- What shariah and technical hindrances prevent the securitization of the assets of Islamic banks?
- How might Islamic ABS be operationalised effectively without contravening shariah requirements?

This study is important because the ability to exploit the potential of asset-backed securitization in compliance with the shariah requirement will enable Islamic banks to operate more efficiently and profitability. By developing an acceptable Islamic securities market that is in compliance with the shariah requirements and fiduciary rules, Islamic banks can provide long-term investment opportunities for their investors and at the same time play an important role in the development of the national economy. This is because

through ABS, Islamic banks can originate more financing than they would be able otherwise. Without ABS, this would not be possible if Islamic banks have to keep their assets on their balance sheets until maturity.

The remainder of this chapter is organised as follows; Section 4.2 analyses the importance of ABS to Islamic banks and explains the financial assets of an Islamic bank and their characteristics so as to see their potential in having them securitized. Section 4.3 analyses the obstacles in the securitization of the assets of Islamic banks as suggested by some Islamic scholars. Section 4.4 discusses ways to overcome the problems and Section 4.5 concludes the chapter.

Section 4.2 Objective

This objective of this section is to analyses two areas. The first sub section analyses and suggests how ABS can help Islamic banks to operate more efficiently and effectively. This includes managing their risks through ABS, managing their liquidity, non-performing loans and meeting their capital and reserve requirements. The second sub section analyses the assets of Islamic banks, and their potentials for being securitized. In particular, this section identifies the ownership of these assets as these contribute to the current problems of structuring an Islamic ABS.

4.2.1 The potential of ABS in Islamic Banks

Islamic banking system has expanded substantially over the last 20 years and has established itself in more than 45 countries. As at 2001, there are more than 276 Islamic financial institutions all over the world. In some countries, Islamic banking is the only form of banking system while in other countries it runs along with the conventional banking system. Further growth of this system and its success in promoting systemic stability and economic development depend on its capability to manage its operations efficiently.

As Islamic banks grow they have to face a lot of problems and challenges. Islamic banks have to deal with the risks associated with banking like credit risk, operational risk and market risk and also have to compete with conventional banks as well. Islamic banks need to be able to balance these two in order to operate efficiently and profitably. The existence of investment account depositors (IADs) who share the profit and loss of the Islamic bank requires Islamic banks to manage their risk efficiently. At the same time Islamic banks have to be profitable in their operations so IADs can get a return on their investments. These two responsibilities can be very difficult for Islamic banks. Conventional banks have been using asset-backed securitization as a tool to deal with many of the opportunities and problems in the financial market. Through the process of ABS, the conventional banks have been able to operate more efficiently and profitably.

Islamic banks too could benefit from asset-backed securitization. In respect of credit risk, Islamic banks use four types of contracts in extending financing to their customers as Islam strictly prohibits interest. These contracts are the Mudarabah, Musyarakah, Murabahah and Ijarah. Islamic banks are exposed to a unique bundle of risks arising from the types of contracts used by them in extending their financings as different type of modes, expose Islamic banks to different type of risk.

In the Mudarabah, the characteristic of this type of contract is the customer does not pay any portion of the losses except if he or she is found to be negligent. This exposes an Islamic bank to the risk of losing the amount invested in the project financed. In addition to this characteristic, the Islamic bank has no means of control on the funds it invested in under this contract. The customer manages the business and the funding on his or her own. (Please refer to Chapter 2). The Musyarakah is a joint venture contract between an Islamic bank and its customer for a specific project. Under this contract, Islamic banks can participate in the management of the joint venture. For both Mudarabah and Musyarakah, the profitability of the project would depend on its success. If the project is successful, then all parties will share in the profit according to their ratio. In addition to this, the amount of profit would vary depending on the amount of profit obtained for a particular period of time. There exists an ex-post information asymmetry, which could lead to moral hazard problem between an Islamic bank and its customer. Therefore instead of keeping these financings and the risks associated on their balance sheets, Islamic banks could sell these assets and their risks through securitization. This would allow Islamic banks to operate more efficiently.

In the Murabahah mode of financing, Islamic banks are exposed to market risk due to the risk stemming from the mark-up price of differed sale. Mark up rates can increase in a period of time. However, the profit rate earned from the transaction cannot be raised because the selling price has been fixed based on the previous mark-up rates. Financings using this mode are suitable for short-term but is widely used for long-term financings like property purchased financing. This is a risk to Islamic banks. This is because the profit rates paid to the investment depositors of Islamic banks will have to respond to the changes in mark-up rates. Even though investment depositors share with the Islamic bank

the profit and loss, they still expect a good return on their investment. A lower return than what is offered by conventional banks would result in Islamic banks losing their customers to conventional banks. One might question that this should not happen, as all customers are Muslims. But this may not be the case in some countries. In Malaysia for example, non-Muslims represent the highest number of IADs in Islamic banks and in Islamic windows offered by conventional banks. These IADs could shift their investments anytime to other banks that are offering higher return to their investments resulting in liquidity problem. Islamic banks could use securitization to overcome this risk. They could sell these financings and with the cash derived from the sale, offer new financings based on the current mark up rate.

In leasing, Islamic banks are responsible for any damages to the equipments leased. If any of the equipment is broken and needs repairing, the Islamic bank would have to bear the cost of repair. The lessee only pays for the rental of the equipment. This puts the Islamic bank at a disadvantage. Islamic financial institutions can resort to purchase insurance to protect them from such risk but the premium that has to be paid to the insurance company is a cost to the Islamic financial institution. Securitization could help to transfer this risk and responsibilities away from Islamic banks.

Another problem faced by Islamic banks is liquidity. This occurs when there is a mismatch between deposits tenure and financing tenure. There is either a surplus of idle cash to be invested or cash shortage position to be funded immediately. Liquid assets are those assets that can be quickly converted into cash. Examples of these assets are deposits in cash like current deposits or demand deposits, deposits in other banks or short-term investments in government securities. A bank manager will try to invest as much of the cash available in his or her effort to maximise the return on total assets of the bank. At the same time the bank manger would also have to be able to match the bank's investments with its liabilities. There must be enough liquidity to meet any mismatch of the term of maturity dates of both assets and liabilities. Islamic banks realised that there is a need for an instrument that can help them overcome the problem of excess liquidity. The Deputy General Manager of ABC Islamic Bank, Mohamed Buqais (Jordan Times, www.jordanembassyus.org) reported that there is a lack of Islamic-structured instruments

to absorb liquidity among Islamic banks. The International Islamic Financial Market[20] is looking for new instruments that can help solve the problems of Islamic banks. The Arab Gambian Islamic Bank has also announced its' problem of investing excess liquidity and is looking for ways to overcome this problem (Kahf, www.kahf.net).

Islamic banks also face the problem of non-performing loans. Non-performing loans can affect a bank's performance. As mentioned in Chapter 3 of this thesis, non-performing loans are so far the most common cause of bank failures. Conventional banks have benefited from using ABS to manage their non-performing loans and Islamic banks could benefit from it too.

ABS is also used in dealing with capital adequacy and reserve requirements. Islamic banks are also subjected to capital adequacy and reserve requirements. Most Islamic banks are subjected to the Basel regulations in determining the capital requirement. Therefore, they have to comply with the minimum requirement of 8% of a bank's total loan. Should an Islamic bank expand further, they have to think of the capital requirements. By freeing some of their assets through ABS, they can be relieved of this burden. The cash obtained from this process would enable Islamic banks to invest in other investment opportunities that can improve the bank's return on asset and return on equity.

[20] The International Islamic Financial Market is set up to help meet the needs of international Islamic banks and financial institutions and be a market for global Islamic capital that operates under the Islamic financial principal.

4.2.2 Summary

ABS has paved ways out of these problems for conventional banks. Although the problems faced by Islamic banks are almost similar to problems faced by conventional banks, these problems could be quite serious if not dealt with. If conventional banks can be affected by the movements in market rates like interest rates or foreign exchange rates, Islamic banks are affected by the changes in the mark-up rates as a result of financing given under the cost plus (debt) based mode of financing. The exposure to credit risk is probably higher than conventional banks because of the characteristics of the contracts. The PLS contracts expose Islamic banks to moral hazard arising from asymmetric information. In Al Mudarabah, Islamic banks do not play a role in the management of the project. Without systematic way of controlling their assets, Islamic banks are exposed to operational risk. The problems of non-performing loans could not only seriously affect Islamic banks but also the whole Islamic banking system in a country because their depositors share in the profit and loss. In country like Malaysia, there is no deposit insurance to cover the deposits. Excess liquidity could make Islamic banks less efficient because it is costly for banks to maintain.

Discussions among Islamic scholars like Dualeh (1998) and Thomas (2001) and economist like Archer (2002) on ABS show that they are aware that ABS could create opportunities to Islamic banks. Many conferences or seminars on this issue have been organised in order to seek possible solutions. However, the predominance of the cost plus (debt) based modes of financing in Islamic banks is a problem because of the difficulty in transforming them into negotiable financial instruments. Islamic banks must adhere to the shariah requirements. Furthermore, the shariah requirements are not the only problem; there is a technical issue to be considered by Islamic banks in ABS. These problems will be discussed in the Section 4.3 of this chapter after the analysis of assets of Islamic banks in the Section 4.2.3.

4.2.3 The Assets of an Islamic Bank

This section analyses the characteristics of the types of contracts used by Islamic banks in extending financing to their customers. The analysis of the characteristics is to determine their potential for being securitized and their title of ownership. Unlike conventional ABS where the assets to be securitized need to have a regular cash flow, Islamic ABS needs for the title of ownership to be transferred to the investors to reflect a true sale of assets. In Islamic ABS the whole securitization structure has to adhere to the shariah requirements and the shariah requires that the ownership of the assets must also be transferred to the investors and not only the cash flow

Islamic banks have various types of assets using various modes of financings. These contracts can be divided into 4 types of contract. They are; Al Mudarabah, Al Musyarakah (joint-venture), cost-plus (debt) based of financing and leasing. This section begins with the profit and loss type of assets of an Islamic bank.

4.2.3.1 Mudarabah Contract

In Mudarabah, the bank is the provider of the capital and will provide 100% financing for the project. The entrepreneur who initiates the project will manage the project. The bank does not have the right to interfere in the management of the project but can supervise. The ratio of distribution of profits generated from the project between the bank and the customer, if any, is determined before the project begins. If there is a loss, it is borne by the bank. The customer is not responsible for the losses unless it is found that the loss is as a result of the customer's negligence. Under this mode of financing the bank shares in the ownership of the asset with the customer. Therefore, the bank can transfer the ownership to the investors if such asset is to be securitized. However, assets under this mode of financing may appear to be an unsuitable candidate for securitization as there are no regular cash flows. There is also the risk of ex post information, which can lead to moral hazard. The financing facilities offered under this could be for project financing and trade financing (letter of credit).

4.2.3.2 Musyarakah (Joint-venture)

Under Musyarakah, the bank together with the customer(s) will provide the financing for the project in agreed proportions. The bank or the customer(s) has the option to participate in the management of the project. The ratio of distribution of profit is decided before the project begins. The ratio need not correspond with the ratio of participation in the financing of the project. In the event of a loss, the sharing of the loss will be in accordance to the share of financing each party has in the project. In this contract the Islamic bank has a percentage of ownership in the project that it is funding and in securitization, can transfer the ownership to the investors. However, like Mudarabah, this contract is risky, as return to the bank would depend on the profitability of the project or transaction. There are no regular cash flows and may appear to be unattractive to be securitized.

Project financing and letter of credit is issued using the Musyarakah contract. The customer informs the bank of his or her letter of credit requirement and negotiates the terms under this contract. The customer deposits his or her share of the cost of the goods imported. The bank establishes the letter of credit and pays the negotiating bank using its own money and the customer's money. The bank releases the goods to the customer and the customer disposes the goods as agreed in the agreement. The profit of this venture will be shared in accordance to the agreement.

4.2.3.3 Cost-Plus (Debt-based)

A cost-plus sale is a buy and sale contract. It is also known as a debt-based contract. Two contracts under cost-plus are used to extend financing. They are the Bai-Bithaman Ajil (BBA) or Deferred Instalment Sale and Murabahah or Deferred Lump Sale. Under this financing, an Islamic bank purchases an asset for a customer. The bank subsequently sells the asset to the customer for an agreed price that includes the original cost and the bank's profit margin. The customer with the agreement from the bank can defer the payment of the sale's price. Under BBA, the customer will settle the payment of the sale's price by instalments within a specified period of time. Under Murabahah, the customer will settle the payment of the sale's price on a deferred term from 30 days to 30 years.

The Deferred Instalment Sale is used to extend financing to customers who wish to purchase any asset like houses, cars, any landed properties, shares or any other assets. It is also used to extend term financing to corporate clients, personal financing to individuals, educational financing to individuals and financing for holiday packages. The Deferred Lump Sale is used in extending financing for working capital facilities or letter of credit facilities.

In a letter of credit facility issued under the contract of Murabahah, the customer informs the bank on the letter of credit requirements and requests the bank to purchase or import the goods. The customer indicates that he or she is willing to purchase the good on their arrival. The bank pays the negotiating bank and sells the goods to the customer at a sale price that includes the original cost and the bank's profit.

Financing under this contract provides a steady stream of cash flow because the amount of repayment is fixed throughout the period of financing in accordance to the agreement made between the bank and the customer. However, the ownership of assets under this mode of financing belongs to the customer, as this is a buy and sale contract. Once the customer purchases the asset, the ownership is transferred from the bank to the customer. This makes securitizing difficult as an Islamic bank does not own the assets and therefore cannot sell them.

4.2.3.4 Ijarah/Leasing

Under this contract, the bank will purchase the equipment identified by the customer under the principle of leasing (Ijarah). The bank that owns the equipment, then leases the equipment to the customer for a fixed period at a fixed amount agreed by both the bank and the customer. The type of financing under this contract would be for the purpose of purchasing plants and machinery, computers, fleet of cars or commercial vehicles or any appropriate assets. Leasing also provides a steady stream of cash flow because the rent paid by the lessee is fixed throughout the lease period. The bank owns the equipment and can transfer the ownership to investors. The facility can be at a fixed or floating rate. An asset under this mode of financing is suitable to be securitized as the cash flow is regular and Islamic bank can transfer the title of ownership to investors.

4.2.3.5 Summary

The above are the most widely used type of contracts for extending financing facilities to customers. The assets based on cost-plus (debt) shows that they have potential to be securitized as they have regular cash flows. However, there is the issue of ownership. Islamic bank does not own the asset and therefore cannot sell them to anybody. Assets using the contract of profit and loss sharing can be sold to a third party, as the Islamic bank owns them, however, due to a different structure; it resulted in the uncertainty of cash flow. This will not make them attractive to investors. The next section analyses the problems faced by Islamic banks in securitizing their assets as a result of these requirements.

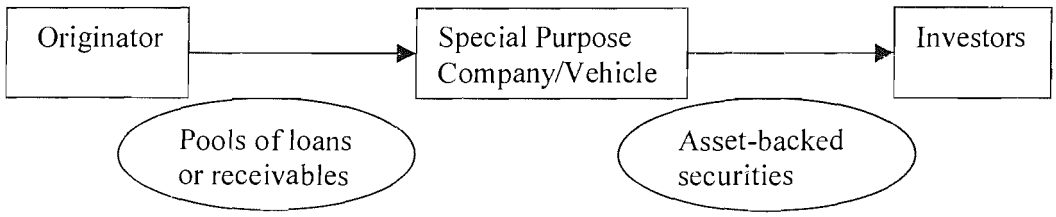
4.3 Problems in Islamic Securitization

This section analyses the two issues; the shariah and technical issues. The shariah issues encompass of the issues of ownership, the trading of debt, credit enhancement and rating that prevent the development of Islamic asset-backed securitization. This section begins with the most important issue of ownership.

4.3.1 Ownership of Assets

Islamic securitization is different from conventional securitization. In a conventional securitization, loans or receivables are pooled and sold to a special purpose vehicle (SPV). The SPV in turn issues one or more debt instruments or securities backed by the loans receivables and other enhancements like guarantee. These securities are then sold to interested investors. See Diagram 11:

Diagram 11: Conventional Asset-backed Securitization

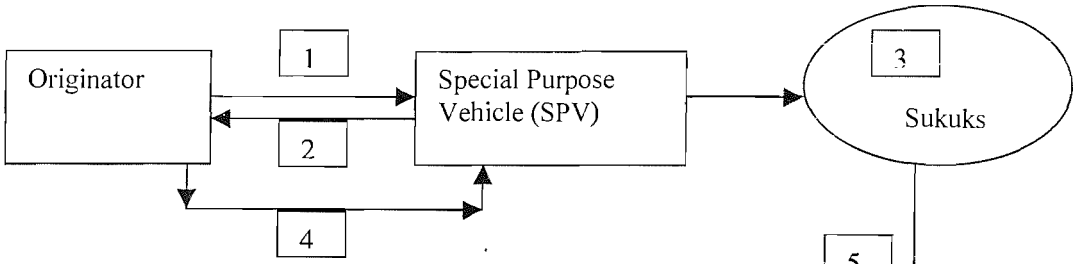


In an Islamic Securitization, the assets that are associated with the receivables must be sold to the SPV. This means that the originator (Islamic bank) must have the ownership title. The SPV securitizing the asset must be provided with the title of the assets to be securitized by the originator. The SPV will then issue notes to investors entitling them to the shares in the SPV. In practice, the ownerships of the SPV are stripped into pieces and distributed to investors. Otherwise, the transaction is considered as non-compliant to the Shariah requirements. That is where the problem of securitization of cost plus assets arises. Cost plus financing is a buy and sale transaction. The cash flows that are generated

from the cost plus financing are debt obligations. The bank only owns the right to the debts and debts cannot be traded, unless at face value as some jurists particularly from the middle- east see any profit created from the sale and purchase of a debt is riba (Rosly and Sanusi, 1999). The Shariah permits the selling of debt by its equivalent in quantity and time of maturity provided it is paid in full. This gives no benefit to the purchaser at all. There are no titles of ownership that can be transferred to the SPV that can be cut into pieces and sold to investors. The ownership of this type of assets lies in the hands of the borrower. The ownership of the title is transferred with sale of the asset. The asset belongs to the borrower (buyer) and not the bank. Therefore, Islamic banks cannot sell assets that are not rightfully theirs.

The securitization of assets based on the contract of leasing complies with the Islamic shariah requirements because the bank possesses the ownership title of the assets. The originator or bank will sell the assets that provide the streams of cash flow to the SPV. The SPV will purchase the assets; lease it under a back-to-back arrangement to the originator. The SPV will then issue Sukuks (notes) entitling the owners of the Sukuks to a pro-rata ownership of the SPV and also the right to receive a proportion of the rental payments. The Sukuk can be traded in the secondary market. At maturity, the SPV will sell the assets to the originator for a nominal amount. An example of the structure of Islamic securitization is illustrated in Diagram 12. From the diagram, the assets generating the income stream of rentals are actually sold to the SPV and the originator no longer has ownership rights to the assets and the income stream generated from the assets. Furthermore, investors actually have a share in the SPV. The ownership element is important for a securitization to comply with Shariah requirements. Firstly, there must be a legal transfer of ownership of the assets from originator to the SPV. Secondly, the investors shared ownership of the SPV. This shows investors participation in the investments therefore allowing them to share any risk and reward from the investments.

Diagram 12: Islamic Securitization on the principles of Ijara/Leasing



1. Originator sells assets to SPV

2. SPV pays the purchase price and leases back the asset to originator on a back to back arrangement

3. SPV creates a trust in respect of the assets and issues Sukuk. Sukuk-will be listed, rated and also approved by an internationally recognized Shariah Board. The Sukuk will be traded in the Secondary Market through appointed market makers

4. Originator pays annual rentals. Lease rentals can be fixed or floating, amortising or non-ammortising

5. SPV forwards the lease rentals to the Investors

6. At maturity the SPV will put the assets to the originator

Source: Adapted from HSBC Investment Bank, London, UK (2001)

4.3.2 Trading of Debt

The financing based on cost-plus or debt based mode of financing represents the highest percentage of financing in Islamic banks. According to Iqbal, 1997, around 75% of Islamic financial transactions are cost-plus sales. It is a sale contract negotiated between a buyer and a seller. The sale price can be paid in a lump sum or by instalment. The Islamic shariah restriction on the trading of debt is that assets based on the cost plus contract can only be traded at face value. They could not be traded at a discount. The discount can be construed as equivalent to interest being earned on the bond and it can be interpreted as guaranteeing the profit or fixing the profit. This means that there is no element of risk assumed by the investors. Therefore, there appears to be difficulty in the issuance of debt securities by the SPV, as they must be traded at face value.

4.3.3 Credit Enhancement

The rating given to the issuer of an ABS deal will also depend on the credit enhancement. In conventional ABS, a variety of internal and external credit enhancements are used to increase the likelihood that investors will receive the cash flow that they are entitled to. Examples of internal credit enhancements are over collateralization yield spread, senior/subordinated tranches and reserve fund. Examples of external credit enhancements are cash-collateral-account method, surety bonds, and third party guarantee or standby letter of credit. Conventional commercial banks for example, can provide two types of credit enhancements. One is a cash collateral account where a bank will make a loan to the SPV to absorb losses. A letter of credit is another form of bank's credit enhancement. It is a promise by a financial institution to provide loans to the SPV in the event of income shortfalls. An issuer may add credit enhancements to improve the rating of the securities issued.

The type of credit enhancement for Islamic ABS must adhere to the shariah requirement. Some of the credit enhancements available in conventional ABS may not be suitable in an Islamic ABS. For example, according to Archer (2002) again, credit enhancement in the form of guarantee is not permissible if guarantee is provided in return for a fee. Therefore, credit enhancement in the form of guarantee is out of the question. The type of

credit enhancement should have a form of risk sharing element in it. This is in adherence to the Islamic shariah requirements that investors are participating in the sharing of profit and loss of the activity.

4.3.4 Rating of Islamic Financial Institutions

The rating of the originator is important as it reflects the quality of pool of loans. The rating helps to reduce the originator's cost in the structuring of an ABS deal. Therefore, rating either of the originator or securities issued plays an important role in an asset-backed securitization structure.

This is where the problem lies. Yar Ahmed from BP Integrated Supply and Trading who has done several conventional securitizations feels that there is lack of asset quality in Islamic banks. He feels that an Islamic rating agency is needed to rate Islamic financial institutions, as only an Islamic rating agency understands the assets of Islamic financial institutions. As at July 2001, only a handful of Islamic financial institutions have been rated and with rating above BB. Please see Table 19.

Table 19: Rating of Islamic Banks/ Financial Institutions as at 31stJuly 2002.

Banks	Current Rating Long Term	Current Rating Short Term	Domestic Strength
BAHRAIN			
Albaraka Islamic Investment Bank	BB	A3	NA
Bahrain Islamic Bank	BB+	A3	BBB-
Shamil Bank of Bahrain	BB+	A3	BB+
JORDAN			
Jordan Islamic Bank of Finance	BB-	B	BB
KUWAIT			
Kuwait Finance House	A-	A2	BBB+
QATAR			
Qatar International Islamic Bank	BB+	A3	BB+
Qatar Islamic Bank	BB+	A3	BB+
UAE			

Dubai Islamic Bank	BB+	A3	BBB-
MALAYSIA			
Bank Islam	BB+	A3	BB+
PAKISTAN			
Faysal Bank	C	C	B-
PALESTINE			
Arab Islamic Bank	NA	NA	B

Source: Capital Intelligence (CI), Bank Analysis and Rating Service, Limassol, Cyprus, 2002

Sheikh Ebrahim, a chairman of the Board of Trustees, Accounting and Auditing Organization for Islamic Financial Institutions in his speech on the 1st of April 2000 suggests that rating of Islamic financial institutions is imperative. This is because if Islamic financial institutions want to participate in a secondary market both issuers and their instruments will need to be rated in terms of their inherent risks. This will help in the accurate pricing and active trading of the securities. A positive assessment from a rating agency can enhance the creditworthiness of Islamic banks and allowing Islamic banks to be competitive. It is important that rating agencies have a clear understanding of the transactions and the concepts of how the Islamic banks operate before analysis can be made. However, according to Sheikh Ebrahim, rating agencies have taken a varied approach when analyzing Islamic banks and as result the rating may be inconsistent. The failure to understand and appreciate the principles that govern Islamic banks will result in the inability to give a fair opinion when assigning a rating to an Islamic bank and its assets. The result of this is that the ABS deal will be unattractive to investors and not marketable.

4.3.5 Summary

The problems of structuring an Islamic asset-backed securitization have been discussed extensively in this section. The problems that have been identified are divided into two issues; they are the shariah and the technical issues. The shariah issues are the issue of ownership, trading of debt and credit enhancement. The technical issue is on the credit rating of Islamic banks.

The securitization of financing based on the contract of cost-plus that is debt-based mode of financing is a problem because of the issue of ownership and also the trading of debt that has to be at the face value. These problems can hinder the progress of ABS as this contract represents the highest percentage of financing in Islamic banking institutions. Around 75% of Islamic banking transactions are cost-plus (Iqbal, 1997). The next issue is on the credit rating of Islamic banks. Not many Islamic financial institutions are rated and this is not a good reflection of the Islamic banking system. The section also looks at the issue of choosing the suitable form of credit enhancement for an Islamic ABS. The form of credit enhancements must adhere to the shariah requirements.

The next section seeks to suggest possible ways forward in overcoming these major issues.

Section 4.4 Possible Solutions

This section proposes possible solutions to overcome the shariah issues and technical issues. The section begins with firstly, the issue of ownership, secondly, the trading of debt and thirdly credit enhancement. Finally, it analyses the technical issue on the rating of Islamic banks.

4.4.1 Issues on Shariah Requirements

4.4.1.1 Ownership of Asset

It has already been mentioned in section 4.3.1 that even though with regular cash flows, assets that are based on cost-plus (debt) mode of financing are difficult to securitize because Islamic banks do not have the ownerships of these assets. This is because once the asset is sold to the customer; the ownership is also transferred even though the customer may have not paid the entire purchase price. In addition to this, assets based on cost-plus (debt) mode of financing can only be traded at face value. They cannot be discounted.

In Islam there is a contract called Hawala. Hawala means 'transferring debt'. Islamic banks can use the contract of Hawala to transfer assets based on cost-plus to another party thus overcoming the problem of the ownership of asset. The rules of Hawala works as below (www.al-islam.org/laws/transactions3)

2390. If a debtor directs his creditor to collect his debt from the third person, and the creditor accepts the arrangement, the third person will, on completion of all the conditions to be explained later, become the debtor. Thereafter, this creditor cannot demand his debt from the first debtor.
2391. The debtor, the creditor and the person to whom collection is referred, should be adult and sane, none should have coerced them, and they should not be feeble-minded, that is, those who squander their wealth. Also, if a bankrupt person is barred from the right of discretion over his property by a fully competent Mujtahid, cannot be asked to get

his debt from others and others cannot transfer their debt to him, but he may transfer his debt to a person who does not owe him anything.

2392. As an obligatory precaution, transferring the debt to a person who is not a debtor will not be correct, unless he accepts it. And if a person wishes to affect a transfer to a debtor for a commodity other than that for which he is indebted (for example, if he transfers the debt of wheat while he is indebted to him for barley), the transfer will not be in order, unless he accepts it.

2393. It is necessary that a person should actually be a debtor at the time he transfers the debt. Therefore, if he intends taking a loan from some one, he cannot transfer the prospective debt in advance to another party, telling the would-be creditor to collect the debt from the party.

2394. The debtor must specify exactly the category and the quantity of the debt he transfers to another party. For example, if his debt comprises of ten kilos of wheat and 10 dollars owned to one person, and he tells him to go and collect either of the two debts from a certain party, that transfer will not be valid.

2395. If the debt is fully identified, but the debtor and creditor do not know its quantity and category at the time of assigning the transfer, the transaction is in order. For example, if a person who has recorded the debt he owes to someone in his books, assigns a Hawala or transfer of debt before referring to the books, and later, after consulting his record, informs the creditors about the quantity of his debt, transfer is in order.

2396. The creditor may decline to accept the transfer of debt, although the person in whose name the assignment has been given may be rich, and may not fail to honor the Hawala.

2397. If a person accepting the Hawala is not a debtor to the person giving the Hawala, he can demand the amount of the Hawala from the person who gave it, before honoring the Hawala. And if the creditor compromises for a lesser amount, the person honoring the Hawala should demand only that sum which he has paid.

2398. When the conditions of the transfer of debt or Hawala have been fulfilled, the person affecting the Hawala and the person receiving it cannot cancel the Hawala, and if the person receiving the Hawala was not poor at the time the Hawala was issued, the creditor cannot cancel the Hawala, even if the recipient becomes poor afterwards. The same will apply if the recipient of the Hawala was poor at the time it was issued, and the creditor knew about it. But if the creditor did not know that the person to whom the Hawala has been issued is poor, and when he comes to know of it, the recipient is still

poor, then the creditor can abrogate the Hawala transaction, and demand his money from the debtor himself. But if the recipient of Hawala has turned rich, then canceling Hawala cannot be substantiated.
2399. If the debtor, the creditor, and the person to whom the Hawala is assigned agree among themselves that all of them or any one of them has a right to cancel the Hawala, they can do so in accordance with the clause of the agreement.
2400. If the person issuing a Hawala pays the creditor himself, at the request of the person in whose name the Hawala was issued, who was also his debtor, he can claim from the recipient of Hawala what he has paid. And if he has paid without his request, or if he was not his debtor, he cannot demand from him what he has paid.

Currently, the contract of hawala is used in a bill of exchange. A cheque issuance by a customer against his or her balance in a bank is a hawala transaction. A cheque issued by a customer against an account without balance (overdraft) may be catagorised as hawala transaction even if the payer is not a debtor to the transferor provided that the payer accepts to pay.

The using of Hawala in an asset backed securitization for cost plus assets can be implemented as below:

1.In line with the rule 2390 of Hawala, the debts of the borrowers' of an Islamic bank will be transferred to a third body, the SPV. However, this does not mean that the borrower will be taken of their duties to pay back their debts. As the SPV is not a debtor to the borrowers, the SPV will demand the borrowers to continue paying their debts to the bank (see 2397 of rules of Hawala). The bank acts as an agent for the SPV in collecting the debts from the borrower and giving them to the SPV at a fixed period of time like every three months for example. (The legal documentation of the ABS is however not the main issue in this chapter)

2. Since the debts of the borrowers have been transferred to the SPV, the SPV now pays the debts of the borrowers to the bank. However, since the SPV settles the debt of the borrowers earlier than the bank expected, the bank will reward the SPV by allowing the SPV to pay only a certain amount. For example, if the total of the debt is RM100 million, the bank could ask the SPV to pay only RM80 million instead. The

difference of RM20 million is as a reward to the SPV for paying the debt earlier and for sharing in the risk of non-payment of the debt of some borrowers. Some jurists find this discounting as riba because the shariah permits the selling of debt by its equivalent in quantity and time of maturity. Chapra and Khan (2000) challenged this by explaining that the debt is created by the Murabaha (cost plus) mode of financing and the price includes the profit on transaction and not ineterst. When the bank sells a debt instrument at a discount, the bank is relinquishing its share in the profit and the buyer is getting a share in the profit and not the interest. (This is further explained in 4.4.3).

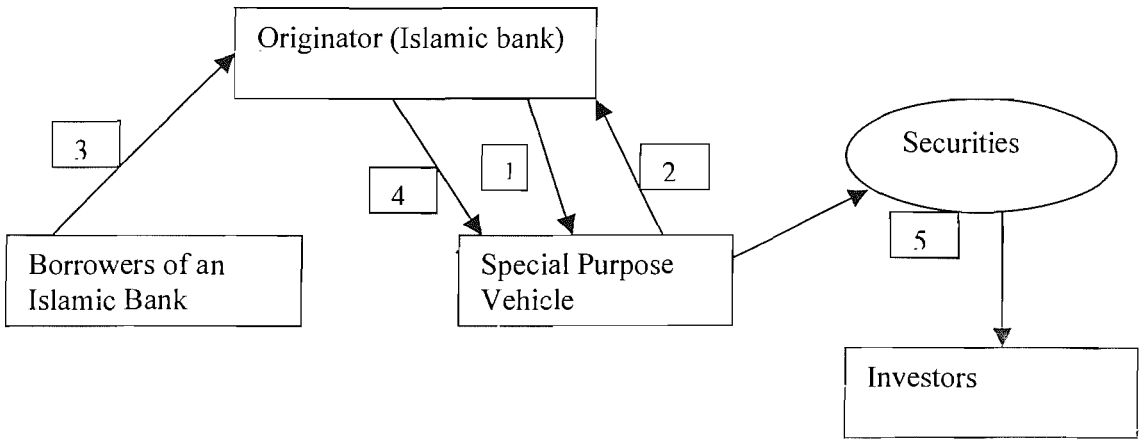
3.The SPV will then issue mudarabah (profit and loss sharing) securities and interested investors amounting the value that is needed to pay to the bank. For example RM 80 million as earlier explained in paragraph 2. Interested investors could purchase these notes. These notes represent the participation of the investors in the shareholding of the SPV.

4. In the Hawala there is a requirement that all parties involves in the transaction should not be a bankrupt. If any of the party is bankrupt, debt cannot be transferred to him or her and he cannot ask others to get his debts from some one else but he can transfer his debt to others. In relation to the securitization structure, the SPV must be bankruptcy remote. Otherwise, debt cannot be transferred to it. This coincides with the requirement that an SPV should be a bankruptcy remote entity. This requirement also ensures that the pool of loans must be of a good quality.

5. The bank collects and pays periodic instalment of RM100 million owed by the borrowers to the SPV. The SPV will then forward them to the investors. The RM20 million is the profit that the investors will make for the investing in the SPV.

The operation of this is illustrated in Diagram 13.

Diagram 13: Structure of an Islamic Asset- Backed Securitization for Debt-based Mode of Assets Using Hawala



1. The borrower's debts are transferred to SPV using HAWALA arranged by the bank as originator

2. SPV accepts the debt and pays the bank the debts of the borrower

3. Since the SPV is not a debtor to the borrowers, the borrowers continue paying the bank instalments of their debts as the SPV is not indebted to the borrowers. The bank will monitor the servicing of the debts on behalf of the SPV. The bank can charge the SPV a fee for this.

4. The Islamic bank will forward the payment of debts to the SPV

5. The SPV then issues securities of itself. The securities will be rated and also approved by an internationally recognized Shariah Board. The securities will be traded in the Secondary Market through appointed market makers. At maturity the SPV will be abolished

4.4.1.2 Trading of debt

As mentioned in section 4.3.2, trading debt at must be at face value. In diagram 13, the SPV issues zero coupon securities to investors. The discount offered by Islamic bank to the SPV for paying of its debts earlier should be looked the bank's relinquishing some of its share in profit in the contract. Chapra and Khan (2000) argue that the selling price under the Murabaha contract includes the profit on the transaction. Therefore, when the bank sells debt at a discount, the bank is actually relinquishing its share in the profit.

Another reason for discounting can be the fact that there is immediate payment of the debt thus discharging the debtor from liability and earlier recovery of the debt. Both parties benefit from the transaction without any loss or damage. This is different than interest that is prohibited because it is damaging the debtor who has to suffer losses from the interest. In a hadith[21] narrated by Ibn Abbas, that when the Nadhir tribe was ordered to leave Medina (for violation of a peace treaty), they approached the Prophet (pbuh) and said: O messenger of God, you have ordered your people to expatriate us and we have debts against some people that are yet to fall due. The Prophet (pbuh) said: **discount the debts for payment**[22] . Ibn Abbas was asked about a creditor whose debt is yet to fall due and he suggested a discount to the debtor for immediate payment. Some of the Muslim jurists including some of the school of jurisprudence[23] do not allow it. The majority of the Muslim jurists do not accept this hadith as authentic and this hadith is considered as a weak narration. However, in Malaysia, where the Shafi School of jurisprudence is practiced, there is acceptance of securitised Murabaha-based assets. Most of the Islamic debt papers issued to date have been based on the principles of murabahah and Bai Bithaman Ajil.

[21] Words from the Prophet (pbuh)
[22] Many hadith reporters report this hadith. However some scholars classify this hadith as weak due to Muslim ibn Khalid who is in the chain of the hadith, nevertheless Muslim is trustworthy and a reliable jurist as Imam Shafii has reported hadiths through him and regard his view as authoritative.
[23] There are four well-known schools of Islamic jurisprudence, namely Hanafi, Maliki, Shafi and Hanbali.

4.4.1.3 Credit enhancement

Credit enhancement is provided in order to increase the marketability of an asset backed securitization. The types of credit enhancement in conventional ABS can be divided into:

1. external enhancements
2. internal enhancements

Examples of external enhancements are; cash-collateral-account method, currency exchange agreement, direct credit substitution, guarantee, guaranteed investment contract, insurance, standby letter of credit and swap arrangement. Examples of internal enhancements are overcollateralisation of the loan pool method, senior/subordinated structure (tranches) method and spread account.

The type credit enhancement offered must comply with the shariah requirements. Interest is strictly prohibited and return or fixed return cannot be guaranteed. There must be an element of the sharing of risk in return for a gain.

The type of credit enhancement must show that there is some form of sharing in the profit and loss of the securitization structure. A credit enhancement that acts as a form of guarantee for investment made by investors would not be appropriate as there is no form of risk in their investments. Their profits in the investments are guaranteed. A cash collateral account method whereby a loan is made to the SPV by the originator or a specific amount of liquidity is put aside in an account may not be appropriate, as this resembles a guaranteed. Clearly, credit enhancement in the form of a guarantee, either conditional or unconditional guarantee by the originator or third party of the performance of the asset is also not suitable for an Islamic securitization as it is clearly stated that it is a guarantee. A standby letter of credit where a financial institution promises to provide the SPV with a loan in the event of income shortfall may not be appropriate as this will reflect that there is no sharing of loss by the investors. A guaranteed investment contract where a financial institution in example a bank or an insurance company guarantees a fixed return on any funds invested by the SPV is also not appropriate for Islamic ABS.

Based on the shariah requirement of profit and loss sharing, the most suitable form of credit enhancement where the investors can actually participate in the sharing of profit and loss would be insurance. In Islam, insurance is seen as a mutual help. Islamic jurists acknowledge insurance as shared responsibility. The concept of insurance is acceptable in Islam because;

- *the policy holders would cooperate among themselves for their common good;*
- *every policyholder would pay his subscription in order to assist those of them who need assistance;*
- *it falls under the donation contract which is intended to divide losses and spread liability according to the community pooling system;*
- *the element of uncertainty will be eliminated insofar as subscription and compensation are concerned;*
- *it does not aim at deriving advantage at the cost of other individuals.*

Source: BIMB Institute of Research and Training Sdn.Bhd., 1996

The contract of Islamic insurance is based on the Islamic profit-sharing principle. By this principle, the entrepreneur will accept payment of the insurance instalments or contributions from investors. The contract specifies how the profit from operations of the insurance managed by the insurance operator is to be shared, in accordance with the principle of profit sharing between the participants. In Islamic insurance, the participant shall agree to relinquish certain proportion of his insurance instalments or contributions that he agrees to pay should any of his fellow participants suffer a defined loss. This way, the participant is fulfilling his obligation of mutual help and joint guarantee, helping other participants who might suffer loss or damage due to catastrophe or disaster.

Insurance would be the best form of credit enhancer for Islamic ABS as it is acceptable to Islamic practices.

4.4.2 Technical Issue

4.4.2.1 Credit Rating

Credit rating is important in a securitization structure. Credit rating sets a defined standard that investors understand and accept (Baron, 2000). The rating says that credit enhancements are appropriate and that investment decisions can be made on whether or not to purchase the security. Markets where credit ratings are absent found that it can affect the price and marketability of new issues and unrated issuers of debt may find limited based of investors. Reiter and Zeibart (1991), Ederington, Yawed and Roberts (1987) and Liu and Thakor (1984) suggest that ratings bring more information to the marketplace than publicly available financial information. Hsueh and Kidwell (1988) suggest that issuers can resolve the asymmetric information problems by using credit ratings to signal the market on the credit quality of their bonds.

According to Tran (2002) the identity of the originator and its operational procedures are key questions that are asked because the originator's skill in selecting, sizing and pricing the assets, its past experience and why it wants to sell its assets are important. The servicing quality of the assets is also important because cash flows of assets can deteriorate if commitments are not met. There must be disclosure and transparency in the setting up of the SPV as well.

The requirements above are all the necessary requirements for rating to be made possible.

It is actually not compulsory for ABS to be rated to especially if they are being sold to private investors and not issued on a primary market. However, in practice selling securities without a rating would be very difficult. There is no law or regulatory rule that says that these types of securities have to be rated. Issuer will have to pay a higher cost because investors do not have confidence in the rating. The same law also applies to the rating of the originator. It is also not compulsory for the originator to be rated but if an originator has no rating it will incur higher costs. For example, a bank that has a low credit rating (say single B) can through the use of credit enhancements issue AB securities that are rated triple A. The lower the originator's rating is, the higher is the associated costs with the issue (either a higher spread will have to be offered or more

costly credit enhancements will have to be used). Therefore, the rating of a bank can lower the cost of the securities.

In rating the issue of the ABS, the analysis of the assets is the starting point for an ABS deal. Historical data on the loan are needed to analyse the frequency of defaults and foreclosures (Baron, 2000). The rating agency analyses the characteristics of loans in the pool. How much money will be recovered if foreclosure takes place? How severe would the size of losses be? How many loans will default? Where are these loans located? These questions all relate to the bank as the originator. The rating of the securities looks at the quality of the originator. What sort of loans does the originator have? What risk management policy does it use? How does it manage its non-performing loans? How is the policy on recovery of non-performing loans? All these will determine the quality of the pool of loans.

Rating agencies have their own way of issuing a rating. For example, Moody's Bank Financial Strength Ratings (BFSRs) represent Moody's opinion of a bank's intrinsic safety and soundness and, as such, exclude certain external credit risks and credit support elements that are addressed by Moody's Bank Deposit Ratings (Moody's Investors Service, www.moodys.com). In addition to commercial banks, Moody's BFSRs may also be assigned to other types of financial institutions such as multilateral development banks, government-sponsored financial institutions and national development financial institutions. Bank Financial Strength Ratings do not address the probability of timely payment. Instead, Bank Financial Strength Ratings can be understood as a measure of the likelihood that a bank will require assistance from third parties such as its owners, its industry group, or official institutions.

Moody's BFSRs do not take into account the probability that the bank will receive such external support, nor do they address risks arising from sovereign actions that may interfere with a bank's ability to honour its domestic or foreign currency obligations.

Factors considered in the assignment of Moody's BFSRs include bank-specific elements such as financial fundamentals, franchise value, and business and asset diversification. Although Moody's BFSRs exclude the external factors specified above, they do take into account other risk factors in the bank's operating environment, including the strength and

prospective performance of the economy, as well as the structure and relative fragility of the financial system, and the quality of banking regulation and supervision.

The definitions for Moody's Bank Financial Strength Ratings employ the alphabetic notation **A** through **E** as well as the symbols + and – to indicate gradation. Table 20 shows the rating in alphabetical order.

Table 20: Moody's Bank Financial Strength Ratings

A	Banks rated **A** possess superior intrinsic financial strength. Typically, they will be institutions with highly valuable and defensible business franchises, strong financial fundamentals, and a very predictable and stable operating environment.
B	Banks rated **B** possess strong intrinsic financial strength. Typically, they will be institutions with valuable and defensible business franchises, good financial fundamentals, and a predictable and stable operating environment.
C	Banks rated **C** possess adequate intrinsic financial strength. Typically, they will be institutions with more limited but still valuable business franchises. These banks will display either acceptable financial fundamentals within a predictable and stable operating environment, or good financial fundamentals within a less predictable and stable operating environment.
D	Banks rated **D** display modest intrinsic financial strength, potentially requiring some outside support at times. Such institutions may be limited by one or more of the following factors: a weak business franchise; financial fundamentals that are deficient in one or more respects; or an unpredictable and unstable operating environment.
E	Banks rated **E** display very modest intrinsic financial strength, with a higher likelihood of periodic outside support or an eventual need for outside assistance. Such institutions may be limited by one or more of the following factors: a weak and limited business franchise; financial fundamentals that are materially deficient in one or more respects;

	or a highly unpredictable or unstable operating environment.
Intermediate Categories	Where appropriate, a "+" modifier will be appended to ratings below the **"A"** category and a "-" modifier will be appended to ratings above the **"E"** category to distinguish those banks that fall in intermediate categories.

Source: Moody's Investors Service, 2003

According to Hassoune, Volland and Al-Yousouf (2002) the problem with rating Islamic banks is that compared to non-Islamic banks it is difficult to judge whether an Islamic bank's asset portfolio is of higher or lower quality than that of the non-Islamic banks. This is due to the limited disclosure relating to asset quality. This hampers the comparison. Furthermore, in the case of impaired financing, financial instruments like mudaraba and musyarakah can only be assessed at the end of a contract. According to Standard and Poor's, Islamic financial institutions have a weak track record of high, consistent and exhaustive financial disclosure. This view is shared by Willis (2000, www.gtnews.com) who suggests that Islamic banks will need to provide a far greater level of transparency because so far they have done very little to provide a clear picture of their general activities, asset quality or management policies. Furthermore, rating agencies are concerned with the asset quality.

Recurrent weaknesses in disclosure relate to volumes of non-performing assets, internal classification rules concerning impaired assets, provisioning policies, and the breakdown of deposits between savings accounts and investment accounts and capital adequacy ratio. Also, information provided to investors regarding these issues is generally insufficient, while there remain large differences between Islamic financial institutions in terms of practices and disclosure. This statement is in parallel to Chapter 3 of the thesis. The analysis in Chapter 3 finds that there is a problem of inadequate disclosure and lack of measurement and management of non-performing loans in Islamic banks. The problems in rating Islamic financial institutions only add to the importance of an appropriate policy of measurement and management of non-performing loans for Islamic banks and

adequate information disclosure in an Islamic bank. Therefore the problem of rating actually lies in the Islamic financial institutions themselves. If they can be transparent by making adequate disclosures then there should be no problem in rating Islamic financial institutions.

The suggestion that an Islamic rating agency should be established because current rating agencies have taken a varied approach in analyzing Islamic financial institutions resulting in inconsistent rating is arguable. International rating agency for example Moody's has made an effort of understanding the operations of Islamic financial institutions (Cunningham, 2000). Moody's are aware that the instruments they used are different from interest-based bank. Fitch IBCA rating agency is also coming up with their rating of Islamic financial institutions. In conclusion, international rating agencies are making an effort to understand the operations of Islamic banks.

If Islamic banks can disclose the quality of its assets, its policy on the risk management and its policy on non-performing assets, then there would be no problem of getting a good rating. Disclosure is very important, as it is a source of information for public. Information that includes the management policies, risk exposures and risk management practices helps to enhance the transparency and efficiency of the financial markets thus promoting a greater stability to the financial systems of any country. Disclosure of credit risk, market risk, liquidity risk helps investors and other parties to assess the risk and the return of their investments should they be interested to purchase the securities.

4.5 Conclusion

The Islamic banking system involves some sharing or distribution of risk in the operation of an Islamic bank. Understandably, this would require Islamic banks to have a conducive and supportive environment in the form of jurisdiction and framework that facilitate the development of appropriate systems. There should be development that can help Islamic banks to improve their position in the banking system. There is tough competition from conventional banks that have experience and technology on their side. The conventional banks are finding it easier to provide the same products as Islamic banks. Islamic banks should meet this challenge through product innovation and liquidity management. Banks and financial markets are becoming more sophisticated and competitive and Islamic

banks must exploit this opportunity. Asset-backed securitization is an important development for banks. More illiquid loans can be transformed into securities that are liquid. However, shariah rules must also be observed.

As mentioned in the introduction, like conventional banks, Islamic banks are also exposed to banking risks especially credit risks. They are also subject to capital adequacy ratio and reserve requirements by regulatory bodies. Most importantly, their special characteristics whereby the principle of profit and loss sharing is used in their relationship between depositors and in extending financings makes them more vulnerable to losses therefore making risk management very important in Islamic banks. Islamic banks also face the problem of non-performing loans that can affect their performance. In addition, Islamic banks have been facing a liquidity issue that is created by the mismatch of deposits tenure and financing tenure. There is either surplus idle cash position to be invested or shortage cash position to be funded immediately. The limited tools in liquidity management in Islamic banks make them vulnerable. The predominance of debt-based financial modes is a weakness as it is difficult to transform these into negotiable financial instruments.

ABS has offered a way for conventional banks to overcome the issues above. Islamic banks on the other hand have had some problems in implementing Islamic securitization. The issues of ownership, trading of debt, credit enhancement and rating of Islamic bank has impeded the development of Islamic securitization. Several scholars like Dualeh (1998), Thomas (2001) have highlighted the potential of Islamic ABS without analyzing the issues that might arise from the structuring of the ABS. This chapter analyses the problems in implementing the Islamic ABS and also suggests solutions to overcome the problems in structuring Islamic ABS.

The issuance of $500 million floating rate sukuk by Islamic Development Bank (IDB) is a major leap in Islamic banking development as the assets are of Ijara contracts and instalment payments under the Murabaha and Istisna contracts. The sukuk is AAA rated and was oversubscribed of $780 million that it had to be closed quickly as orders were still coming in. The sukuk are a ring-fenced portfolio of IDB assets. They are separated from other assets of the bank's multilateral assets. The assets consist of not less than 30% of its total value, assets under the Ijara contracts with rentals consisting of the unamortized portion of the acquisition with fixed or variable profit portion. In addition to

this assets, instalment payments under Murabaha and Istisna contracts that IDB has entered into with some of its clients also forms part of the assets. The IDB also retains the risk of default on the sukuk assets whereby it acts as a liquidity provider to cover costs and expenses and periodic distribution payments to sukuk holders.

The problem of ownership can be overcome using the principles of Islam itself. The assets based on the cost plus (debt) mode of financing can be securitized using hawala. Hawala was used when the Prophet (pbuh) was alive and should not be an issue. The discounting of the value of debt should not be likened to interest. Instead it should be likened to capital appreciation. Furthermore, the practice of discounting was also implemented during the time of the Prophet (pbuh). The issue of credit rating can be overcome if Islamic banks practice adequate disclosure. This would enable rating agencies to rate Islamic banks fairly. As for credit enhancements, insurance appears to be the most appropriate as credit enhancement should also be in the form of sharing of risk between the investors and another party. Given these, Islamic securitization can play a role in the development of Islamic banking system in the future.

CHAPTER 5

CONCLUSION

A stable and efficient banking system is very important in ensuring the survival of banking institutions. In an environment where Islamic banks compete with conventional banks, it is of crucial importance for Islamic banks to overcome issues that can impede its development. Therefore, the objective of this thesis is to evaluate and analyse 3 main issues that are important to the development and survival of modern Islamic banking. The first issue is the problem in extending financing under the Mudarabah mode of financing. The second issue is on the measurement and management of non- performing loans in Islamic banks in Malaysia as compared to conventional banks in the United Kingdom and what lessons can be learned from the financial crisis in Japan. The third issue is on the potential of asset-backed securitization as a tool for obtaining funds and managing risk in modern Islamic banking.

The thesis shows that the problem in extending the Mudarabah mode of financing can be overcome by penalizing the entrepreneur if he or she is found to be shirking. It suggests the form of penalty that can be implemented in order to push the effort of the entrepreneur. The thesis also shows that the measurement and management of non-performing loans in Islamic banks in Malaysia are quite lenient as compared to those of conventional banks in the UK and Japan. Finally, the thesis suggests that Islamic ABS is the solution for Islamic banks in obtaining funds and managing their risk.

The International Associations of Islamic Banks (IAIB), suggests that the duty of Islamic banks is towards the society (IAIB, 1990). This can be achieved by extending financing to those in need (those who has no collateral but has the knowledge) using the PLS mode of financing. However, the Mudarabah mode of financing is vulnerable to incentive problems. The Mudarabah mode is seen as impractical because of the moral hazard problem. In Chapter 1, it is shown that the problem in executing the Mudarabah mode of financing due to moral hazard can be reduced by introducing penalty. Bankers shy away from this mode of financing. An entrepreneur comes to an Islamic bank with forecasted cash flows that promise good return. However, the scenario could change when financing is extended to the entrepreneur. The return of the money invested by an Islamic bank is

lower than the forecasted return. The Mudarabah mode of financing is quite similar to the sharecropping contract in the agrarian society. The problem of moral hazard is also found in the sharecropping contract. Both banker and landlord face the problem whereby an entrepreneur or tenant may provide less effort, under report or over-indulged in personal spending. The objective of an Islamic bank is to get the return as reflected in the forecasted financial statement or higher as it has to responsibilities to give returns to its depositors who invested in the bank. The way to push the entrepreneur to put the required effort is by monitoring and penalizing the entrepreneur. This is shown in Chapter 1, whereby using the model of sharecropping and incorporating penalty into the model shows that the effort of the entrepreneur can be controlled. Several forms of penalty are suggested in the chapter.

In Chapter 2, the policy on the management and measurement of non-performing loans in Malaysia is analysed and compared with the policy in conventional banks in the UK and Japan. The fact that the agreement between the depositors and an Islamic bank is using the PLS mode, warrants a good measurement and management of non-performing loans of an Islamic banks. Unlike depositors in conventional banks, depositors in an Islamic bank are not protected by a guarantee on their amount of deposits. Therefore, information disclosure to the depositors is very important in an Islamic banking system because of the risk sharing characteristics and the absence of protection. A comparison was made on the policy of measurement and management of non-performing loans of an Islamic bank in Malaysia and those of conventional banks in the United Kingdom and the forbearance policy of banks in Japan. The chapter looks at the definition of non-performing loans, loss provision, taxation, valuation of security and level of disclosure. The findings are that the measurement and management on non-performing loans in Islamic bank in Malaysia is lenient. The definition of non-performing loans is stricter in the United Kingdom and Japan after the country changes its policy. The policy on loss provision in each country also defers. While Malaysia has a standard policy on loss provision, the United Kingdom gives freedom to its banks in the United Kingdom. Japan's policy on loss provision changes after the financial cirisis. The provisions are now based on self-assessment of the loan portfolio using the Tracing Method.

A for the level of disclosure of non-performing loans in the financial statements of Islamic banks in Malaysia, they are limited to the past 12 months and there is no

breakdown of non-performing loans. They are not analysed by either the type of loans or customers. The depositors, share very little knowledge of non-performing loans faced by the bank. This could endanger not only the Islamic banking system but also the whole financial system if there is a run. Even rumors are enough to liquidate a bank. Transparency in disclosing non-performing loans would help to promote a healthy banking system, as banks would be disciplined in their activities so as to protect depositors. Public disclosure of information about a bank's policy and its objectives would enable depositors to monitor bank's performance. In an Islamic banking framework, depositors have more incentives to monitor bank's performance as their investments are not fixed and guaranteed by banks.

Islamic banking system involves some sharing or distribution of risk with its depositors. Like conventional banks Islamic banks are exposed to banking risks like liquidity risk, credit risk, non-performing loans and market risk. Islamic banks must also adhere to regulatory requirements. At the same time, Islamic banks have to compete with conventional banks that have the advantage of using modern techniques in managing their risks. The asset-backed securitization (ABS) is a new and innovative method used for obtaining funds and managing risk. Chapter 4 explains ABS can also be used to help Islamic banks but shariah requirements and technical issues have limited its usage in the Islamic banking system. Unlike conventional ABS where the receivables can be packaged and securitised, there must be an element of ownership in the assets to be securitized. Islamic banks cannot sell assets that are not rightfully theirs. Furthermore, debts cannot be traded. Therefore, cash flow generated from the cost plus mode of financing based on the mode of cost plus could not be securitised, as Islamic banks only own the right to the debts and not the assets that generate the cash flow. The type of credit enhancement in an Islamic ABS must also adhere to the shariah requirements. There must be form of risk sharing element in it. Then there is the technical issue of rating. The rating of an originator is important in an ABS as it reflects the quality of the loans. However, rating agencies have varied approach when analyzing Islamic banks and as result the rating may be inconsistent. Chapter 4 suggests the potential of ABS as an important tool for Islamic banks to address its problem of managing its risks. The hindrance caused by shariah requirements is addressed using the hawala contract where Islamic banks can transfer the cash flow from the debt to another party (special purpose vehicle). The special purpose vehicle will then issue shares in its company for investors to buy. The issue of rating

would depend on the willingness to disclose the quality of its assets, policy on non-performing loans and risk management techniques. Rating agencies found recurrent weakness in disclosing volumes of non-performing loans, classification rules concerning impaired assets, provisioning policies and the breakdown of deposits between savings accounts and investment accounts and capital adequacy ratio.

The continued growth of Islamic banking will depend on its efficiency and its competitiveness with conventional banks. A prudent supervision, good accounting disclosure regime and institutional market development are important to help the development of Islamic banks. These will help them to introduce more profit and loss sharing financing that has been described by Islamic economists as the ideal mode of financing. Depositors of Islamic banks are like shareholders but with no voting power. They are entitled to a share of the bank's profit but if the bank incurs a loss, the depositors will receive a negative rate of return. As such appropriate measurement and management of non-performing loans are important for Islamic banks. This can avoid extensive erosion of investment deposits in the event of losses, which can lead to liquidity crisis against which Islamic banks may be less prepared for as compared to conventional banks. Islamic banks are expanding and they need to strengthen themselves by developing risk-hedging instruments and techniques that can help them reduce their risks and at the same time be competitive. Islamic banks could benefit from Islamic ABS. ABS has the ability to encourage the growth of Islamic banks, attain off-balance sheet treatment and therefore improving return on asset. It is also a mean to get funding for the Islamic bank. Islamic investors and depositors are seeking for innovative financial instruments that are Shariah compliant issued by institutions with proper credit ratings. These financial instruments should be able to be traded in accordance with the market practices.

Suitable information disclosure is an important element in an Islamic banking environment. This is because Islamic banks work in a risk sharing principle. The deposits of depositors of an Islamic bank are not protected. Depositors of an Islamic bank should have the incentive to monitor the bank, as their return of investments would depend on the performance of the Islamic bank. The financing through PLS and other mode of financing adds complexity and unique form of risks that needs to be monitored and

managed. A poor management and measurement of non-performing loans would expose the Islamic bank to closure.

The three issues that have been raised are important for the development of Islamic banks. In order for Islamic banks to expand efficiently and to continue it existence in the banking system, they need to address these three issues of the Mudarabah mode of financing, the measurement and management of non-performing loans and the potential of Islamic ABS.

The limitation to this study is that it is difficult to obtain the latest information on Islamic banking activities.

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