# CHAPTER 2

The chapter reviews previous literature and article that motivates and support this study in investigating effect of credit crunch on the banking industry with regards to risk exposure of bank failure. The chapter starts with the emergence of the crisis and progresses on to adoption of leverage ratio, gross revenue ratio, return on assets ratio and return on equity ratio used as indicators of bank failures in the short term i.e 1-2 year period. Finally, the summary of the literature review is presented.

## 2.1 Global Financial Crisis

The crisis emerged with problems in the US subprime housing market induced by the rising mortgage default rates which was detected early was self-reinforcing. High loan-to-market value ratios coupled with the crumbling prices eliminated the equity of many householders in their properties which led to further delinquencies and snow balled to further deteriorating house prices inducing more defaults. As a chain reaction property values crept downwards and adversely impacted securities backed by subprime mortgages.

The rating agencies commenced steadily downgrading structured products from 2007 including securities they had originally rated Triple A as pointed out by Brunnermeier, 2009, Coval et al., 2009. The negative revision of credit ratings depressed the values of Mortgaged Backed Securities further.

Subsequently, credit spreads, the difference between the returns on risky assets and the risk free rate, began to widen in July 2007. Cecchetti, 2009 indicated that investors in mortgage-backed assets, including banks, were about to suffer vast losses.

The declining prices for mortgage-linked securities further raised doubts about structured products as pointed out by Coval et al., 2009. As a result, banks losses reduced their capital curbing lending activities leading to a credit crunch.

However, in Malaysia the housing market surged by 20 to 30 percent of the market values in the last year especially in Klang Valley areas arising from the low mortgage rate war between banks. Other factors that contributed to the surge was the relaxed investment policies whereby Foreigners will not be required to get the FIC's approval before buying property in Malaysia, either residential or commercial. In January 2011 Bank Negara Malaysia has intervened by allowing 70% financing for purchase of third property. Banks have also retracted from interest rate wars to ensure pricing compensates risk.

The research on bank failures focused on finding models to predict bankruptcies and started with the seminal works of Beaver (1966) and Altman (1968). This was followed by several studies like Blum (1974), Altman et al. (1977), Martin (1977), Zavgren (1985), Jones (1987), Altman et al. (1994) which focused on developing models for corporate bankruptcies. Research done by Meyer and Pifer (1970), Sinkey (1975), Santomero and Vinso (1977), Korobow and Stuhr (1985), West (1985), Espahbodi (1991), Thomson (1991)

and Kolari et al. (2002) on bank failures shows that the models designed are effective in predicting bankruptcies.

Poor asset quality and low capital ratios are two characteristics consistently associated with the failed banks. Wheelock and Wilson (2000) stressed that banks with relatively illiquid low-quality assets or little capital are more likely to fail resulting from excessive risk taking and inefficiency in managing operations.

Problems closely related to bank failure prediction include bankruptcy prediction as mentioned by Altman, Marco, & Varetto, 1994; Anandarajan, Lee, & Anandarajan, 2001; Bryant, 1997; Mckee, 2000; Nanda & Pendharkar, 2001; OLeary, 1998; Pompe & Bilderbeek, 2005

## 2.2. Capital Adequacy Ratio

Capital adequacy is a term used to describe the adequacy of a bank's aggregate capital in relation to the risks which arise from its assets, its off balance sheet transactions, its dealing operations and all other risks associated with its business (Hitchins et al., 2001). The purpose is for a bank to have sufficient capital in relation to its risks is to absorb the highest foreseeable amount of loss and still give allowance in which to realise assets, raise new capital or arrange for disposition of its business (Hitchins et al., 2001).

Regulators imposed liquidity monitoring measures on banks to meet specified minimum levels of withdrawals. According to Gleeson, 2006 such measures are precautionary against short-term cash flow problems and not in

a crisis situation. A bank operates with required minimum level of capital in order to reduce possibility of failure (Gleeson, 2006).

Quiroz Rendon, 2007 further emphasised that capital contains risk in a banking firm, protects deposits and equalises competition amongst banks. According to Power 2003, some banks felt that they were at a competitive disadvantage as a result of the regulation as capital needs to be topped up for riskier assets in the Banks portfolio.

Banking institutions in Malaysia operating locally and abroad and it's subsidiaries consolidated are required to comply with the Capital adequacy Ratio also known as Risk-Weighted Capital Ratio (RWCR) requirement at all times. Capital adequacy framework is the minimum capital required by a banking institution as required by Basel I or Basel II. The calculation of the RWCR differs, depending on the requirements of Basel I or Basel II.

## 2.2.1 Basel I

Basel I introduced in 1988 requires Banking institutions to maintain a minimum RWCR of 8%. Calculation of RWCR is as follows:



RWCR = Risk Weighted Credit Ratio CB= Capital Base CRWA Credit Risk-Weighted Asset

MRWA = Market Risk Weighted Avarage.

LER RWA = Large Exposure Risk RWA for Equity Holdings

## 2.2.2. Basel II

Basel Committee subsequently addressed the flaws inherent in the 1988 Basel Capital Accord. These measures were developed to calculate regulatory capital partly based on the risk models and systems of the individual banks (Power, 2003). A revised framework known as Basel II which consists of three pillars namely: capital adequacy requirements, centralized supervision and market discipline and these pillars constitute the basis of the reform of the Basel Accord.

Gadanecz, 2008 emphasised that Basel II reflects the types of risks are pertinent to Banks and measures to ensure sufficient capital, incorporate offbalance sheet exposures more effectively and improve regulatory capital incentives.

In Malaysia Basel II was introduced in 2004 to be implemented in stages i.e. 2008 for the Standardised Approaches and 2010 for the Internal Ratings Based Approach which requires banking institutions with Islamic banking operations to maintain minimum RWCR of 8% which is to be complied at the conventional, Islamic banking operations and overall (conventional plus Islamic banking operations) level.

The calculation of the Risk-Weighted Capital Ratio (RWCR) for banking institutions with Islamic banking operations is as follows:



RWCR of the Islamic banking operations will be computed as follows:

# RWCR Islamic = <u>CB Islamic</u> TRWA Islamic

# Less : $(1-\alpha)ii$ (CrMRWA funded by PSIAiii) Less : $(\alpha)$ (CrMRWA funded by PER of PSIA

RWCR = Risk Weighted Capital ratio

CB = Capital Base

CRWA = Credit Risk-Weighted Asset

CRMWA = Credit and Market Risk Weighted Assets

LER RWA = Large Exposure Risk RWA for Equity Holdings

MRWA = Market Risk Weighted Assets

ORWA = Operational Risk Weighted Assets

TRWA=Total Risk Weighted Assets

Total risk-weighted assets is the sum of credit, market and operational risk weighted assets of Islamic banking operations

ii (1- $\alpha$ ) represents the quantum of PSIA that is recognised as risk absorbent for RWCR computation purposes and approved by the Bank.

III PSIA balances include its PER

## 2.2.3. Basel III

Basel III is the most recent international effort to establish a new capital

standard for banks. However, member countries may modify Basel III

agreements to suite their own financial regulatory structures.

Basel III is to remedy the regulatory capital and liquidity failures that resulted in 2007 – 2009 global financial crisis. Basel III redefines regulatory capital to raise quality, consistency and transparency. Under Basel III standards, Tier 1 capital must consists of common equity and retained earnings. Tier 1 capital is adjusted to align it close as possible to the banks' tangible common shares. Unlike Basel II, goodwill and preferred stocks and other assets will not be included in the new Tier 1 capital.

Minimum common equity that banks must hold as capital will increase from 2% (current) to 4.5% in 2015. Mortgage servicing rights (MSR), deferred tax assets (DTA) and holdings in other financial institutions (HIOFIs) not exceeding 15 % Tier 1 capital of were also included.

On January 2015 minimum total capital plus capital conservation buffer would be at 8%. Thereafter between January 1 2016 - January 1 2019 minimum total capital is expected to increase by 2.5% and conservation buffer by 0.625% per year. Total on January 2019 is expected t 10.5% as illustrated in Table 1 Appendix IV. Table I displays the timeline for implementation of Basel III and it's mechanics. 60% of minimum total capital plus conservation buffer would be Tier 1 capital by 2019.

Basel III also addresses that buffer is build up of capital buffers outside of periods of financial stress that can be drawn down when losses are incurred. When the buffer is drawn down banks are required to rebuild it by reducing distribution of earnings, dividend payments and salary bonuses.

Basel III once implemented would be geared towards more concrete financial system.

## 2.3 Capital Crunch

Bemanke and Lown, 1991; Hancock and Wilcox, 1992; Hancock et al., 1995; Baer and McElravey, 1994; Berger and Udell, 1994; Bizer, 1993; Cantor and Wenninger, 1993; Furlong, 1992; Haubrich and Wachtel, 1993) had researched on the link between bank capital regulation, the loss of bank capital, and bank shrinkage also referred to as a capital crunch.

According to Hancock and Wilcox 1992, banks may maintain a desired level of capital which is topped up after a large decrease in their capital, even in the absence of capital regulation. However, even with capital regulation, banks may not respond to a loss of capital instantaneously by rebuilding their capital to the minimum requirement in the absence of enforcement actions (Baer and McElravey 1994). Sometimes, the ratio is intended as a minimum acceptable level, whereas in other cases, the ratio may identify an appropriate level of capital for the bank.

This distinction between a minimum and an "optimum" level is discussed in Estrella (1995). According to Estrella, the level of capital that is adequate for regulatory and supervisory purposes may differ between banks operating normally and banks in the process of liquidation.

These distinctions are demonstrated in the following simple graph.

• • • • • • • • • • • • • • • • • • •					Capital Ratio
0	А	В	С	D	-
	(Backstop)		(Optimum)		
Criticall	у				
Undercapitalized			_ Going Concern		

The "optimum" level, defined in various ways in economic research (C.f., Estrella 1995,Berger et al. 1995), is shown as point C in the graph. This is the level that maximizes some objective function for bank owners. However, in practice this exact level is very difficult to ascertain with any level of precision. Nevertheless, there is an informal range around this level, say from point B to point D, over which capital may be generally considered adequate for a going concern. Above point B capital is high enough and below D the total cost of capital to the firm is balanced against its benefits. Finally, point A identifies the backstop level at which the bank is no longer viable and must be shut down to prevent losses to depositors and to the public.

Basel III attempts to address the minimum and optimum level by clearly prescribing the capital level to be observed in 2.2.3



Figure 2.3.1 Composition of Banking Sector Capital in Malaysia

In Malaysia, Banking institutions are required to maintain a minimum RWCR of 8%. As reported in Bank Negara Malaysia Financial Stability and Payment Systems Report 2010, more than 70% of the financial sector's total capital comprise of equity, reserved and retained profits.

## 2.4 Derivatives

Derivative instruments most often used to mitigate interest-rate risks, can be used to hedge any type of risk exposure in any market. Frank Partnoy, an expert on financial regulation stated that derivatives are a centerpiece of the global financial crisis. Derivatives are not the cause of the global financial crisis but quicken the melt down. According to Warran Buffet, derivatives are financial weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal.\* Allen Greenspan and Warran Buffett claim that derivatives values and liabilities are difficult for even their holders to track. \*

In Malaysia Bursa Malaysia Derivatives Berhad (BMD), formerly known as Malaysia Derivatives Exchange Berhad (MDEX), 75% owned subsidiary of Bursa Malaysia Berhad provides, operates and maintains a futures and options exchange. \*Source: Alan Greenspan Speech on May 8 to the 2003 Conference on Bank Structure and Competition, Warren Buffett's Annual Letter to Shareholders of Berkshire Hathaway, March 8, 2003

The Malaysian Derivatives trading involves a simple straight forward landscape i.e. Exchange traded and over the counter traded type derivatives which involves Commodities and Financial instruments only. The landscape of the derivate market is as follows :

## Figure 2.4.1

**Derivative Market Structure In Malaysia** 



To track risk, Bursa Malaysia Derivatives Clearing Berhad (Bursa) manages the risk by eliminates credit risk between clearing participants by becoming a counterparty to each contract which is bought or sold by a clearing participant and giving an undertaking to perform its obligations under such a contract

Bursa constantly reviews the margin positioned to ensure that its requirements are neither inadequate nor excessive. The performance of this function provides confidence to the Malaysian market.

## 2.5 Ratios as predictors of Bank failures

Stuhr & Van Wicklen, 1974; Tam & Kiang, 1992; Thomson, 1991; West, 1985; Whalen, 1991; Whalen & Thomson, 1988) have predicted likely bank failures based on financial ratios. According to Mitchell 1909, the informal use of ratios by bank regulators and supervisors goes back well over a century. Davidoff and Zaring, 2008; Financial Services Authority, 2008, stressed that increase in Banks' leverage ratios and excessive risk taking were highlighted as major triggers of the crisis.

Lane et al. classified 21 financial ratios under the five categories of the capital, asset quality, management, earning, and liquidity (CAMEL) rating and applied a stepwise procedure for combining the backward and forward elimination technique both one year and two years prior to bank failure. Cole and Gunther reported that the CAMEL ratings decay rapidly.

Capital adequacy is a measure of the level and quality of a bank's capital base. Asset quality measures the level of risk of a bank's assets. This is related to the quality and diversity of loan borrowers and their ability to repay the loans.

Management quality is a measure of the quality of a bank's officers and the efficiency of its management structure.

Earnings ability is a measure of the performance of a bank and the stability of its earnings stream.

Liquidity measures a bank's ability to meet unforeseen deposit outflow in a short time.

Gilbert, Stone, Trebing 1985 stated that capital ratios were introduced formally in 1981 whereby the regulatory requirement set a minimum level of capital that the institution had to hold.

Mitchell 1909 stressed that capital ratios are valuable tool for assessing the safety and soundness of banks. Estrella et al. (2000) later wrote an article for Federal Reserve Bank of New York on the subject of capital ratios as predictors of bank failures. In this study it was discovered the median of capital ratios of failed banks are consistently lower than the median ratios of the surviving banks.

The analytical model of the present study is mostly drawn from this article. It emphasizes the point that bank failures can be predicted with the help of two simple capital ratios i.e. leverage ratio and the ratio of capital to gross revenue. These ratios predict bank failure over one or two year horizon and provide timely signal for supervisory action. This model also uses Risk-

weighted ratios to predict bank failure over a longer horizon. However, computing this ratio is more costly and complicated.

Capital ratios measure the absolute amount of capital of the firm to the absolute level of risk of the bank. This ratio indicates adequacy of capital in relation to absolute risk. A large bank should be supported by a larger of capital base than a smaller bank. Similarly, a riskier bank needs a larger capital base.

#### 2.5.1. Leverage Ratio

Leverage ratio is calculated as tier 1 capital divided by tangible assets. The capital needs of a bank are directly proportional to its level of assets. Thus, banks are likely to reduce low-risk assets such as Treasury securities which are easily marketable and retain less marketable assets such as loans. However, this ratio does not include risky off-balance-sheet activities which may produce misleading relative results.

Leverage ratios should be at a minimum of 8%. Statistics are based on unweighted data and are influenced heavily by the large number of small banks that tend to have higher capital ratios. High leverage ratio arising from deteriorated asset value indicates the probability that capital would be at risk is higher.

In this study, tier 1 capital only is used in the leverage ratio computation as tier 1 capital is freely available and can be utilized to absorb capital losses immediately. Thus, the rapidly declining leverage ratio signals of early warning signs bank failure.

#### 2.5.2. Risk-weighted Capital Ratio

Risk-weighted capital ratio is defined as the ratio of tier 1 capital to riskweighted assets. Risk-weighted ratio is the most effective predictor of failure over longer time horizon. Risk Weighted Capital ratio uses risk weighted assets as the denominator instead of total assets.

This measure includes off-balance-sheet exposures and adjusts for differentials in credit risk according to type of counterparty and type of instrument.

Risk weighting effectively requires banks to charge more capital for riskier assets. This requirement discourages Banks from operational risk, and reputational risk. Further, the requirement to inject more capital to extend credit to risky borrowers may induce banks to refrain from lending leading to a credit crunch.

The financial sector is dynamic whereby the introduction of new products continuously causing the risk-weighting scheme to become obsolete. Thus, the risk-based capital ratio is not superior to simple ratios in capturing the overall risk of banks and is not considered in our study.

#### 2.5.3. Gross Revenue Ratio

The gross revenue ratio is tier 1 capital divided by total interest and noninterest income before the deduction of any expenses. Shepheard-Walwyn and Litterman (1998) introduced the gross revenue of the bank as the measure of scale.

Gross revenue includes off balance sheet components. Thus, gross revenue takes into account all risk as these risks are compensated by larger

revenues. Considering this, gross revenue ratio is more reflective of risk compared to leverage ratio.

Banks dwelling in fee based income carry limited risk compared to the large revenue generated. Smith et al. (2003), opines that the conventional view of fee income is that it is more stable than interest income. However, DeYoung and Roland (2001) rebuts that fee income may be less stable than margin income.

In Malaysia owing to stiff competition amongst Banks loan pricing war has deteriorated interest income margin. Should the loan turn non performing, the income margin is totally wiped off. Further, the Banks in Malaysia suffer from high overheads arising from the rising cost of funds. To complement banks' income banks are now relying on fee based income from Unit Trust and insurance agency business. Marketing these products have been priority arising from the thinning margin from loans and cost of carrying non performing loans. Foreign banks focuses mainly on fee based income .

Further studies by DeYoung and Roland, 2001; Stiroh, 2004b found fee income to be more volatile than margin income. This was evident in times of crisis when fee based income deteriorated as investors shy away from investments locally and abroad. Smith et al,2003 also suggested that non interest income reduced bank risk.

Gross revenue also measure reflects a more realistic relationship with economic conditions. Relatively high gross revenue ratios may be explained by reduced revenue resulting from an economic downturn. Gross revenue ratio is more sensitive to business cycle compared to total assets and less

susceptible to regulatory capital arbitrage. A large standard deviation, suggests that banks have difficulty in meeting the capital requirement.

## 2.5.3.1.Tier 1 Capital

Capital instruments that qualify as Tier 1 Capital should be fully paid-up and permanently available, freely available and not earmarked to particular assets or banking activities and able to absorb losses.

Items that qualify as Tier 1 capital are ordinary paid-up share capital, share premium, statutory reserve fund, general reserve fund, retained profits including current unaudited losses, surplus after tax from the sale of fixed and long-term investments and minority interests.

## 2.5.3.1Tier 2 capital

Elements which do not meet all of the Tier 1 capital characteristics qualify as Tier 2 Capital.

Items that qualify for inclusion as Tier 2 capital are Hybrid (debt/equity) capital instruments, Subordinated term debt subject to the prescribed limit, reserves arising from the revaluation of premises provided it is approved by the Bank and subject to excess of forced sale value over net book value, or 50% of the excess of fair market value over net book value whichever is lower. Revaluation is permitted only after a period of 10 years from the date of purchase or from the date of last revaluation, whichever is later.

#### 2.5.4. Return on Assets Ratio

Merton (1974), Froot et al. (1993), Froot and Stein (1998) and Stiroh and Rumble (2006) illustrate that shareholders may be concerned about bank total risk due to the impact upon foregone investment and the need for active risk management to address information asymmetry and agency problems.

Since bank management cannot diversify total wealth away from their exposure to the individual bank, total risk is critical for these stakeholders. (Stulz, 1984). the combination of the two revenue sources generates positive portfolio diversification benefits. Banks' in Malaysia utilize RWCR to reflect Banks' total risk. RWCR is computed based on Basel I and in 2010 Basel II.

Our research uses these ratios as well as some other ratios to study the level of capital maintained by Islamic and conventional banks during the period of study.

#### 2.5.5. Return on Equity Ratio

According to Allen and Santomero, 2001 traditional function of banks as financial intermediaries has shifted focus to non-traditional sources (fee income) since the mid-1990s. However, statistics from Reserve Bank of Australia, (2005) reveal that despite this increase, income from traditional sources (interest income) still contributes for over 80 percent of bank total income in Australia. Similarly, Banks in Malaysia also subscribe to a similar configuration.

"How has this shift impacted bank risk?" Stiroh and Rumble (2006, p. 2158) stressed that banks may be more concerned with total return than risk return tradeoffs. Therefore, banks would be willing to sacrifice risk on return for higher returns. Traditionally, banks are viewed as intermediaries, taking deposits, writing loans, and earning margin income on the spread between the deposit and loan interest rates. According to Reserve Bank of Australia (2004), due to increased competition and the process of disintermediation, the profitability of this traditional source of income has been declining. Smith et al. (2003),further stressed that the fee income is that it is more stable than margin income given the thinning margin arising from competition.

DeYoung and Rice (2004) finding revealed that increases in noninterest income are associated with higher profit variability and a worsening of banks' risk-return trade-off. They also conclude that non interest income acts as a supplement to interest income, rather than replacing interest income. This was also suggested by the Reserve Bank of Australia (2005). Banks in Malaysia have diversified to non interest income to supplement interest income after the financial groups acquired Investment arm and an Insurance arm.

Studies by Stiroh (2004a, 2006b), Stiroh and Rumble (2006) and Baele et al. (2007) use non interest income to measure bank diversification away from traditional net interest income toward a wider range of financial services.

Stiroh (2004a) concluded that the overall volatility of bank income has declined over the study period and attributed this to declining interest income volatility. This is particularly pertinent when there is a credit squeeze following the financial crisis

Stiroh (2006b) concludes that the shift toward non interest income has increased bank risk but not bank returns. Stiroh and Rumble (2006) also conclude that increased exposure to non interest income results in worsening bank risk-return tradeoffs. The increased volatility of non interest income more than offsets any portfolio diversification benefits.

According to Deng et al. (2007), diversification into non-traditional activity results in increased agency problems which results in a higher cost of debt as diversification across lending and non-lending activities does not add value and is likely to increase agency costs.

According to DeYoung and Roland (2001) non interest income increases income volatility as bank loans are based on relationships. The switching cost associated with changing lenders is high, while fee based income has less of a relationship component. The switching cost acts to reduce the volatility associated with interest margin income. Further, the lending process is associated with interest expenditure, a variable cost while in the case of non interest income the main input is staff cost, which is fixed, particularly in the short run, thus generating higher operating leverage and so higher potential risk. Non interest income does not require high levels of fixed assets and thus has a lower level of required capital as opposed to lending activity. Higher financial leverage results in higher risk.

#### 2.6 Islamic Banking

Islamic finance began with the establishment of Dubai Islamic Bank in 1975 (EI–Gamal, 2005). Clear understanding of Islamic law and finance was written in two books Vogel and Hayes (1998) and Mallat (1988). Another book by Iqbal and Mirakhor (2007) provides the conceptual framework and discusses the application and risk management in Islamic banks.

El-Gamal (2001, 2005) stressed on the prohibition of interest (Riba). Islamic Banks operate based on Shariah principles that prohibit riba or interest. As business entities, Islamic banks need to make a profit to stay in. Instead of charging interest from loans, these islamic banks offer financing facilities in other forms such as lease, sale and partnership. This allows Islamic Banks to profit in ways that are permissible by Shariah law. The five principles of Islamic finance governed by Shariah Law are prohibition of interest (riba), uncertainty (gharar) and activities related to vice, alcohol and pork as well as the profit and loss-sharing and asset backing principles.

The Islamic financial system in Malaysia is a competitive component of the overall financial system, complementing the conventional financial system as a driver of economic growth and development. The key structural components of the Islamic financial system comprises of the Islamic banking industry, the takaful industry and the Islamic money and capital markets. BNM established the National Syariah Advisory Council on Islamic Banking and Takaful (NSAC) on 1 May 1997 as the highest Syariah authority on Islamic banking and takaful in Malaysia.

BNM continues to issue new Islamic banking licences to qualified foreign financial institutions in anticipation that these institutions will act as a bridge between Malaysia and other global Islamic financial markets to tap new markets and growth opportunities. In addition, this will also contribute to spur financial innovation to facilitate international trade and investment flows between Malaysia and the rest of the world. Islamic Banking also enjoys specific legal provisions such as tax exemption that would enable Islamic finance to offer products at competitive rates. For instance, issuance of Sukuk benefited from double taxation issue.

Prior to 2006 Islamic Banking business was under the umbrella of the Conventional banking arm. Thereafter, the Islamic Banking business has become a separate entity from the conventional banking with independent management but under the same group. In 2006, only 5 banks set up operations of independent Islamic Banks. Foreign Islamic Banks, Kuwait Finance House and Al Rahji Bank also ventured into business in Malaysia in 2006.

Dar and Presley (1999) provided an insight to reconciliation of Western literature and the Islamic economic paradigm. Islamic finance should be viewed as a category on its own and not as an alternative to conventional finance as it provides the market with another financing option. Islamic Conventional and Islamic Banks operate on two different business models. Firewalls have been erected between conventional and Islamic funds to preserve integrity in the system while corporate governance among banking institutions are enhanced and the relevant acts are continuously reviewed in order to adapt to a fluid environment.

Islamic Banking is specifically designed for Muslims who would like to abide by religious requirement. Principles in Islamic finance are not just about religion but about transparency, ethics and fairness, as well as promoting entrepreneurship and sharing of risks between financiers and customers which may also appeal to non-muslims.

Price competitiveness is always the main point of debate between Conventional and Islamic Banking. For example Bai Bithaman Ajil (BBA) Islamic Home Financing structure, which is deferred payment sale offers more competitive deals than conventional banking. Conventional housing loan is based on debtor-creditor relationship and the interest rate charged is based on a certain percentage above/minus the base lending rate over loan period. Fluctuation in the base lending rate will affect total loan cost and arrears in conventional loans are normally capitalized.

However, under the BBA scheme, a seller-buyer relationship is established and the selling price is fixed upfront. The sale price is then repaid in fixed installments throughout the financing period. This eliminates the customer's interest rate risk and arrears will not be capitalized.

In short, the BBA scheme eliminates additional or hidden costs which are 'cheaper' compared to conventional home financing. However, in some instances the fixed profit rate far exceeds the conventional interest rate, the BBA was unattractive as consumers prefer to opt for the conventional lower interest rate pegged at Base Lending rate (BLR). Thus, Islamic Finance introduced a variable rate Islamic finance known as Base Financing Rate (BFR). Increase in the profit rate will either lengthen the tenure of the loan or change the monthly instalment amount just like in conventional loans. A

decrease in the profit rate will result in rebates to the customer or a shorter tenure similar to conventional loans. Additionally, Islamic floating profits have a <u>ceiling rate</u>, ie a maximum profit an Islamic loan provider will earn. Further, Islamic finance does not impose "penalty interests" charges on late payments imposed by Conventional Banks for late payment.

Islamic product offering and pricing mirror the conventional products. Unless Islamic Banking is proactive in creating market awareness and conceive more genuine Islamic products instead of just coming up with adaptations of products offered by conventional banks, it would be almost impossible to expand the Islamic the finance share in the global financial market.

Islamic banking services in Malaysia utilize using existing infrastructure and branches of conventional banks to market their offering though the Management is separate. This option was seen as the most effective and efficient mode of increasing the number of institutions offering Islamic banking services at the lowest cost and within the shortest time frame. The Group's focus is still on Conventional banking which has been long existing. As Islamic Banking and Conventional Banking business is carried out from the same premises, Islamic banking business is carried out as and when requested only or merely to meet targets set. Islamic Banking should be transacted from a separate window to maximize marketing and consumer awareness. Islamic business owners suffer market maturity enjoyed by commercial banks. Islamic Banking in Malaysia has a long journey to match business of the more advanced Islamic Market.

Archer and Karim (2006) stressed on capital structure, risk sharing, and capital adequacy covers such aspects as the displaced commercial risk and creating value for shareholders of Islamic banks.

Cihak and Hesse (2008) wrote an IMF working paper on Islamic Banks and Financial Stability providing an insight into small Islamic banks and large Islamic banks and how financially stable they are in relation to conventional commercial banks. In Malaysia, Islamic Banks are in infancy stage whereby the Islamic Banks have been operating as a separate entity the umbrella of the group since 2006. Foreign entrants commenced operations in 2006 and have yet to gain market share.

A lecture series by Chapra (2009) stresses how Islamic finance can help minimize the chances of future financial crisis. Islamic Banks are subjected to low risk exposure as all risk is shared and do not trade in risky elements i.e. derivatives. However, compared to Conventional local Banks we may not see the difference as local conventional banks refrain from indulging in risky and complicated derivative trading. Foreign Conventional Banks are more active in derivative trading capitalizing on cross border experiences. In any instance this type of transaction is monitored by Bank Negara Malaysia to ensure banks' risk exposure are closely monitored.

Islamic Banks' concept of mudharabah or profit-sharing places the Islamic Banks on a more solid footing even during times of economic crisis when non-performing loans (NPLs) tend to soar.

During the economic crisis, conventional borrowers repayments suddenly doubled or tripled leading to NPL to rise. However, Islamic Banks were comforted as their borrower's repayments were fixed and their customers were unaffected hike and there was no issue of rising NPL.

Conventional Banks were desperately in need for capital injections from their shareholders to strengthen their leverage but Islamic Banks were not affected since under the mudharabah concept, NPLs are not charged against shareholders' funds but against deposits. That is the beauty of mudharabah where depositors shoulder the rising NPL load.