



Islamic banking in Brunei Darussalam

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Abstract *This paper studies the current realities of the Islamic banking system of Brunei Darussalam from the perspective of the theories of modern financial intermediation and Islamic financial contracting. The limited information on the banking system of Brunei Darussalam reveals that the first phase of the Islamic banking experimentation has been successful, as Islamic banks command roughly 11.5 per cent of the market share. The financial services industry, however, remains extremely competitive and Islamic banks face formidable challenges from conventional banks. Islamic banks can proliferate if they: advance towards the second phase by gradually consolidating retail banking with investment banking; establish vital links with local and foreign institutions; and use ijthad in modern financial engineering to optimally design loans while simultaneously reducing their risk exposure. An efficient Islamic financial system can allocate limited capital resources to the most profitable ventures and assist in wealth creation. This can foster the growth not only of Negara Brunei Darussalam but also of the regional economies, particularly at this crucial juncture when Asian economies are reeling from the current financial crisis.*

I. Introduction

The Islamization of the commercial banking industry heralds a new era of awakening of the Muslim *Ummah* (community). Islamic banks cater to a broad array of clientele that includes Muslims as well as non-Muslims. The potential for Islamic-banking services has even attracted the attention of conventional banking giants such as Citibank and Hong Kong & Shanghai Banking Corporation (HSBC). These industry behemoths have created special subsidiaries or windows to attend to the demand for these services (Wilson, 1994).

The main goals of an Islamic Banking and Financial system are to:

- (1) Implement the value system of the *Qur'an* and the *Sunnah* (tradition or practice of Prophet Muhammad^{SAW}) in the realm of the Muslim socio-economic system. Ibn Taymiyah^{r.a.} (n.d.), a distinguished scholar of Islam, explicates this as follows: "In mu'amalat (business transactions) all activities are permissible unless forbidden by revelation (*Qur'an*) or the practice of Prophet Muhammad^{SAW}". The examples of prohibited business activities would include dealing in gambling, liquor, pork etc. The financial contracts of Islamic banks need to be clearly documented, equitable and avoid the elements of *Riba*, *Gharar* and *Maysir* as explained in the following section.

- (2) Foster the growth of the economy of Muslim nations by developing financial markets, institutions and instruments. A well-developed capital market, with efficient institutions offering diverse financial facilities, can reduce the overall cost of capital. It can enhance social welfare by facilitating the acceptance of projects whose (i) present value of all relevant cash in-flows (benefits) after tax is greater than the present value of all cash out-flows (cost) of the project; or (ii) the expected internal rate of return is greater than a minimum threshold rate (or cost of capital)[1]. Furthermore, these necessary conditions should also be satisfied for each party financing the project to alleviate agency effects. This entails economic development, which is promoted in Islam, as Prophet Muhammad^{SAW} exhorted Muslims to undertake business ventures (*tijarah*) as described in the following *hadith* (narration).

Nu'aym ibn Abd Al-Rahman has quoted the Prophet^{SAW} as saying: "Nine tenths of earnings (*Rizq*) is in *bai'* (business ventures), and tenth in cattle". This was reported by Ibrahim Al-Harbi (Al-'Iraqi, 1992) and by Sa'id ibn Mansur (Al-Suyuti, 1990).

- (3) Dampen the shocks of extreme economic output by promoting risk-sharing instruments whose payoffs are strictly contingent on the profitability of a firm or project at a micro level. Financial facilities with fixed costs can severely strain the resources of borrowers during a slowdown, which lead to bankruptcies and structural impairment of the economy. The gist of Islamic financial securitization is summarized by the following well-known *hadith* quoted by Kahf and Khan (1992), "*Al-kharaj bi al daman.*" This implies that entitlement of return from assets vests in the one bearing the risk of it.

The focus of this paper is to examine the Islamic banking system of Negara Brunei Darussalam in the light of modern theories of financial intermediation and Islamic financial contracting. We initiate this study by analyzing the role of financial intermediaries from the mainstream literature such as Bhattacharya and Thakor (1993), Greenbaum and Thakor (1995), and Boot and Thakor (1997). Banks are special because their loans provide other financial intermediaries with signals about the values of the portfolios they carry (James, 1987). This is because banks scrutinize and monitor the borrower very closely and are presumed to know the borrower "better" than any other creditors.

We then examine the theory behind Islamic banking in contrast with that of conventional banking. The main thrust of Islamic financial contracts is on profit and loss sharing, which can be deemed as equity (*Musharakah*) and hybrid (modified *Mudharabah* and *Ijara*) facilities (Ahmad, 1994). Nonetheless, Islam allows credit (debt) facilities of *Bai' Murabahah*, *Bai' Bithaman Ajil* and *Ijara wal-'iqtina*, which resemble conventional products. This is because not only does the process lead to the same conclusion but the profits arising from the arrangement of the loan are priced and competitively discounted. However, the risks of these vehicles are inherently higher than conventional ones as

espoused by Ebrahim (1999). This is because Islamic financial instruments are non-recourse asset-backed securities. The pricing of these credit instruments reflects this risk exposure endowing Islamic bankers with a risk premium. This is confirmed from the empirical observation of this paper.

Islamic banks in Brunei Darussalam are quite successful in controlling 11.5 per cent of the total deposits in the nation. However, they fit the profile of a financial intermediary in an evolutionary phase, as espoused by Boot and Thakor (1997). Thus, there is a dire necessity to complement the existing system with capital markets, as a high proportion of the national savings is placed overseas. Furthermore, capital markets facilitate the securitization and marketability of the profit and loss sharing instruments of *Mudharabah* and *Musharakah*. Although the future of Islamic banking is extremely bright, much needs to be done in designing, developing, implementing innovative products/services and marketing them. The government can assist in providing the necessary impetus for the advancement to the next phase of capital markets.

This study is structured as follows: Sections II and III cover the vital roles played by financial intermediary and retail banks in the economy respectively. Section IV sheds some light on Islamic banking and contrasts it with that of a conventional one. Section V presents the state of financial intermediation in Brunei Darussalam, while Section VI discusses a strategic plan of action for the future. Finally, Section VII provides some concluding remarks.

II. The role of a financial intermediary

Financial intermediaries (FIs) facilitate buyers and sellers of capital resources. Samuelson and Nordhaus (1989) define financial intermediaries as institutions like banks, insurance companies, and savings and loan associations that take deposits or funds from one group and allocate them to another group.

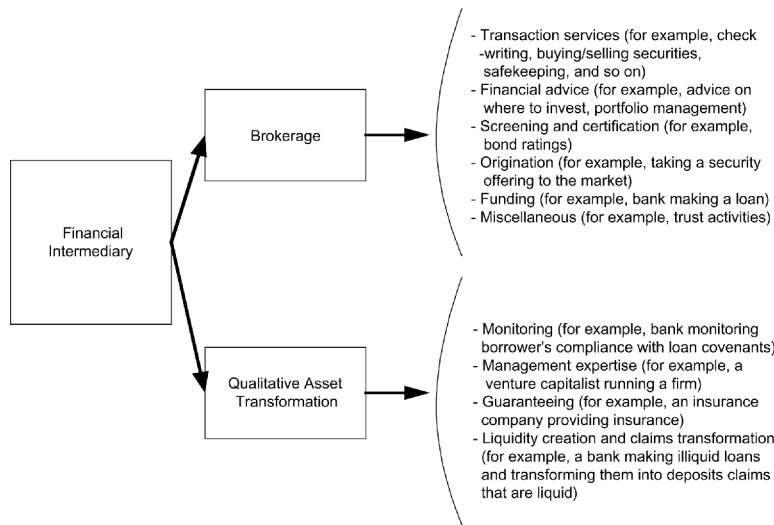
The role of FIs can be best explained by the lack of them in an imaginary assumption; what could FIs do that could not be done without them? After all, we could simply put on an advertisement for a required borrowing in the newspaper and invite people to bid on its interest rate. The reason why we do not do that is because people perceive the bank to be better. In a world of imperfect information, it is very difficult to accurately evaluate the various qualitative aspects on the lending and borrowing, given the time constraints. People would rather trust the financial intermediary than a stranger, given its specialization.

Greenbaum and Thakor (1995) classify FIs as performing two main functions; The Brokerage Function and The Qualitative Asset Transformation (QAT) Function. Figure 1 illustrates these two functions.

The brokerage function

The brokerage function refers to the information, timeliness and costs savings that FIs provide in the transformation of assets. This arises from two sources:

- (1) A broker is presumably able to provide information with the whole greater than its parts, due to skills developed in picking up subtleties and signals from the information;



Source: Greenbaum and Thakor, 1995

Figure 1.
Services provided by
financial intermediary

- (2) As information is reusable in nature, brokers can provide services for a cross-section of customers, without jeopardizing the integrity of the information, resulting in cost savings as well as providing inter-temporal reusability of information (Bhattacharya and Thakor, 1993).

Qualitative asset transformation (QAT)

Without financial intermediaries, in a world of imperfect information, there would be greater inefficiencies in the allocation of financial resources. For example, mortgages would typically come in large, irregular sizes with long and uncertain duration. Lenders, assuming a certain level of risk aversion, would demand higher compensation for bearing risk and irregular conditions to approve funding. FIs' role is to buffer between savers and users of funds. It buys mortgages in bulk with deposits from customers and in return earns the spread of interest between deposits and mortgages. With the characteristics of liquid deposits, FIs' resources could be channeled to an unlimited type of other assets with varying durations, divisibility, risk and currency. Typically, FIs would hold longer duration deposits to finance shorter claims to meet certain liquidity preference of customers and minimize risk. Whatever the form, risk is inherent in FIs'. Risk in turn, could also be diversified, shifted or absorbed by varying financial instruments such as swaps, futures, forwards and options.

Although the functions of QAT and brokerage are discussed as being distinct, in reality, both are performed in isolation or in combination. For example, mismatch between asset and liability duration can be changed by lengthening or shortening the QAT with brokerage services. In fact, if there

were a perfect match between assets and liabilities durations, the financial intermediary would purely act as a broker.

The attributes and configuration of various FIs differ by the nature of their role in the economy. The role and the organization of FIs depend not just on the ability to evaluate risks but also on addressing of post-lending moral hazard (Boot and Thakor, 1997). As such, FIs provide the following advantages to society:

- They reduce the cost of transactions with services from brokerage to quality asset transformation;
- They gain from an increase in size because of economies of scale and by diversification of information;
- FIs such as banks provide viable signals to capital markets through their loan approval process. The regular monitoring of their clients' financial status mitigates asymmetrical information (James, 1987 and the following section);
- Banks enhance and improve the quality of total aggregate investments (Bhattacharya and Thakor, 1993).

With a variety of instruments and financial intermediaries, the financing choice of a borrower varies according to a firm's life cycle, as illustrated in Figure 2.

At an infant stage, management skills and expertise are assumed to determine the success of the business. As such, financial intermediaries that provide such expertise are of synergy to a young firm. Furthermore, a natural characteristic of a young firm is its insignificant tangible assets base on which it could collateralize to raise funds. Intermediaries such as venture capitalists would be interested in lending such funds for their promises in the future. Such lending would involve equity stakes in the borrower's firm to provide expertise and address the issue of moral hazard in case of failure.

As the infant firm grows, it accumulates tangible assets, which could be used as collateral to borrow from a bank. Such collateral also serves to mitigate moral hazard. To further protect against moral hazard and risk associated with the lending, most bank loans are short-term in duration. The short-term nature of these loans serves as a monitoring device to reassess and re-evaluate a firm's commitments to the bank. At this stage, the firm would go to a bank rather than a venture capitalist because its assets could be used as insurance in its obligations, whereas a venture capitalist would need a further stake in equity

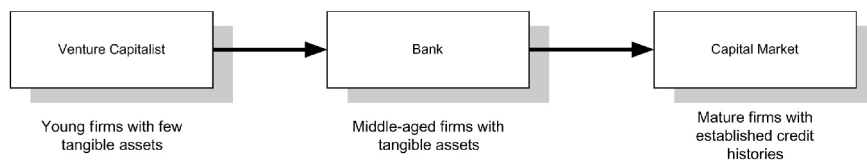


Figure 2.
Hierarchy of financing
sources

Source: Greenbaum and Thakor, 1995

participation. With collateralization, the borrower at this stage would be able to obtain loans far cheaper than through a venture capitalist.

As the firm matures, its track record and established presence permit it to borrow at special rates. The goodwill in its business restrains the firm from taking any unnecessary risks in unproductive debt positions. As moral hazard monitoring lessens, the firm is able to directly access the capital markets where capital costs are lower. However, asymmetric information still remains a problem. This is reduced by investment banks that are able to monitor the firm on behalf of investors at a cost lower than that incurred by them.

Although the framework of a firm's suitability with a financial intermediary is explained here, it does not represent a structured process or convey that these financings are mutually exclusive. In the real world, the structuring of public or privately held debts is based on the characteristics of the firm and the availability of creditors to meet capital market needs.

These issues are particularly interesting with the structuring of financial systems as to how banks and capital markets emerge and evolve. In Boot and Thakor's (1997) model, there exists a two-tier financial system comprising banks and capital markets. They state that "a financial system in its infancy will be bank dominated, and increased financial market sophistication diminishes bank lending".

Rajan (1992) suggests that banks charge information-related rents for which there is no substitute in direct borrowing. Since they accumulate inside information for reducing asset-substitution/moral hazard, they control the firm's destiny through indentures in the loan contract-making it expensive. Hence, if the borrowers could credibly demonstrate future profitability to an investment bank, they would rather acquire funds from capital markets directly. From what we know of the financing hierarchy, the existence of a two-tier financial system can improve investment efficiency. Thus, in an infant economy undergoing evolution, the value of bank financing is predominantly important for mitigating moral hazard and asymmetric information. Figure 3 exhibits the evolutionary phase of financial system architecture.

As a financial system matures, credit reputations by established borrowers would diminish moral hazards, which will induce other financial intermediaries to supply funds at a lower cost. Even a bank dominated financial system will lose market share to capital markets when vital information once dominated by banks erodes to near-market information. Greater sophistication in the capital market is manifested by the flow to near-market information on debts. Boot and Thakor (1997) attribute the flow to near-market information through

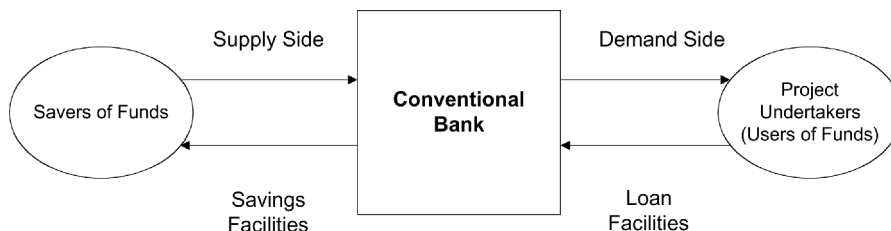


Figure 3.
Evolutionary phase of
financial system
architecture

security innovations that stimulate greater information awareness as well as liquidity. Examples include the development of the bond markets, stock markets and mutual funds. Another important attribute is the role of information technological progress that provides greater access and timing to information at a lower cost to investors. Figure 4 illustrates the advanced phase of financial system architecture.

III. The special status of banks

Commercial banks act as the center of any financial intermediary's universe. Their roles are broader than most financial intermediaries and are considered, in many aspects, as an indicator of one's nation's economic health. They hold the largest variety of earning assets that include commercial and residential mortgages, personal loans, working capital requirements, automobile loans, term financing, structured financing, and also financing innovations through derivatives. They act as an agent of monetary policy where interest rates, determined by the Central Bank, would restrict and ease the conditions on which credit is made available to the economy. They also serve as "trusted dealer" by issuing bank guarantees and letters of credit.

One important study in recent times even suggests that banks not only lower capital exchange cost like interest rates but also lower capital exchange costs between other parties (Greenbaum and Thakor, 1995). To understand this argument better, it is worth noting the distinction between inside and outside debt:

Inside debt is defined as a contract in which the creditor has access to information about the borrower not otherwise publicly available. . .by contrast, outside debt is defined as publicly traded debt in which the creditor depends on information about the borrower that is publicly available (Greenbaum and Thakor, 1995).

In this aspect, bank loans are inside debts, while bonds and commercial papers are good examples of outside debt. Inside debts like bank loans are shorter in maturities than outside debts. This is because banks need to evaluate the borrower's ability to repay structured banking obligations and the timely

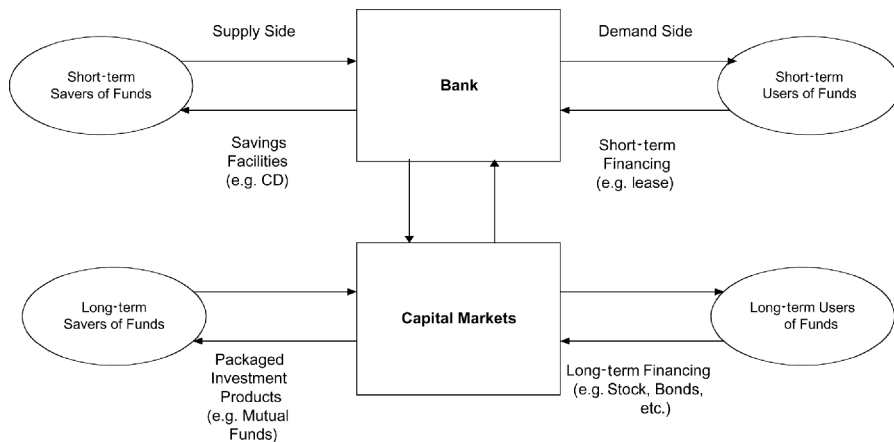


Figure 4.
Advanced phase of
financial system
architecture

monitoring of such debts makes inside debts shorter in duration. The evaluation and subsequent approval or withdrawal of the banking facility will send signals about the firm to other creditors. The signals are credible because: the bank is already committed to the borrower; and the bank is presumed to have better access to information from the borrower not otherwise publicly available. The presumption of the bank's quality of information is based on the fact that banks are inherently opaque. This is because the risk of their financial assets (bank loans) is relatively hard to observe or easy to change (Morgan, 1997).

In general terms, such benchmarking of internal debts is common and reduces duplication of further evaluations by multiple creditors. Only bank loans are unique in such evaluations. Empirical evidence indicates that there is a positive and statistically significant stock price response to a borrower's acquisition of a bank loan, suggesting that banks are better informed about their borrowers than market participants. However, there is a negative stock price response to debt placed privately with insurance companies (James, 1987). This suggests bank uniqueness amongst other financial intermediaries.

IV. Islamic banking in contrast with conventional banking

One definition of an Islamic Bank is a bank that, by its own choice, opts to comply with two sets of law: the law of the Land (Jurisdiction); and the Islamic Law (*Shari'ah*). This is why Islamic bankers have two types of legal counsel: traditional "lawyers" and "*Shari'ah* Councils" (Al-Bahar, 1996). As Islamic finance is intertwined within its religion, the basis of the religion affects the finance in two important ways:

- (1) "Islam aims at building a socio-economic order based on justice and considers economic activity as a means to an end and not an end in itself. It enjoins Muslims to harness natural resources, which are a trust from Allah^{SWT}, for carrying out rightful activities; but abhors exploitation and man-made inequalities of income and wealth."
- (2) "Islam is deeply concerned with the problem of economic development, but treats this as an important part of a wider problem, that of total human development. The primary function of Islam is to guide human development on correct lines and in the right direction. It deals with all aspects of economic development but always in the framework of total human development and never in a form divorced from this perspective" (Al-Harran, 1993).

The core belief of Islamic banking stems from a divine injunction against the acceptance of interest between buyers and sellers of capital resource. Such injunctions are based on compliance with Islamic jurisprudence or *Shari'ah* extracted from the holy *Al-Qur'an* and *Al-Sunnah*. The *Shari'ah* specifies, *inter alia*, rules that relate to the allocation of resources, property rights, production and consumption, and the distribution of income and wealth (Iqbal and Mirakhor, 1987). These injunctions are historically and ethically linked, as interest creates social divisions between the rich and the poor and especially

causes hardship to borrowers. This is so because the lender is seen to be exploiting other people's needs without actively using to advantage the productive nature of the capital in question. As such, Islamic banking advances the following set of beliefs: interest as a reward for saving does not have any basis as a moral foundation; abstinence from spending of present income does not deserve a financial reward; and to benefit from money is to transform the money into investments, conditioned to accept risks and bringing the knowledge of other factors of production together (Presley, 1988).

The prerequisites of Islamic financial contracting incorporates the following:

- (1) Financial contracts must be clearly documented, as quoted in the following verses of the *Qur'an*: "O ye who believe! Do not eat up your property (wealth) in vanities. But let there be amongst you traffic and trade by mutual goodwill (*Qur'an*, 4:29). "O ye who believe! When you deal with each other, in transactions involving future obligations in a fixed period of time, reduce them to writing" (*Qur'an*, 2:282).

Contractual dealings must be fair (equitable) with good intentions as ordained in the following verses of the *Qur'an*: "Allah^{SWT} enjoins justice, the doing of good, and generosity towards fellow-men; He forbids all that is shameful and all that runs counter to reason, as well as envy; He exhorts you (repeatedly) so that you may bear (all this) in mind". (*Qur'an*, 16:90). "And (in all your dealings) give full measure and weight with equity" (*Qur'an*, 6:152).

Prophet Muhammad^{SAW} reinforced the above verses in the following hadith: Abu Sa'id^{RA} reported that the Prophet^{SAW} said: "The truthful, honest merchant will be with the Prophets, the truthful ones and the martyrs" (*Tirmidhi*, 12:4).

Rayner (1991) lays down four elements of a contract on a property (mal): they are lawfulness, existence, deliverability and precise determination.

- (2) Islamic financial contracts should be free of components of Riba, Gharar and Maysir.
 - *Riba* is prohibited under the *Qur'an* teachings in the following verse: "Those who devour *Riba* will not stand except as stands one whom the evil one by his touch has driven to madness. That is because they say: Trade is like *Riba*. But Allah^{SWT} hath permitted trade and forbidden *Riba*. Those who, after receiving directions from their Lord, desist shall be pardoned, for the past their case is for Allah^{SWT} to judge. But those who repeat (the offence) are companions of the fire. They will abide therein forever." (*Qur'an*, 2:275).
 - The *Shari'ah* prohibits *Riba* as it is a form of exploitation for either consumption or production. There are principally two types of it: (i) *Riba al-nasi'ah* (*nasi'ah* means delay) – refers to fixing of loans with calculated "addition" or "premium" over the principal capital being borrowed for a specified maturity; essentially a fixed interest from a debt contract. The emphasis of *Riba al-nasi'ah* is in opposition to the

predetermined calculations for the positiveness or additions to the loan; *Riba al-fadl* (excess in spot transaction) – refers to the increment in spot transactions such as barter. It also encompasses market manipulation, unfair trade, etc. (Thomas, 1995). *Riba al-fadl* is cited in the following *hadith*: On the day of Khaybar, Fadalh ibn Ubayd al-Ansari^{RA} bought a necklace of gold and pearls for 12 dinars. On separating the two, he found that the gold itself was worth more than 12 dinars. So he mentioned this to the Prophet^{SAW}, who replied, “It (jewelry) must not be sold until the contents have been valued separately”. (*Muslim*, 9:3863).

- The distinction between trade and *Riba* is worth noting as found in the verse God has allowed trade and prohibited *Riba* (*Qur'an* 2:275). From an economic point of view, the exchange between the buyer and the seller is viewed as just. This is because the profit arising out of the trade is equal to the labor and time that the buyer spent in securing the commodity to the seller. On the other hand, interest is deemed unjust because the lender is legally assured of his capital and premium at the time of expiration of the loan without executing any labor or being subject to any risk. From an Islamic moral point of view, the use of interest is burdensome to the borrower in the event of project failure or economic catastrophe.
- In the context of modern financial economics, *Riba al-nasi'ah* can be defined as a risk-free return from an investment vehicle or strategy (Ebrahim, 1999). This is because the income stream assigned to the lender is independent of the future value of the project. Regardless of the risk inherent, conventional lenders assume the right to the capital and interest, whether the employed capital yields positively or negatively[2]. The real danger lies when shocks are introduced into the economy, as experienced in South East Asian countries. The extraction and outward flow of funds by creditors in a herd-like fashion caused markets to crash with high volatility in the region (Kaminsky and Reinhart, 1998; Miller, 1998). As markets have become more integrated than ever, the panics are felt elsewhere. Thus solutions based on *ribawi* (conventional) finance have failed to resolve these problems[3].
- *Gharar* is implied as “deception based on the absence of knowledge or the unlikelihood of delivery with the prospect of causing harm” (Thomas, 1995). In conventional banking, the actual returns on the bank’s portfolio of loans are unknown, although the bank commits itself to paying depositors a predefined rate of income.
- *Maysir* entails speculative elements in a contract where expected gains are not clearly defined at the initiation of the contract. Ibn Taymiyah^{r.a.} (n.d.) clarifies the distinction of *Gharar* and *Maysir* by saying that: “*Gharar* is something the consequence of which is unknown (*majhul al-'aqiba*), selling it involves *Maysir*, which is gambling (*qimar*). *Gharar* is

of three types: either what does not exist like *habal al-habala* or that which cannot be delivered, like the horse that has escaped; or third, that which is unknown in an absolute sense (*majhul mutlaq*), or the object which is identified but remains unknown in its genus or its quantity.’

As *Riba*, *Gharar* and *Maysir* are centrally absent in the Islamic banking system, methods and instruments of banking are intended primarily to be based on profit and risk sharing and to a lesser extent on trade/credit facilities. Islamic financial contracts comprise basic (“plain vanilla”) and derivative instruments as described below.

“Plain vanilla” Islamic financial instruments

This category comprises three types of vehicles: credit (debt); hybrid; and equity. Credit (debt) facilities are assets-backed loans accompanied by a sale and include *Murabahah*, *Bai’ Bithaman Ajil-BBA* (deferred instalment sale) and *Ijara wal-Iqtina* (financial leasing). Hybrids include *Ijara* (leasing) and *Mudharabah*, while equity participating instruments include *Musharakah* (see Figure 5).

Debt securities. Debt financing in Islamic banking emphasizes facilities for trade or business. These are elaborated below.

Bai’ Murabahah (cost plus) facilitates purchases of capital equipment and charges a fee for its services. A borrower specifies the need of an asset financing to an Islamic bank. The bank, after consideration and evaluation, agrees to purchase the asset and sells it back to the borrower with a mark-up to be paid at an agreed time. The profit arising from this arrangement compensates the Islamic bank for the risk borne and the capital tied-up. The asset is owned and utilized by the borrower subject to a lien on it. The lien is subsequently removed on final payment to the Islamic bank. Ebrahim (1999) explains that profits on *Murabahah* facilities are generally higher than conventional loans because Islamic instruments are structured to share the risk of the asset or venture. As such, Islamic credit facilities are generally non-recourse, secured by the underlying asset only; in contrast to conventional loans which are backed by all the assets of the borrower.

Arguments for *Murabahah* as a distinct Islamic instrument are based on the risk between the purchase and the resale of the asset in question; the bank takes responsibility for the goods before delivery to the client. Although this argument is justifiable, the reward for the risk profile involved is already factored as in a

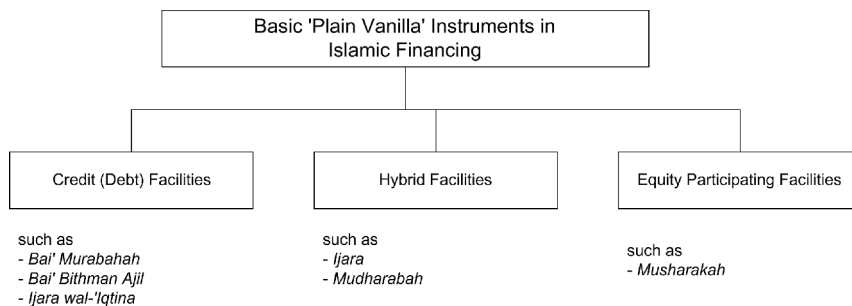


Figure 5.
“Plain vanilla”
instruments in Islamic
financing

conventional interest on risk. Hence, the “profits” and “interest-charge” implied are similar in outcome, although not by design (Iqbal and Mirakhor, 1999; Rosly, 1999)[4].

Bai’ Bithaman Ajil (BBA)/*Bai’ Muajjal* (deferred instalment sale) is similar to *Bai’ Murabahah* except that payments are allowed to be deferred in the purchase of capital assets. As such, *BBA* facility charges higher-premium for its services and risk incurred during deferment.

Ijara wal-’Iqtina (financial lease) facility also provides financing for capital equipment. Distinct from operating leases (*Ijara*, discussed below under hybrid securities), *Ijara wal-’Iqtina* is designed such that the lease payment includes a portion of the price of the asset. The lease is structured in such a way that towards the end of it the asset is given away as a “gift” and the title is transferred to the borrower (Khoja, 1995; Al-Omar and Abdel-Haq, 1996).

Hybrid securities. Ijara (operating lease) is a facility where the Islamic bank buys the asset and rents it to the client. *Ijara* has features of both debt and equity. On the debt side, this is similar to a risky asset-backed loan. On the equity side, the wild card in the estimation process is the expected salvage value. The expected salvage value may turn out to be either positive or negative.

Classically *Mudharabah* implies the bringing together of capital on the part of the financier and know-how/labor on the part of the borrower. *Mudharib* in essence means a trustee or agent and refers to the borrower. The financing agent is referred to as an investor (*rabb-ul-mal*) with characteristics of a sleeping partner. The profits that arise as a result of economic activity of a trustee are divided between the *Mudharib* and the *rabb-ul-mal*. In respect to Islamic banking, the bank acts as a *Mudharib* in managing the funds of the agent subject to the contractual agreements of the *Mudharabah*. It is important to note that any loss associated with the capital is borne by the investor, while the *Mudharib*’s losses are on his efforts, which may be uncompensated. The liability is such that, if the *rabb-ul-mal* finds the *Mudharib* negligent or attempting to cheat, he has the right to sue the *Mudharib*. In the current economic environment, corporations largely conduct businesses where managers are paid salaries. Non-voting *Mudharabah* securities need to be adapted to a senior level to a *Musharakah* (equity) facility. Thus, a modified *Mudharabah* in contemporary times can be envisioned as hybrid, i.e. it combines the features of both equity and Islamic debt contracts. Equivalent instruments in conventional finance include a participating stock with no contractually promised dividends (Ebrahim, 1999).

Equity participating securities: Al-Musharakah. Musharakah or *shirkah* can be defined as a form of partnership where two or more persons combine either their capital or labor together, to share the profits, enjoying similar rights and liabilities (Al-Harran, 1993). It closely resembles equity or ownership (control) of an enterprise in conventional finance. With the characteristics of equity participation, the contract is based purely on a profit and loss basis on the business venture. *Musharakah* examples include equity participation in partnerships, limited company and co-operatives.

Islamic derivatives

These comprise both Islamic Futures and Embedded Options in a contract, as illustrated in Figure 6. However, the development of it is largely unrealized (Khan, 1995).

Bai Al-Salam/Istisna are similar to a futures contract where the buyer and seller agree to a price, quality, quantity and delivery date[5]. *Bai Al Salam* is structured for commodities, while *Istisna* is for manufactured goods.

The adapted version of *Mudharabah* discussed above has an embedded call option, which can be structured to allow an investor to participate in the income or growth of the venture[6]. This property of the facility makes it extremely flexible in that it could be molded to suit the financial goals of the investor. The determination of the profit-sharing ratio or the pricing of this facility is elaborated by Ebrahim (1999) as follows:

A *Mudharabah* facility can be synthesized as a combination of a *Murabahah* (cost-plus) facility and fractional (θ) shares of *Al-Ikhtiyarat* (European Call Option) such that the profit from the *Murabahah* in the good states of the economy offsets the Call Price[7].

Examples of modified *Mudharabah* vehicles include: income version (sharing of net operating income); growth and income version (sharing of net operating income as well as appreciation of the business); and growth version (sharing of the appreciation of the business in the future).

Tadamun or *Takaful* is a form of mutual Islamic insurance contract based on a collective sharing of risk by a group of individuals whose payments are akin to premiums invested by the Islamic banking institution for the benefit of the group (Al-Harran, 1993). This is essentially a Put Option on the underlying asset being insured[8].

One of the tenets of Islamic banking is to resolve and improve on problems inherent in conventional banking. Thomas (1995) is of the view that *Riba*, *Gharar* and *Maysir* manifested in the conventional system can wreak havoc in an economy as advanced as the USA, as depicted by the massive failures of US savings and loans institutions of the 1980s. A conventional bank's earnings are typically based on the spread between its *ex-post* loan portfolio and its *ex-ante* contractually fixed cost of funds from its depositors. *Ribawi* contracts on both sides of a bank, as

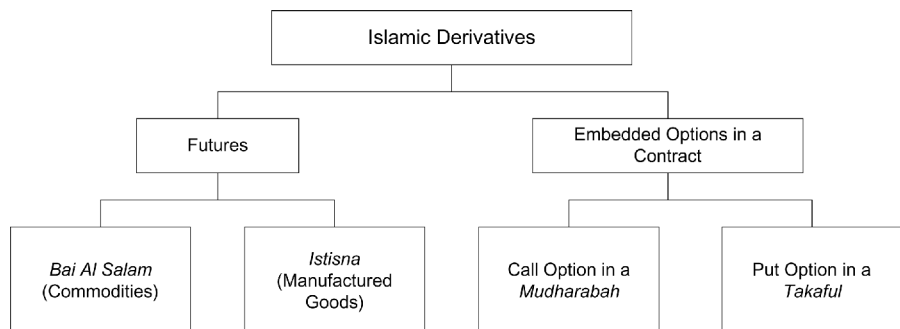


Figure 6.
Islamic derivatives

Source: Khan, 1995

portrayed in Figure 3, have the potential of endangering the entire economic system. First of all, *ribawi* loans cause defaults in the poor state of the economy, thereby impairing its structure if it snowballs into a recession. Second, the bank's act of *ex-ante* promising fixed-interest to its depositors creates *Gharar* (deception), as the bank may not have the necessary resources if its portfolio return did not exceed its contractual liability. The bank may also jeopardize depositors' assets by riding up the yield curve for some additional returns or investing in riskier loans due to the moral hazard created by deposit insurance.

Islamic banking aims to promote economic growth through risk-sharing instruments whose payoffs fluctuate with economic output and do not structurally impair the economy in the manner of excessive fixed-interest debt does in a poor economic environment such as a recession (Asquith *et al.*, 1994; Andrade and Kaplan, 1998). In Boot and Thakor's (1997) model of financing hierarchy, there exists a two-tier system of intermediation comprising banks and capital markets. It will be seen in the next section that the current phase of Islamic banking in Brunei Darussalam fits the evolutionary stage (see Figure 3). It needs to advance to the next phase involving capital markets where financial engineers will eventually produce innovative products and services to mitigate risk and enhance the economic development of the nation (see Figure 4). Islamic banks complemented by capital markets can withstand extreme shocks of economic output by matching users and savers of funds in an environment free of *Riba*, *Gharar* and *Maysir*. This can be achieved by pooling assets and securitizing them for sale to investors in accordance with their investment horizons and risk preferences.

V. State of financial intermediation in Brunei Darussalam

The first bank in Brunei, prior to British colonialism, was established in 1935 and was called the Post Office Savings Bank. Japanese occupation destroyed most of the records of the bank. The first bank during British rule was the Hong Kong & Shanghai Bank (established in the mid-1940s and currently called Hong Kong Bank) followed by the Standard Chartered Bank. These banks were supported by the British administrators and followed conventional banking practices under British Law. Subsequent banks in Brunei include Malayan Banking (1960) followed by the United Malayan Banking Corporation (1963), the National Bank of Brunei (1964), Citibank (1971), the Island Development Bank (1980), Baiduri Bank (1992), Tabung Amanah Islam Brunei (1992) and the latest, the Development Bank of Brunei (1995). In the mid-1980s, the National Bank of Brunei folded and the Island Development Bank (IDB) became the only local bank in Brunei. IDB was subsequently renamed the International Bank of Brunei and largely enjoyed the support of the Brunei Government. In 1993, the International Bank of Brunei was renamed the Islamic Bank of Brunei to administer the financial affairs of the community according to the lofty ideals of Islam.

Banks in Brunei are regulated under the Banking Act and Finance Companies Act through the Ministry of Finance. There is no Central Bank in

Brunei but the functions of monitoring are under the jurisdiction of the Ministry of Finance through the Brunei Currency Board, the Department of Financial Services and the Brunei Investment Agency. The Brunei Currency Board is in charge of controlling the money in circulation and maintaining currency interchangeability (fixed at par) with Singapore.

Of the total banks in Brunei Darussalam, the Islamic Bank of Brunei (IBB) and Tabung Amanah Islam Brunei (TAIB) are the only banks that offer Islamic banking services. The others offer financial services based on conventional banking practices. It is only in the early 1990s that Islamic banking facilities were available. The first Islamic bank came into being with the inauguration of TAIB in 1992, since it was regarded as a *Fardu Kifayah* (religious obligation) on the Muslim community. TAIB's initial formation was as a trust fund whose prime function was to provide facilities for Muslims to make the pilgrimage to Mecca. The second Islamic Bank, IBB, was established in 1993 to provide Muslims with Islamic banking facilities mainly in trade and commercial finance[9]. Between 1992 and 1997, IBB's customer deposit base has grown tremendously from about BND386 million to about BND782 million. The core clientele base of IBB comprises the affluent and the middle class segment of the population. TAIB is similar to a savings and loan institution and is owned by the government. Its main objectives are to operate/promote Islamic financial services and to raise the socio-economic standards of the population. Between 1992 and 1996, the customer deposit base of TAIB rapidly grew two and a half times from BND118 million to about BND295 million. TAIB mainly focuses on the underprivileged segment of the population.

Conventional banks are of two types in Brunei:

- (1) locally operated but foreign-controlled branches of international banks such as the Standard Chartered Bank, Hong Kong Bank, CitiBank, and Maybank; and
- (2) locally operated and incorporated banks such as Baiduri Bank and the Development Bank of Brunei.

As the prevailing banking act does not require foreign controlled banks to publish local financial results for the public, very little information is available about the performance of such banks. It was, however, estimated that Hong Kong Bank had a deposit base of over 1 billion dollars in 1989, while the Standard Chartered Bank had deposits of around half a billion dollars during that time (Cleary and Wong, 1994). The overall Brunei bank deposit base between 1991 and 1995 is shown in Table I. The total Islamic banking deposits between 1992 and 1995 aggregated to about 11.5 per cent of the market share. It has been stagnant between these years.

Although Table I indicates a rising level of deposits in the banking system, most of the deposits are channeled out of the country, especially to Singapore (see Figure 7). In one report, an official indicates "an increasing concern over the banks using the country as a source of relatively cheap funds that can be more profitably loaned offshore" (Cleary and Wong, 1994).

The existing financial instruments and infrastructure have been somewhat limiting in the country. Loans and advances indicate a pattern towards consumption rather than production (see Table II).

As Table II shows, credit in productive and development ventures such as agriculture, manufacturing, transport and professional service account for less than 6 per cent from 1991 through 1994. Furthermore, less than 40 per cent of the loans are locally utilized.

Deposits: (in B\$ million)	Demand	Time	Savings	Other deposits	Total deposits
1991	1,848.4	1,287.6	1,032.5	103.5	4,272.0
1992	2,027.8	1,522.2	903.3	—	4,453.3
1993	2,031.8	1,935.4	999.3	—	4,966.5
1994	3,966.0	2,040.0	1,078.3	—	7,084.3
1995	3,643.7	2,725.8	1,168.4	—	7,537.9

Sources: Brunei Currency Board, Ministry of Finance, Financial Institution Section, Ministry of Finance

Table I.
Total deposits in
Brunei Darussalam
(1991 to 1995)

% of Net Amount Due from Banks Outside Brunei over Total Deposits

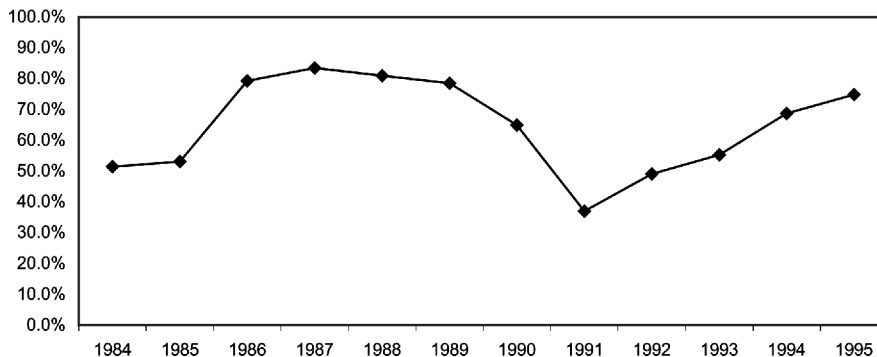


Figure 7.
Percentage of net
amount due from banks
outside Brunei

	Percentage of credit and finance, construction, general commerce and personal loans to total loans[10]	Percentage of agriculture, manufacturing, transport, professional services loans to total loans	Total loans as a percentage of total assets
1991	94.1	5.9	38.7
1992	95.5	4.5	36.7
1993	95.0	5.0	36.7
1994	95.6	4.4	28.3

Sources: Brunei Currency Board, Ministry of Finance, Financial Institution Section, Ministry of Finance

Table II.
Distribution of loan
spending

As local supply of funds is in excess of demand, interest rates charged by conventional banks should theoretically be lower than those in Singapore. Thus, there is a dire need to keep funds at home to foster the economic development of the nation.

Figure 8 shows the pre-tax return on assets (ROA) on total assets of selected banks in Brunei. Owing to the different nature of institutions being compared, which are subjected to different forms of taxation (global/local/religious), pre-tax ROA is presumed to be the best indicator of profitability[11]. The results of HSBC (Hong Kong & Shanghai Banking Corporation) and SCB (Standard Chartered Bank) in the graph are consolidated, as no local results are available. However, as HSBC and SCB are international banks with representation all over the world, they serve to benchmark comparative analysis for local banks. The volatility experienced by Baiduri Bank could be ascribed to it being a newcomer (activated in 1994 but founded in 1992). The high ROA of TAIB and IBB could be rationalized from the fact that the risks inherent in Islamic contracts are higher than those of conventional loans. This is because (as explained earlier) Islamic contracts are non-recourse asset-backed securities. Islamic banks such as IBB thus allocate a higher provision for debts that are bad and doubtful as a proportion of total fixed assets, as indicated in Table III. This is not necessarily true for TAIB. These provisions depend mainly on the economic environment and the type of risky assets held by the bank.

The current availability of sources and uses of funds are described in Tables IV and V. Table IV shows IBB and TAIB primarily offering Islamic debt financing for individuals, businesses and real estate ventures. Long-term hybrid or equity oriented facilities securities are rarely used[12]. Table V provides the rationale for the cash outflow from Brunei Darussalam. This is attributed to the lack of local investment facilities for the long term.

Thus, Islamic banks have managed to profitably serve and retain around 11.5 per cent of the deposit base of the country. However, from the perspective of

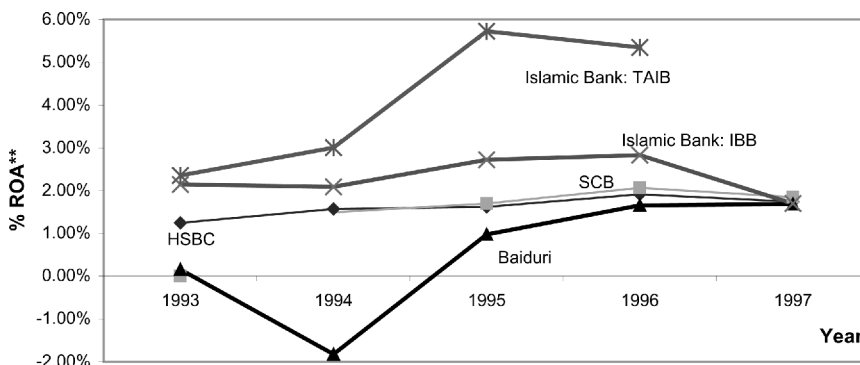


Figure 8.
Pre-tax return on assets
for selected banks
operating in Brunei
Darussalam

Source: Compiled data from companies' respective annual reports
For TAIB, 1997 results are not available and for Standard Chartered 1993 results are not available
**Note that Return is pretax but taking into account provisions for bad and doubtful debts to make comparisons possible.

Boot and Thakor (1997) the financial intermediation needs to advance to the next stage where Islamic banks are complemented by capital markets to enhance the economic development of the nation.

VI. A strategic plan of action for Islamic Banks

Where banks go from here depends very much on where the country wants to go. The consensus and development plans of Brunei point to the direction of further diversification of the economy base, away from the primary export of oil. Such diversification needs the enhancement of Islamic financial intermediaries (IFIs) in the country. However, current evidence shows that a great proportion of the reserves of the country is collected and managed elsewhere (outside the country) by *ribawi* banks and on *ribawi* terms. The possible developments of IFIs are first discussed by assuming certain scenarios based on the current economic environment.

	1993	Provisions as percentage of fixed assets			1997
		1994	1995	1996	
HSBC	0.56	0.14	0.18	0.16	0.21
SCB	N/A	0.36	0.18	0.15	0.31
Baiduri	0.00	0.00	0.64	0.80	0.91
IBB	0.39	0.79	0.81	0.65	0.81
TAIB	0.56	0.14	0.18	0.16	N/A

Source: Compiled data from companies' respective annual reports

Table III.
Provisions of bad and doubtful accounts as a proportion of fixed assets

	Short/intermediate term financing facility		Long-term financing facility	
	BBA*/ <i>Murabahah</i>	<i>Ijara wal-'Iqtina</i>	<i>Mudharabah/Ijara</i>	<i>Musharakah</i>
Consumption financing for individuals	Yes	Yes	No	No
Financing for business	Yes	Yes	No	No
Financing for real estate ventures	Yes	Yes	No	No

Note: * = BBA is an Islamic term, literally *Bay'bi-thamam Ajil*, i.e. Mark-up

Table IV.
Demand side facilities offered by IBB/TAIB in Brunei Darussalam

	Short term Investment product			Long term Investment product	
	Savings account/CD <i>Al-Wadiah</i>	Money market instruments	Islamic bonds <i>(Ijara/Income Mudharabah)</i>	Growth and income funds <i>(Mudharabah)</i>	Growth funds <i>(Musharakah)</i>
Individuals	Yes	No	No	No	Limited
Institutions	Yes	Limited	No	No	Limited

Table V.
Supply side facilities offered by IBB/TAIB in Brunei Darussalam

In an environment of low returns, and a lack of long-term savings instruments in the market, a financially astute Bruneian can take the following possible actions:

Scenario I: Consume most of the current discretionary income and savings

This will boost the local and regional trading communities. As most of the goods and services are imported into Brunei, the expected gain will be derived mainly from businesses acting as “middle-man”, where value is gained through minimizing distribution costs, maximizing distribution outlets and providing some or a little after-sales service. Ignoring the development of industries to cater for local needs through import, substitution strategies might lead to a burgeoning trade deficit in the future. Long-term implications of this scenario would be retarding economic growth of the country, increasing inflation and decreasing real returns.

Scenario II: Invest income and savings in the property/real-estate sector

The direct consequence of this would be an oversupply of housing and commercial property. An oversupply has serious implications on rental claims and could create negative impacts on banks financing these properties[13].

Scenario III: Invest income overseas

Bruneians facing very few restrictions on the flow of capital to and from the country could invest in productive ventures globally. This seems like a viable option due to the advantages of regional and global diversification and wider alternatives in evaluating risk return portfolios. The problem is perhaps the low yields that Brunei depositors are getting; what good is profit maximization if depositors do not truly enjoy the benefits of diversification? As one banker pointed out in anonymity, “The bank pays deposit rates of between 2.5-3 per cent and our off-shore investments yield much more than that. While it is true that we incur foreign exchange risk, yet the world is our oyster and we have many alternatives from which to choose. Bearing this in mind, the cost of capital here has to be higher due to the local risk factor compared to the outside world.”

In order to enjoy the benefits of global investments, some form of participation by the Brunei depositors is needed. Such participation can be viewed in terms of Islamic capital market products that fit the category of *Mudharabah* or *Musharakah* or portfolios of these in the form of mutual funds that invest locally with some exposure globally. The funds need to be marketed, suited and securitized sufficiently so that they are affordable. Brunei, being a Muslim country, has religious injunctions on investments entailing *Riba*, *Gharar* and *Maysir*. The primary focus therefore is to necessitate the development of IFIs, especially capital market products and services in market niches not served. This could be achieved by providing complementary Islamic investment-banking facilities. The advantages of this strategy are that it will:

- deter excessive consumption practices in Brunei;
- restrict capital outflows;
- shift deposits from short-term debt like securities to long-term hybrid/equity investments needed for national development;
- manage and minimize risk incurred by the current banking system through Islamic product innovations; and
- foster growth of the national economy.

The development of financial intermediation under Islamic jurisdiction could be achieved in Brunei as follows:

- (1) Increase awareness of Islamic products and services via brochures, pamphlets and seminars. This will enable the Islamic banks to gain market share and retain financial resources in the nation.
- (2) Design, develop and implement Islamic facilities that enhance the competitive ability of Islamic banks and reduce their risk exposure (Ebrahim, 2000).
- (3) Create Islamic money market instruments and intermediate-term notes by carefully securitizing the *Ijara* facility for durable assets and capital goods. This will reduce the premium leasing rates currently being charged by few conventional finance companies and will lead to overall growth of the market. Furthermore, a lease is considered an *ayn* (unique object) as opposed to a *dayn* (debt obligation), which makes it easier to securitize for sale in secondary markets. The potential of Islamic fixed income securities backed by an *Ijara* facility is discussed by Kahf (1997).
- (4) Create Islamic Bonds by resorting to the modified *Mudharabah* facility. This is also considered an *ayn* (unique object), which makes it easier to securitize for sale in secondary markets. Research in *Mudharabah* shows promise, as it can be synthetically molded for various financing purposes (Ebrahim, 1999). For example: venture capitalists can design growth or growth and income *Mudharabah* to finance start-up enterprises; and assets that depreciate such as automobiles can be financed with a decreasing income *Mudharabah* (Ebrahim, 2000).
- (5) Securitise equity shares of local companies and offer them to the public. Currently IBB shares are the only ones trading in the local bourse, which remains underdeveloped and lacks liquidity.
- (6) Pool/package the *Ijara/Mudharabah/Musharakah* facilities into distinct portfolios for sale, as mutual funds/unit trusts to the general public. This will also help in curtailing the cash outflow of Brunei Darussalam.
- (7) Design, develop and implement Islamic hedging and risk minimizing facilities such as Islamic futures (*Bai Al-Salam/Istisna*), Islamic swaps, etc. (Iqbal, 1999). This will enhance the profitability of Islamic banks while simultaneously reducing their risk exposure.

For the above to be feasible, Islamic bankers need to use state-of-the-art financing technology allowed in the *Shari'ah*. They need to establish rapport with themselves as well as the religious scholars (experts in *Mu'amalat*) along with academics in institutions such as the University of Brunei Darussalam, to design, develop and implement products and services as discussed above. In-house research and feedback from staff also need to be encouraged. Finally, strategic alliances need to be drawn between the Islamic banks in Brunei Darussalam with institutions such as Bank Islam Malaysia Berhad and the Islamic Development Bank.

VII. Conclusion

Islamic banking is in a rapidly growing stage as a feasible alternative to conventional banking. Although innovative solutions for some issues are still lacking, it would be unfair to compare its progress to that of established conventional finance. There will be no justification in looking for disadvantages in it in contrast to the problems of conventional banking today, especially in the light of the current crisis in South East Asia, where countries had to call out for a revamping of the conventional financial system. It is important to keep the spirit and flame growing in the progress of Islamic banking. In this aspect, Brunei Darussalam has seen tremendous change and improvement from practically zero Islamic banking to a feasible and practical approach in just over half a decade. However, more creative techniques need to be undertaken to suit the financial needs of firms based on their distinct requirements. Hence, retail banking is not enough. Islamic Investment banking and retail banking must integrate to provide the twin engines of growth and development in the country.

Notes

1. It should be noted that this criterion is valid for independent projects (Brigham and Gapenski, 1991).
2. Conventional finance literature attributes *ribawi* loan transactions to the presence of (i) asymmetric information between insiders (managers) of firms and outside investors (Ross, 1977; Myers and Majluf, 1984); (ii) conflict of interest (agency effect) between managers and shareholders of firms (Jensen and Meckling, 1976). These issues can be mitigated by (i) making it obligatory on corporate insiders to reveal vital information such as profitability and their stake in the firm on an ongoing basis and (ii) giving managers performance incentives such as stock options.
3. In the context of the current crisis in South East Asia, austerity measures of high *ribawi* rates are viewed by some as exacerbating the crisis.
4. The excessive use of credit facilities by Islamic banks globally has drawn the ire of scholars such as Ahmad, S.M. (1989) and El-Naggar (1994).
5. Conventional futures are very controversial with the *Ulema* – religious scholars (Kamali, 1999). However, there is a relationship between a conventional future contract and a *Bai'Salam* contract on the same commodity. A *Bai'Salam* contract can be synthesized using a *Murabahah* vehicle in conjunction with a futures contract.
6. It should be noted that certain *Ulema* such as Justice Taqi Usamani have given their verdict allowing contracts with embedded options (Kahn, 1999).

7. Note that this needs to be technically modified to incorporate the present value of profits from a *Murabahah* in the good states of the economy to offset the call price.
8. The put option in a *Takaful* can be derived using the Put-Call Parity Theorem and the call pricing formulas in the finance literature.
9. IBB on 13 January 1993 was named after taking over International Bank of Brunei and marked the conversion from conventional banking to Islamic banking.
10. The aggregation of all these activities under consumption is not appropriate. For example, construction activities are productive in nature due to the earning stream from rents. However, due to lack of detailed information, the bulk of these activities are assumed to be for consumption purposes.
11. Return on Equity (ROE) is not appropriate here due to the differences in leverage employed by Islamic versus conventional banks. Moreover, it cannot be evaluated for TAIB, as the Brunei Government owns it. Pre-tax ROA are used instead of Post-tax ROA because of insufficient information in the calculation of *Zakat* (Islamic wealth tax paid as charity to the poor) for Islamic banks. This is a major issue especially in the case of TAIB. Furthermore, due to accounting differences, it must be noted that IBB in 1997 had an investment of B\$9 million classified under operating and administrative expenses. It is not clear what these investments are and why they are allocated as expenses.
12. There are a few exceptions involving *Musharakah* participation. These include IBB's investment in real estate developments in Kuala Lurah area and TAIB's ownership in a chain of petrol (gas) stations in Brunei Darussalam.
13. The excess spending on the real estate sector of the economy has created considerable overhang of vacant properties exacerbated by the current financial crisis (see Stephen, 1999).

References and further reading

- Ahmad, S.M. (1989), *Towards Interest-Free Banking*, Institute of Islamic Culture, Lahore, Pakistan.
- Ahmad, Z. (1994), "Islamic banking: state-of-the-art", *Islamic Economic Studies*, Vol. 2 No. 1, pp. 1-34.
- Al-Bahar, A. (1996), "An overview of developments and potential in Islamic banking and finance", *International Investor-Islamic Banking & Finance*, 1996 Conference, p. 1.
- Al-Harran, S.A.S. (1993), *Islamic Finance: Partnership Financing*, Pelanduk Publications, Malaysia, pp. 15-157.
- Al-Iraqi (1992), *Takhrij Ahadith Al-Ihya' with Ihya' 'Ulum al-Din of Al-Ghazali*, Kitab Adab Al-Kasb, (Dar Qutaybah, Beirut, Lebanon), Vol. 2, p. 95.
- Al-Omar, F. and Abdel-Haq M.K. (1996), *Islamic Banking: Theory, Practice and Challenges*, Oxford University Press, Karachi and Zed Books, London, pp. 11-19.
- Al-Suyuti (1990), in Al-Albani, N. and Al-Islami, A.-M. (Eds), *Da'if Al-Jami' Al-Saghir*, Beirut, Lebanon, *Hadith* No. 2434.
- Andrade, G. and Kaplan, S.N. (1998), "How costly is financial (not economic) distress? Evidence from highly leveraged transactions that become distressed", *Journal of Finance*, Vol 5, pp. 1443-93.
- Asquith, P., Gertner, R. and Scharfstein, D. (1994), "Anatomy of financial distress: an examination of junk-bond issuers", *Quarterly Journal of Economics*, Vol. 109 No. 3, pp. 625-58.
- Bhattacharya, S. and Thakor, A. (1993), "Contemporary banking theory", *Journal of Financial Intermediation*, Vol. 2, pp. 3-48.
- Boot, A. and Thakor, A. (1997), "Financial system architecture", *Review of Financial Studies*, Vol. 1 No. 3, p. 695.
- Brigham, E. F., and Gapenski, L. C. (1991), *Financial Management Theory and Practice*, Dryden Press, Chicago, IL, pp. 315-442.

- Cleary, M. and Wong, S.Y. (1994), *Oil, Economic Development and Diversification in Brunei Darussalam*, St Martin's Press, New York, NY, p. 114.
- Ebrahim, M.S. (1999), "Integrating Islamic and conventional project finance", *Thunderbird International Business Review*, Vol. 41 No. 4/5, pp. 583-609.
- Ebrahim, M.S. (2000), "Pricing asset backed Islamic financial instruments", *International Journal of Theoretical and Applied Finance*, Vol. 3 No. 1.
- El-Naggar, A. (1994), Interview, *American Journal of Islamic Finance*, Vol. IV No. 4, pp. 12-13.
- Greenbaum, S. and Thakor, A. (1995), *Contemporary Financial Intermediation*, Dryden Press, New York, NY, pp. 48-128.
- Ibn Taymiya (n.d.), *Al-Qawid id Al-Nu ra niya Al-Fiqhiya (The Second General Rule: Prohibited and Permitted Contracts)*, pp. 112-33.
- Ibn Taymiya (n.d.), *Nazariyya Al-'Aqd (On the Sale of Something for its Value or at the Established Price or by its Number)*, pp. 220-29.
- Iqbal, Z. and Mirakhor, A. (1999), "Progress and challenges of islamic banking", *Thunderbird International Business Review*, Vol. 41 No. 4/5, pp. 381-405.
- Iqbal, Zamir (1999), "Financial engineering in Islam", *Thunderbird International Business Review*, Vol. 41 No. 4/5, pp. 541-60.
- Iqbal, Zubair, and Mirakhor, A. (1987), "Islamic banking", *Al-Tawid: A Quarterly Journal of Islamic Thought and Culture*, April-June, p. 91.
- James, C. (1987), "Some evidence on the uniqueness of bank loans", *Journal of Financial Economics*, Vol. 19, pp. 217-315.
- Jensen, M.C. and Meckling, W. (1976), "Theory of the firm: managerial behavior, agency costs and capital structure", *Journal of Financial Economics*, Vol. 3, pp. 305-60.
- Kahf, M. (1997), "The use of asset *Ijara* bonds of bridging the budget gap", *Islamic Economic Studies*, Vol. 4 No. 2, pp. 75-90.
- Kahf, M. and Khan, T. (1992), *Principles of Islamic Financing (A Survey)*, Islamic Development Bank, Jeddah, Saudi Arabia, p. 9.
- Kamali, M.H. (1999), "Prospects for an Islamic derivatives market in Malaysia", *Thunderbird International Business Review*, Vol. 41, No. 4/5, pp. 523-40.
- Kaminsky, G.L. and Reinhart, C.M. (1998), "Financial crises in Asia and Latin America: then and now", *American Economic Review*, Vol. 88 No. 2, pp. 444-8.
- Karsten, I. (1982), "Efforts to develop Islamic financial systems: focus on the abolition of the fixed interest rate", *IMF Survey*, February, p. 56.
- Khan, M.F. (1995), *Islamic Futures and their Markets*, Islamic Development Bank, Jeddah, Saudi Arabia.
- Khan, T. (1999), "Discussion forum: Islamic financial derivatives", *International Journal of Islamic Financial Services*, Vol. 1 No. 1.
- Khoja, E.M. (1995), *Instruments of Islamic Investment*, Dallah Al-baraka Group, Jeddah, Saudi Arabia, pp. 25-36, 57-82.
- Miller, V. (1998), "Banking crises, currency crises, and macroeconomic uncertainty", *American Economic Review*, Vol. 88 No. 2, pp. 439-43.
- Morgan, D.P. (1997), "Judging the risk of banks: what makes banks opaque?", working paper for the Federal Reserve Bank of New York, New York, NY, p. 2.
- Myers, S.C. and Majluf, N.S. (1984), "Corporate financing and investment decisions when firms have information that investors do not have", *Journal of Financial Economics*, Vol. 13, pp. 187-221.

-
- Presley, J.R. (1988), *Directory of Islamic Financial Institutions*, Croom Helm, Beckenham, London, pp. 68-9.
- Rajan, R. (1992), "Insiders and outsiders: the choice between informed and arm's length debt", *Journal of Finance*, Vol. 47, pp. 1367-400.
- Rayner, S.E. (1991), *The Theory of Contracts in Islamic Law*, Graham and Trotman, London, pp. 266-304.
- Rosly, S.A. (1999), "Al-Bay' Bithaman Ajil financing: impacts on Islamic banking performance", *Thunderbird International Business Review*, Vol. 41 No. 4/5, pp. 461-80.
- Ross, S. (1977), "The determinants of financial structure: the incentive signaling approach", *Bell Journal of Economics*, Vol. 8, pp. 23-40.
- Samuelson, P.A. and Nordhaus, W.D. (1989), *Economics*, McGraw-Hill, New York, NY, p. 233.
- Stephen, I. (1999), "Ghost' houses haunt landlords", *Borneo Bulletin*, 6 September, pp. 1-2.
- Thomas, A.S. (1995), *What Is Permissible Now?*, First Printers, Singapore, pp. 1-26.
- Wilson, R. (1994), "Development of financial instruments in an Islamic framework", *Islamic Economic Studies*, Vol. 2 No. 1, pp. 103-18.