Journal of Islamic Finance, Vol. 3 No. 2 (2014) 015 – 029.
IIUM Institute of Islamic Banking and Finance
ISSN 2289-2117 (O) / 2289-2109 (P)

Islamic Banking and *Shari'ah* Compliance: A Product Development Perspective

Habib Ahmed[a]

[a]*Durham University Business School,The United Kingdom*

Abstract

The key difference between Islamic banks and their conventional counterparts is that the former abides by the principles of Islamic law (Shari'ah). However, some Islamic banking products are criticized for not fulfilling the Shari'ah requirements as these closely mimic conventional products. The article discusses how traditional Islamic contracts are used to structure Islamic modes of financing during contemporary times. To understand the choice of financing modes used by Islamic banks, the product development process is examined and the role of Shari'ah related bodies in these institutions (Shari'ah unit/department and Shari'ah supervisory board/committee) in this process is outlined. The article contends that the choice of modes of financing used by Islamic financial institutions depend on external and internal factors. In some cases Islamic banks choose controversial modes of financing as these are the only ones that are feasible under the legal and regulatory regimes they operate under. In other cases the choice of inferior modes may result from competing internal organizational considerations whereby economic factors overshadow Shari'ah requirements. The article highlights the role of Shari'ah related bodies within a bank in ensuring Shari'ah compliance of products.

Keywords: Islamic banking, Shariah compliance, Product development

1. Introduction

Islamic banking started in the mid-1970s primarily to provide financial services compliant with *Shari'ah* (Islamic law) to Muslims who would otherwise not do business with conventional interest-based finance due to religious convictions. During its short history, the Islamic financial sector has grown at a fast pace and become a significant global phenomenon now with estimates the size of the industry to be worth USD 1.13 trillion in 2012. The industry is expected to continue its rapid growth with projections of its assets more than doubling in the MENA region from a figure of USD 416 billion in 2010 to USD 990 billion in 2015 (Ernst & Young 2011). Although the industry has grown rapidly during its short history, the nature of the products it is offering has come under increased scrutiny. The crux of the criticisms is focused on the products offered by Islamic financial sector, which increasingly appears to be mimicking those from conventional finance (Khan 2010). In doing so, the contention is that *Shari'ah* requirements are diluted whereby forms of contracts are fulfilled but the substance and spirit of Islamic law are not (ElGamal 2008).

The failure of Islamic finance to fulfill the *Shari'ah* requirements has led to negative perceptions and damaging observations about the industry. At the extreme end of the spectrum, Islamic financial industry has been denounced as 'deception' and 'charade' (Saleem 2006a and 2006b). Seniawski (2001) and Holden (2007) identify the current practice in Islamic financial industry as 'legal hypocrisy' and Hamoudi (2007) calls it 'semantic fantasy' and 'jurisprudential schizophrenia'. ElGamal (2007 and 2008) claims that Islamic financial institutions are rent-seeking Shari'a arbitrageurs using ruses to circumvent prohibitions of Islamic law. More recently, some *Shari'ah* scholars have joined the critics in pointing out problems with the legalistic approaches of approving Islamic financial transactions. For example, Usmani (2007) points out the majority of the *sukuk* (Islamic bonds) issued in the market replicate conventional bonds and not in line with the spirit of Islamic law. Similarly, Delorenzo (2007) views the Islamic total return swap, which is a replication of a conventional swap, unacceptable and even though the form uses *Shari'ah* compatible contracts.

To explain the choices of modes of financing that an Islamic bank may opt for, the article examines how *Shari'ah* principles are incorporated in structuring products. This is done by looking at the product development process and identifying the role of *Shari'ah* related bodies in financial institutions (*Shari'ah* unit/department and *Shari'ah* supervisory board/committee) in different stages of developing products. *Shari'ah* scholars sitting in supervisory boards of different Islamic financial institutions are responsible to ascertain that products comply with *Shari'ah* and provide a seal of approval before they are launched in the market. Kahf (2004) maintains that pronouncing *Shari'ah* compliance of products by the *Shari'ah* supervisory boards (SSBs) convinces the religious minded people to deal with the banks both as providers and users of funds.

Interest based loans being prohibited by *Shari'ah*, Islamic banks use various sale and equity based modes of financing. The choice of specific modes of financing that Islamic banks use to structure products can be discussed at two levels. At the first level, the *potential* set includes all the *Shari'ah* compliant contracts that can be used for a particular product. However, external constraints arising from legal and regulatory requirements can limit the use of certain modes of financing. Thus, at the second level the *feasible* set constitutes the modes that fulfill the legal and regulatory requirements. Given the legal and regulatory settings, the organizational capabilities and preferences determine the types of products that banks develop from the feasible set.

The goal of this article is to examine how the choices of Islamic modes of financing are made to evaluate the causes of the dilution of *Shari'ah* principles in Islamic banking products. The article contends that in certain cases Islamic banks choose controversial modes of financing as these are the only ones that are feasible given the external constraints. In some other cases, however, the choice of inferior modes may result from competing internal dynamics whereby the *Shari'ah* requirements are overshadowed by economic incentives and business related factors. Specifically, complying with the Islamic contractual stipulations introduces certain inherent risk-return features that sometimes may not be compatible with the risk-return appetite of banks. The friction between the *Shari'ah* requirements and economic motivations can lead to adoption of products that dilute the former.

The article is organized as follows. Section 2 introduces the key Islamic financing contracts and outlines the features of Islamic banking products. Section 3 presents the basic structure of the product development cycle and the role of *Shari'ah* bodies in different phases of the process. After going over the legal/regulatory environments under which Islamic banks operate, section 4 examines how choices of Islamic modes of financing may be influenced by external constraints and internal organizational dynamics. The last section concludes the article.

2. *Shari'ah* Principles, Islamic Contracts, and Islamic Banking Products

The overall goal of an Islamic economic system, of which Islamic finance is a part of, is to realize the goals of Islamic law (*maqasidal-Shari'ah*) which should manifest in the economy as enabling growth and justice (Chapra 2008, Siddiqi 2004). One implication of *maqasid* is that other than fulfilling the legal stipulations, an Islamic financial system should also cater to the social needs of a society. Accordingly, there is a general agreement among proponents of Islamic finance that *maqasid* should inhere in the operations and products of Islamic financial institutions (Siddiqi 2006). Whereas *maqasid* has both legal and social implications, the focus of this article is on the former.

Kahf (2006) asserts that *maqasid* at the transactions' level are achieved by fulfilling the underlying objectives of exchange envisaged in Islamic law. These include upholding property rights, respecting consistency of entitlements with the rights of ownership, linking transaction to real life activity, transfer of property rights in sales, etc. Furthermore, the overall goals of Islamic law are linked to fulfilling the legal maxims (*al-quwaid al-fiqh*) that reflect the spirit of Islamic law (Kamali 2006). Some legal maxims have relevance to Islamic financial transactions. The legal maxim 'in contracts, attention is given to the objects and meaning, and not to the words and form'[*] provides the guiding principle of focusing on substance over form in devising financial products.

A maxim that links risks and return in economic transactions states 'the detriment is as a return for the benefit (a*l-ghurm bi al-ghunm*).[†]The implied relationship between 'entitlement of gain' to the 'responsibility of loss' in this maxim is usually used to propose the preference for profit-loss sharing instruments in Islamic finance (Kahf and Khan 1988: 30). Another maxim that is often used in approving Islamic products is the maxim of necessity which states that 'hardship causes the giving of facility'[‡]. The implication of this maxim is that leniency can be used in cases that cause hardship or injury. In such situations, a concession (*rukhsah*) can be used to dilute the force of established law as an exception.

The underlying principle of Islamic law related to commerce and transactions is permissibility (*ibahah*) which maintains that everything in economic affairs is permitted other than those explicitly forbidden by divine guidance (Kamali 2000). Prohibitions under Islamic law can be broadly classified as *riba* and *gharar*.[§]*Riba* (literally meaning increase or growth) is prohibited by *Shari'ah*. Although it is common to associate *riba* with interest, it has much wider implications and can take different forms. The common premise in the prohibition of *riba* lies in the unequal trade of values in exchange (Siddiqi 2004). An implication of rules of *riba* for monetary transactions is that interest bearing loans are prohibited.

Gharar literally means danger and also signifies deception. The word, however, has connotations of uncertainty, risk or hazard and also implies ignorance, gambling and fraud. Mustafa Zarqa defines forbidden transaction involving *gharar* as the 'sale of probable items whose existence or characteristics are not certain, due to the risky nature that makes it similar to gambling' (Al-Zuhayli 2003: 83). *Gharar* can exist in the terms of a contract or in the object of a contract. *Gharar* in a contract arises when the consequences of a transaction are not clear and there is uncertainty about whether a transaction will take place. *Gharar* in the object of the contract arises when there is uncertainty about the subject matter of sale and its delivery. Islamic law distinguishes between ownership and possession and requires actual possession before selling something to ensure delivery. *Gharar* will exist when either the object of sale does not exist or the seller and/or buyer do not have the knowledge of the object being sold. One implication of *gharar* is that derivative contracts such as futures, options and swaps are prohibited as these do not fulfill the conditions of the existence of object and introduces uncertainty by postponing the exchange at a future date.

2.1 Islamic Contracts and Financial Products

The traditional Islamic contracts that are frequently used is Islamic finance can be broadly classified into equity and debt modes. While equity instruments are partnership-based contracts of *mudarabah* and *musharakah*, debt-instruments arise from sale transactions. These fixed-income debt instruments include *murabahah* (cost-plus or mark-up sale), *bai-muajjal* (price-deferred or credit sale), *salaam* (object-deferred or pre-paid sale), *istisna* (construction/manufacturing contract) and *ijarah* (leasing contract). The basic features of these key instruments are outlined below.[**]

a) *Musharakah*: *Sharikah* is a partnership between parties in which financial capital and/or labor act as shared inputs and profit is distributed according to the capital share of the partners or in some agreed upon ratio. The loss, however, is distributed according to the share of the capital. Though there can be different kinds of partnerships based on money, labor, and reputation, one case of *sharikah*is participation financing or *musharakah* in which partners share both in capital and management of the business enterprise. Thus partners in *musharakah* have both control rights and claims to the profit.

b) *Mudarabah*: *Mudarabah* is similar to the concept of silent partnership in which financial capital is provided by one or more partner(s) (*rabul mal*) and the work is carried out by the other partner(s) *mudarib*. The funds are used in some activity for a fixed period of time. The financiers

[*]See Article 3 in Majallah (2001).
[†]See Article 87 in Majallah (2001).
[‡]See Article 17 in Majallah (2001).
[§]For a detailed discussion on *riba* see Siddiqi (2004) and Fadel (2008) and for *gharar* see Al-Dhareer (1997) and ElGamal (2001).
[**]For a discussion on these modes of financing see Ayub (2007) and Usmani (1999).

and the managers of the project share the profit in an agreed upon ratio. The loss, however, is borne by the financiers according to their share in the capital. The manager's loss is not getting any reward for his services. As the *rabul mal* is sleeping partner, he/she has a claim on profit without any say in the management of the firm.

c) *Murabahah/BaiMuajjal*: *Murabahah* is a sale contract at a mark-up. The seller adds a profit component (mark-up) to the cost of the item being sold. When the purchase is on credit and the payment for a good/asset is delayed, then the contract is called *bai-muajjal*. A variant would be a sale where the payments are made in installments. These contracts create debt that can have both short and long-term tenors. In these debt contracts the supplier of the good has claims on a fixed amount that must be paid before arriving at profits.

d) *Salam/Istisna*: *Salam* sale is an advance purchase of a generic good. In a *salam* contract, the buyer of a product pays in advance for a good that is produced and delivered later. The product-deferred sale contract applies mainly for agricultural goods. *Istisna* or commissioned manufacturing is similar to *salam* contract with the difference that in *istisna*the good is produced/built according to the specifications given by the buyer. This applies mainly to manufactured goods and real estate. The client asks the financier to provide an asset (such as real estate) built and the payments are made over a period of time in the future. In *istisna* the payments can be made in installments over time with the progression of the construction/production. In this case the financier can opt to have a parallel *istisna* and sub-contract the project to a third party for its completion.

e) *Ijarah*: *Ijarah* is an operating lease in which the lessee pays rent to the lessor for use of usufruct. In *ijarah* the ownership and right to use an asset (usufruct) are separated. It falls under a sale-based contract as it involves the sale of usufructs. A lease contract that results in the transfer of an asset to the lessee at the end of the contract is called *ijarah muntahia bit tamleek. Ijarah muntahia bit tamleek* combines sale and leasing contracts and use the hire-purchase or rent-sharing principles. As the periodic payments include rent and part of the asset price, the ownership of the asset is transferred to the lessee at a nominal price or a gift after the contract period is over.

Financing in contemporary financial system takes place either through markets or intermediaries. The traditional contracts in their pure forms do not have the features that can cater to the needs of the contemporary financial markets and institutions. Adapting to this new financial structure requires creating a new set of instruments that can cope with dealings of the contemporary finance. Most Islamic financial products would entail one dominant contract and multiple supporting contracts. For instance, in a simple *murabahah* based financing contract, a bank must first buy the asset such as a car before selling it to the client at a markup. This product would, however, also include the following: a promise from the client to purchase the good, an agency contract whereby the bank appoints the client an agent to purchase the good from the vendor, a sale contract between the vendor and the bank, a sale contract between the bank and the client (the *murabahah* contract) and collateral or guarantee agreement to mitigate the credit risks.

Note that even though *murabahah* creates a debt, it is contractually different from an interest-bearing loan. First, as the debt arises from a credit sale contract, it is tied to real transactions. Second, if there is a default in payments of dues the bank cannot charge an additional amount as done with compound interest in case of a loan contract. *Shari'ah* scholars, however, permit charging a penalty for delays in payments to mitigate moral hazard problem of clients on the condition that it is given away to some charitable cause (Usmani 1999).

2.2 Islamic Banking Products, Shari'ah Compliance and Risks

The main focus of Islamic financial industry has been to provide *Shari'ah*-compliant structures of conventional financial products (Dar 2007). The technology and institutional arrangements allow the use financial/legal engineering to develop Islamic products that replicate conventional financial products at low costs (ElGamal 2008). From an economic perspective, the objective of Islamic banks is to structure products that have similar risk-return features of conventional products. From a legal perspective, this is done by using several legitimate Islamic contracts to produce outcomes that replicate conventional products. Doing so, however, can sometimes result in products that are *Shari'ah* compliant in form but not in substance.

A controversial product that falls under this category and used as an example in this article is 'organized *tawwaruq'*. The product involves several sale contracts starting with one in which the bank first buys a certain quantity of standardized commodity such as metal or wheat and then sells it to the client at a mark-up. The bank then acts as an agent of the client and sells her commodity to a broker and deposits the proceeds of the sale into the client's account. The result of these multiple sales and agency contract is that the client gets cash and owes the bank the amount financed plus a return in the future. Organized *tawarruq* is controversial as economic substance of combining several legitimate contracts is similar to a synthetic interest-based loan. As a result, the International Council of *Fiqh* Academy, an international jurisprudential body, issued a ruling declaring organized *tawarruq* illegal as it entails elements of *riba*.[††]

The models of Islamic banking have evolved over time.[‡‡] When Islamic banking was mooted in the 1970s, it was envisaged to be 'two-tier *mudarabah* model', whereby profit-loss sharing modes of financing would be used on both the asset and liability sides (Khan 1987, Siddiqi 1981).On the liability side, the demand deposits would take the format of interest-free loans (*qard-hassan*) and savings and investment deposits would take the form of profit-loss sharing investment accounts using the *mudarabah* concept. Islamic bank was expected to invest in productive projects on profit-loss sharing basis on the asset side using *mudarabah* and *musharakah* contracts. The resulting profit/losses from these investments were to be shared by the shareholders and investment account holders at an agreed upon ratio.

As Islamic finance expanded over time, the Islamic banking model transformed to one-tier *mudarabah* with multiple investment tools (Iqbal et.al. 1998). While saving and investment deposits take the form of *mudarabah* based profit-sharing investment accounts, the instruments used on the asset included the fixed-income modes. To finance different assets, banks started using predominantly sale based contracts such as *murabahah*, *istisna, salaam* and *ijarah* and to a lesser extent used profit-sharing modes of financing (*musharakah* and *mudarabah*). Islamic banking further evolved to mainly using fixed-income debt instruments on both assets and liabilities sides.This is done by using organized *tawarruq* whereby synthetic loans resembling interest-based debt are created by buying/selling commodities.

From a product development perspective, compliance with *Shari'ah* principles introduces some additional risks that can affect the choice of modes of financing. Being sale based and partnership contracts Islamic financing modes entails both market and credit risk.[§§] This is apparent when one observes the risk weights given to different modes by Islamic Financial Services Board (IFSB), an international regulatory standard setting body for the Islamic financial industry. IFSB (2005) stipulates credit risk weights on assets financed by *musharakah* and *mudarabah* modes to be 400% and the corresponding weights on sale based instruments (*murahabah, istisna, salam and ijarah*) as 100%. Furthermore, depending on the type of contacts, the instruments may have additional capital requirements for market risks. For example, a non-binding *murabahah* or *ijarah* contract will have an additional market risk weight of 187.5% of the value of financing. Clearly, the risk weights indicate that the equity based modes are deemed riskier than sale based modes.

As Islamic banks operate in competitive markets, they are under pressure to structure products that have acceptable risk-return features from a business point of view. An easy option to achieve this is to replicate the conventional products by using legal/financial engineering techniques. While doing so fulfills the economic and market requirements, it is sometimes done at the cost of diluting the substance of *Shari'ah* principles. Use of products that dilute/breach of *Shari'ah* principles can, however, be costly to Islamic banks. In the short-run, any revenue from the transactions that are not *Shari'ah* compliant is excluded from the income of the bank and donated to some charitable cause. Thus, *Shari'ah* non-compliance can affect the income and profitability of banks adversely. In the long-run, dilution of *Shari'ah* principles can negatively affect the perception of stakeholders about the Islamic financial

---

[††]The ruling was issued by the International Council of *Fiqh*Academy in its 19th session which was held in Sharjah, United Arab Emirates during 26 – 30 April 2009.

[‡‡] For a review of the evolution of Islamic banking models and current state of Islamic finance see Ahmed (2011) and Siddiqi (2006b) respectively.

[§§]For a discussion on risks facing Islamic banks see Ahmed and Khan (2007).

practice causing a serious loss of trust and credibility. As most of the clients use Islamic banks for religious reasons, *Shari'ah* non-compliance can be a reason for reputation risk that can make the Islamic finance sector susceptible to instability and trigger bank failure (Qattan 2006).[***]

3. Shari'ah Compliance: A Product Development Perspective

Product development (PD) process involves structured flow of information and activities required to accomplish creation of new products (Ulrich and Eppinger 2008). The process identifies a sequence of activities undertaken and the distribution of responsibilities among relevant personnel to develop new products. As developing products requires input from various departments of an organization, it is best developed by a team, headed by a PD manager who coordinates the activities and drives the development of the product. Cooper (1994) identifies benefits of a well-planned process as introducing discipline, reducing technical risks and ensuring completion of tasks by a cross functional team. Edgett (1996) finds that financial institutions with rigorous PD process are more likely to produce successful products.

While there is no unique PD process that applies to all firms, researchers have suggested different elements of the process. Johne and Harborne (1985) identify three main phases of PD process: initiation, evaluation, and implementation. Cooper (1994) identifies four stages as preliminary investigation, building business case, development and test and validation. Others have pointed out more detailed steps involved in the PD cycle. Avlonitis et.al. (2001) maintain that a PD process would involve five key activities: idea generation and screening, business analysis and marketing strategy, technical development, testing, and commercialization/launching. While Cooper and Edgett (1999) propose 13 steps, Scheuing and Johnson (1989a and 1989b) detail 15 different activities required for developing products in the service sector.

The product development process in Islamic banks is discussed under three broad phases of idea generation and acceptance, converting concept into product, and commercialization. Fulfilling the *Shari'ah* requirements in products and operations necessitates additional units and processes to ensure that the contracts and operations comply with Islamic law. Usually, the *Shari'ah* bodies would include an in-house *Shari'ah* department/unit and an independent *Shari'ah* Supervisory Board (SSB). The SSB constitutes *Shari'ah* jurists and scholars who meet periodically to ensure fulfillment of overall *Shari'ah* requirements in general and approve new products in particular.[†††]In other words, the key role of the SSB is to ensure the 'Islamic' character of Islamic finance. Given the unique nature of Islamic financial products, the basic features of the PD process and role of *Shari'ah* bodies under the three phases are presented next.

3.1 Idea Generation and Acceptance

Idea generation and acceptance phase is an important component of the development cycle as it identifies the new products that will be introduced by a bank. Cooper and de Brentani (1991) show that the quality of execution of pre-development activities is a good indicator of successful products. Kelly and Storey (2000) identify various idea screening criteria used by the service sector to identify the products that can be potentially developed. The highest ranked category is financial implications of the new product which requires examining the costs, potential turnover, impact on revenue, likely profit and doing a cost benefit analysis.

Reinertsen (1997) maintain that market risks arise when the product fails to meet market requirements. This risk may result from not being able to assess the needs of the customers and the demand for a particular product correctly. Studies reveal the majority of the products fail due to miscalculating the market, and only a quarter due to technical reasons (Smith and Reinertsen 1998). Thus, market risks can be reduced by having a better assessment of the customers' needs. Along with market research, Edgett and Parkinson (1994) identify market synergy as an important factor that can predict successful products developed by the financial organizations. de Brentani (1991) shows that products closely linked to the

---

[***]Chapra and Ahmed (2002) report that in a survey shows that 381 (or 81.4 percent) total number of 468 depositors from Bahrain, Bangladesh and Sudan will move funds to other banks due to non-compliance of *Shariah* and a total 328 (70 percent) would move funds if they learnt that learn that income of the banks come from interest earnings.

[†††]For a discussion the role of Shari'ah Supervisory Board and Shari'ah governance see Ahmed (2012) and Grais and Pellegrini (2006).

existing ones are more likely to be successful. This is because products that are completely new entail more risks as these are unfamiliar to customers. Given the unique nature of contracts used in Islamic finance, the customers may not be aware of the risk-return features of the product and reluctant to use ones that are very different from the ones they are familiar with.

Other than assessing the market demand, an important aspect in the idea generation phase in Islamic banks would be to identify the appropriate *Shari'ah* compatible contract that can be used for the product. In the pre-product launch stage, the *Shari'ah* department/unit contributes to the development of new products by advising on the different *Shari'ah* compliant structures for the product. A short concept paper outlining the basic *Shari'ah* structure should be presented to the SSB for initial screening. The *Shari'ah* unit/department of the bank will have an important input in developing the concept paper. The SSB's role is to formally approve the product structure before it goes for full scale development. The goal of getting the concept cleared by the SSB is to minimize the risks of *Shari'ah* compatibility before developing the product.

3.2 Converting Concept into Product

Once the senior management of the bank authorizes the development of a new product, the next phase will be to translate the concept into a product. Shostack (1984) lays out the basic framework of a product design. The first step is to prepare a blueprint for the product which would require laying out the detailed steps and processes involving the product. For each step, the input required from different departments/units of the bank need to be identified and the resulting expected output specified. Given the intangibility and simultaneity of services, the blueprint of developing financial products needs to keep in view two perspectives (Lovelock 1984). The first relates to systems and procedures from the bank's viewpoint and the second is to understand the service delivery system from the clients' perspectives. After the product design and process flow of the product is completed, the next step is to implement various aspects to make the product live.

Cooper et.al (1994) find proficient operating and delivery systems as main operational factors for successful products. Operational risks arise in the development phase due to improper oversight of various parts of the delivery system. Failure to acknowledge all factors that can get wrong can create problems in the post-launch stage. The delivery of the product will be affected if something new comes up that has no solution in the system or the personnel are not trained to handle it properly. As different people may deal with a client during the life-time of the product, one problem is to provide standardised products (Lovelock 1984). Care has to be taken to reduce the variability of the services provided in the product development phase. To minimize the deviations in services within a tolerance level, there is a need to have a well-structured plan for the operating and delivery process.

The risk management department has an important task of evaluating the various risks associated with new products. Other than examining the risks inherent in the product, the department also assesses its implications on enterprise risks. The role of the compliance unit/department is to ensure that the new product fulfills all the internal rules and external laws and regulations of the country. To guarantee that the product does not violate any laws of the country and regulatory rules and standards, the department has to liaise with the relevant regulatory authorities to get the product cleared.

Being responsible for the financial health of the organization, the finance department would look into the costs and revenue from new products (Fuller 2005). Other than financial control, the finance department will also identify the financial accounting treatment of new products. A key issue that needs to be considered is the capital requirements for different modes of financing. Furthermore, new codes for balance sheet and general ledger entries for the new product need to be created. These are used by the Information Technology (IT) department to execute the software necessary for the product. New products may require improvement in operating systems/software and upgrading the hardware for the product's operation/delivery. Kelley and Storey (2000) identify IT as the main constraint in PD. They find inflexibility of the IT systems to accommodate new products, system development speed, systems support, and IT development resources as among barriers to developing new products.

Developing Islamic banking products face additional risks compared to conventional banking products. As indicated, the risks inherent in Islamic modes are complex and need to be recognized and mitigated by the risk management department. The accounting implications of Islamic products will be different from conventional banking transactions. This stems not only from the fact that Islamic products use sale and equity based contracts, but also due to other *Shari'ah* requirements.[‡‡‡] Furthermore, the compliance department needs to understand the implications of the laws and regulations of the country on the Islamic mode used in a product. As most of the banking IT systems are based on conventional banking models, embedding Islamic products in these systems can be a challenging task. Given that Islamic financial contracts are sale or equity based, adapting these in conventional banking IT systems can be difficult and in some cases can prevent development of new Islamic financial products.

A final step in finalizing a product is to prepare all the relevant documents related to the delivery of the product. On the one hand, these would comprise forms, contracts, leaflets and brochures prepared for the clients. On the other hand, these would include other documents such as product manual, guidelines necessary for the delivery of the product, etc. prepared for internal use. After the all the documents related to the product are prepared and vetted by the legal department, these need to be presented to the SSB for review and final approval. In particular, the contracts forms and marketing documents should be reviewed and cleared by the SSB.

3.3 Commercialization

Once the in-house testing is carried out successfully, the product is ready for launch. Cooper et.al (1994) identifies various factors related to launch preparation that can increase the probability of success. The factors include understanding and support of the product by all relevant staff, extensive training for all customer contact staff, marketing of the new product internally before launch and extensive training of the operations and technical staff. They also find customer service such as providing friendly, courteous, prompt and efficient service can make products successful. Along with quality of execution of launch and marketing activities, Cooper and de Brentani (1991) identify execution of technical activities, service delivery and service expertise as additional the success factors.

Edgett (1996) finds marketing support at the launch stage to be important for successful products. Cooper et.al (1994) identify various effective marketing communications factors that can make a product successful. The important factors include expertise and resources related to promotion, distribution/sales. The product performance is better if the awareness in terms of benefits of the new product are provided to the customers. This can be done with a more effective promotional campaign and create a 'brand' image for the product that is distinct for the targeted market. One additional element in marketing of Islamic financial products would be to highlight the contract features to convince the clients about its *Shari'ah* compatibility.

Bowers (1986) asserts that as banks deal with services that are sold from different outlets, it is important to train the personnel to maintain the uniformity of the services. This would require training both the front-end and back-end staff. As the quality of the product depends on the dealings of front end personnel who are in direct contact with the clients at branches and those dealing in sales and call centers, it is important to train them to ensure the quality of the product delivery. The staff members selling the Islamic financial products also have to be trained on, among others, the features of the products so that they are able to answers queries of the clients on *Shari'ah* structures and compliance. The relevant back-end staff will include those from the credit administration, legal department and *Shari'ah* department. The latter would also need training to carry out *Shari'ah* audit of the product.

Edgett and Parkinson (1994) observe that products having strong support after launch are superior to the competitors' offerings. After the product is live for a certain period, there is a need to review different dimensions of the product from feedback of staff and customers. Performance of products can be assessed according to both financial and non-financial criteria (Avlonitis et.al. 2001). The performance of the product is compared with the projections made during the development phase. If any issues arise in the post-launch review, the product features may have to be changed or fine-tuned to make it more suitable for the customers.

[‡‡‡]For example, in case of a default in a debt-based product such as *murabahah*, the bank may charge a penalty. However, this penalty cannot be used as income of the bank and must be given away as charity and need to be put in a separate account.

One aspect in the post-launch phase in Islamic products is to ensure compliance with the approved *Shari'ah* procedures and processes. The in-house *Shari'ah* department/unit should also conduct internal *Shari'ah* audit on the processes used in delivering products by the Islamic bank. One of the roles of the *Shari'ah* audit is to ensure that the processes are followed according to approved schema. Though the actual management of the oversight of the *Shari'ah* requirements related to operational issues is done by in-house *Shari'ah* department/unit, the SSB must be aware of the issues and correct them whenever required. Whereas, it may be difficult to carry *Shari'ah* audit in smaller banks due to lack of resources, larger banks have adequate resources for *Shari'ah* audit to detect non-compliance.[§§§] If the audit finds irregularities in the processes that make transactions void from *Shari'ah* perspectives, the income from the transactions has to be separated from the income of the bank and given to charity.

4. *Shari'ah* Compliance: Constraints and Choices

The selection of a mode of financing for a product offered by an Islamic bank will depend on the constraints that external legal/regulatory regimes impose on the potential set and the internal organizational dynamics through which choices are made from the resulting feasible set. As banking law defines what banks can do and the kind of products that can be offered, the range of *Shari'ah* compliant modes that will be in the feasible set is likely to be larger in countries that have Islamic banking laws. This section presents a brief overview of the legal/regulatory regimes for Islamic banking and then discusses how external and internal factors affect the determination of the modes of financing that Islamic banks use in products.

4.1 Legal and Regulatory Environment for Islamic Banking

The legal regimes under which Islamic banking operates can be broadly divided into three types. The first group of countries has Islamic legal systems. These countries include Iran, Saudi Arabia and Sudan. Iran adopted an Islamic legal system after the revolution of 1979. The Islamic Banking Law was enacted in 1983 to cover all banking operations (Mirakhor and Khan 1989). Saudi Arabia has a traditional Islamic system whereby the legal authority and control of the judiciary lies with the clergy (Vogel 2000). Though contemporary laws in from of royal edicts exist, the country does not have any specific Islamic banking law. Sudan transformed the banking sector into Islamic during the 1980s and enacted Islamic Transactions Law in 1984.

The second group of countries has predominantly Western legal system,[****] but introduced Islamic banking law to provide the legal basis for Islamic financial practices and dealings. The countries in this group can be further divided into ones with common law and those with civil law systems. Examples of common law countries with Islamic banking laws are Malaysia and Pakistan. Malaysia enacted Islamic Banking Act (IBA 1983) and Bank and Financial Institutions Act (BAFIA 1993, amended) to cater to the Islamic banking practices. Pakistan amended laws to accommodate Islamic finance including the enactment of Banking and Financial Services Ordinance 1984. There are some other common law countries, such as Bangladesh in which Islamic banking is covered under a section of the existing banking law.

Among civil law countries, Indonesia introduced the Islamic Banking Act No. 10 in 1992 and amended it in 1998 (Djojosugito 2005). The country also introduced the Central Banking Act in 1999 to support creation of instruments of liquidity management for Islamic banks. In countries of the Gulf Cooperation Council (GCC) region that have variants of civil law system, specific Islamic banking laws do not exist. However, there are provisions of Islamic banking in other laws and/or in regulatory rules. For example, the Central Bank of Kuwait Law of 1968 has some stipulations about that Islamic banking practice.

[§§§] For example, AlRajhi Bank, one of the largest Islamic banks in Saudi Arabia has a large *Shari'ah* department and carries *Shari'ah* auditing in a regular basis.

[****] While most of the Muslim countries have retained Islamic law for personal matters such as marriage, divorce, inheritance, *etc.*, their commercial law and codes are influenced by Western laws. For a discussion on the legal system and laws in the Arab world, see Sfeir (1998). See also World Bank (2004) for legal regimes in different countries.

Similarly, the Financial Institutions Law 2006gives the Central Bank of Bahrain (CBB) authority to regulate all banks including Islamic. The CBB issued a Rulebook for Islamic Banks which governs various issues related to the operations of Islamic banks.

The third group of countries are ones in which Islamic financial institutions operate under Western legal systems with no supporting Islamic banking law. In these countries, the Islamic financial products would have to adjust to existing banking laws. The practice of Islamic finance under the Western legal regimes, however, is also influenced by the approach of the regulatory authorities towards Islamic banking. In countries where the regulatory authorities are accommodating to Islamic banking, Islamic banks and other financial institutions can be established under non-Islamic legal framework. United Kingdom has successfully introduced Islamic banking with proactive support of the regulatory authority without introducing any specific Islamic banking law (Ainley et.al. 2007). However, to place Islamic banking at par with their conventional counterparts, some tax laws were altered so that Islamic finance is not unduly penalized for using sale based contracts. For instance, the tax law was amended in 2003 to eliminate double real estate transfer tax (stamp duty) for Islamic mortgages. More recently the tax framework was altered in 2008 and 2009 to enable issuance of Islamic bond or *sukuk*(Amin 2010a and Amin 2010b).

In countries where the regulatory authority does not pro-actively support Islamic banking, Islamic financial products can be provided by some other appropriate organizational format. This is particularly feasible in countries that emphasize on substance over form in accounting standards.[††††] For example, in the US several finance companies such as American Finance House Lariba (California) and Guidance Residential (Virginia) are providing *Shari'ah* compliant mortgage financing. This can be done as couple of Islamic products used by the finance companies resemble their conventional counterparts in substance. For example, citing the Generally Accepted Accounting Principles recognition of the substance over form, the Office of the Comptroller of the Currency (OCC) in the United States (US) permitted the use of the proposed Islamic lease program as it was functionally equivalent to that of a financing with secured lending. Similarly, OCC ruled in 1999 that *murabahah* financing was permissible as it is 'functionally equivalent to either a real estate mortgage transaction or an inventory or equipment loan agreement'.[‡‡‡‡]

4.2 Shari'ah Compliance: External Constraints

A key problem arising for Islamic banking products is that while *Shari'ah* compliant contracts are used at the product level, the national laws and regulations related to banking and finance may not be Islamic. The conventional banking laws may not be appropriate for Islamic banking practices due to their different conceptual nature. For example, whereas Islamic banks' main activity is trading (*murabahah, salam, istisna, etc.*) and investing in equities (*musharakah* and *mudarabah*), most conventional banking laws would forbid commercial banks to undertake such activities. The disparity of laws/regulations at the national level and the Islamic law used at the product level can create situations in which the latter is not compatible with the former. In such cases, the modes in the potential set that do not conform to national laws and statutes cannot be used in developing products.

One way to overcome the external constraints is to modify the products in ways that suits the laws and regulations. As indicated above, sometimes this can be done relatively easily by changing the accounting treatment of the product. For example, while Islamic principles related to leasing would imply using operating lease, it may not be allowed by conventional banking laws. Prohibition of operating lease by banks can be overcome by using a financial lease in the accounting sense. Even though financial lease contradicts Islamic notion of a lease, Islamic banks may be forced to use it to structure their products due to regulatory requirements.

Non-Islamic banking laws and regulations can also dilute the *Shari'ah* requirements in products in more direct ways. One way this arises is from the regulatory definitions of different products that can be offered by banks. For instance, according to the Banking Act 1987 Regulations 1990 in the United

---

[††††] International Accounting Standards require accounting to be reported in terms of economic substance and not the legal format (Sultan 2006: 24).
[‡‡‡‡] The interpretative letters issued by OCC for *ijarah* (leasing) 997 is No. 806 issued in December 1997 and the one for *murabahah* is No. 867 issued in November 1999.

Kingdom, the definition of deposit requires 'capital certainty' (Ainley et.al 2007: 14). Given this requirement, a *mudarabah* based savings account would be inconsistent with the legal definition of deposits due to its profit-loss sharing features. The complication related to *Shari'ah* compliance arising from this disparity of legal concepts is apparent in the *On Demand Savings Account* of Islamic Bank of Britain (IBB). To comply with the legal definition of deposits, this *mudarabah* based account of IBB had to be modified with the following special conditions:

> "6.4. If the pool of funds referable to your capital return a loss, we shall offer to make good the amount of any shortfall that you may have suffered. We are required by current UK bank regulations and policy to make this offer to you. If you choose to accept this offer, you shall be entitled to receive payment from us of the full amount that you had previously deposited with us. You are entitled to refuse this offer from us.
>
> 6.5. We would like to draw your attention to the guidance offered by our Sharia Supervisory Committee. Their guidance is that if you accept our offer to make good the amount of any shortfall (set out in special condition 6.4), you will not be complying with Sharia principles." (IBB 2012: 6).

The above clearly shows that *Shari'ah* features of the Islamic product are compromised due to conditions arising from non-Islamic legal regime. Even in countries that have Islamic banking laws, some Islamic products may not approved by the regulators due to other reasons. As one of the key objectives of the regulatory regimes is to maintain stability in the financial sector by overseeing the risk profiles of banks and their products, most regulators would review product structures before they are launched in the market. In many jurisdictions, banks are required to present new product specifications such as risk features, capital requirements, balance sheet implications, fees charged, etc. to the regulators for approval. As Islamic banking practice is new and there is lack of understanding on the risk features of their products, there may be reluctance to approve unfamiliar products. Specifically, regulators may be hesitant to authorize profit-loss sharing financing modes such as *mudarabah* and *musharakah*as these are deemed risky.

An indirect effect of regulatory regime on financial products is the capital adequacy requirements. According to both Basel and IFSB capital adequacy standards, riskier products require higher capital charges. As such, products that are equity based or require the bank to hold assets will carry higher capital charge due to market risks. For example, the partnership-based products such as *mudarabah* and *musharakah* have higher capital requirements than debt based products such as *murabahah*and *tawarruq*. Given the competitive markets and the fact that capital is expensive, Islamic banks are likely to opt for the later modes as they will not be able to pass on the higher risk premium and capital charges on to the price of the product.

4.3 Shari'ah Compliance: Internal Dynamics

While a bank does not have control over external legal and regulatory environment, it can influence the organizational elements affecting product development. In an ideal situation, the feasible set will have several *Shari'ah* compliant options that can be selected to develop products. The specific modes used to develop products from feasible set will depend on many factors. As indicated in the idea generation phase of the PD cycle, one of main factors considered to identify products that are developed is their financial performance. Islamic banks operate in competitive markets and they are under pressure to keep the risk-return features of their products similar to the ones offered by their competitors. Sometimes this results in tensions between economic motives and *Shari'ah* requirements in different modes of financing. The PD process outlined above informs how the tensions may be resolved by examining the domains of control and decision making that results in the choice of mode of financing used in new products.

A hypothetical example of a product for financing working capital shows how conflicts can arise between the economic interests and *Shari'ah* principles. The potential product space for working capital includes *Shari'ah* compliant ones (*murabahah* and *musharakah*) and controversial *tawarruq* based one. In case of *murabahah,* the bank buys the input used in production and sells these to the client at a markup. As *murabahah* supplies the client with the necessary inputs, it is not be a feasible mode to provide cash. Temporary *musharakah* provides cash to the firm through equity participation. As indicated, *tawarruq* uses multiple contracts resulting in debt that is similar to an interest-based loan. Of the different modes in the potential set, *tawarruq* is controversial and the least risky alternative as it predominantly entails credit risk.

If clients want working capital financing to buy of inputs, then the *murabahah* mode can be used. However, if the client wants cash to pay for operating costs such as salaries and utility bills, then *murabahah* is not feasible as it involves sale of goods. The options available to the PD manager would be to use either *musharakah* or *tawarruq*. Though the former is *Shari'ah* compliant as it satisfies both the form and substance of Islamic law, it may not be accepted due to economic considerations such as high capital requirements or stringent risk guidelines meant to protect the returns. From a risk perspective, *tawarruq* may be preferred mode as it carries the least risks.

Whether a bank will adopt the controversial *tawarruq*-based Islamic product or one of the *Shari'ah* compliant alternatives for financing working capital will depend on the SSB. When *Shari'ah* compliant products are available in the feasible set, SSB can opt to approve these, instead of the ones that are controversial. However, as the PD manager is likely to face objections from risk management department to use *musharakah* based products, he may try to convince the SSB about the risks involved in the *Shari'ah* compliant mode and request approval of *tawarruq* based product. The decision of SSB in favor of the later type of product can be rationalized by invoking the maxim of necessity. The dominance of *tawarruq* based products in some jurisdictions indicates that this is being done extensively. It has been noticed, however, that when the SSB are strict in approving controversial products such as *tawarruq*, the banks are forced to use *Shari'ah* compliant alternatives. For example, as the SSB of Dubai Islamic Bank in the UAE does not permit *tawarruq*, the bank uses other *Shari'ah* compliant products. Unlike Dubai Islamic Bank, other Islamic banks in the UAE use *tawarruq* based products as the SSBs in these banks appear to be permissive of this mode.

5. Conclusion

While the key feature of Islamic finance is that its products and operations abide by the principles of *Shari'ah*, it has been criticized for diluting the *Shari'ah* requirements. Some products are structured by using several legitimate contracts to produce outcomes that are similar to transactions prohibited by Islamic law. To understand the choice of financing modes used by Islamic banks, this article examined the PD process and identified the roles of various departments of a bank play in this process. The dilution of the Islamic legal principles in banking products may be partly due external factors that are not under the control of the Islamic banks. New products have to comply with the laws and regulations of the country they operate in and in some cases these can restrict the type of products that Islamic banks can offer. However, in other cases the calculus of economic factors may conflict with the principles of *Shari'ah*. In these cases, too much emphasis given to the former can lead to choosing inferior modes of financing. The article shows that *Shari'ah* department and SSB play a vital role in ensuring 'Islamic' nature of Islamic banks by fulfilling the *Shari'ah* requirements in products. In particular, the SSB has direct responsibility to ascertain that the products comply with the principles and goals of *Shari'ah* before they are launched in the market.

References

Ahmed, Habib. 2011. *Product Development in Islamic Banks*. Edinburgh: Edinburgh University Press.

Ahmed, Habib and Tariqullah Khan. 2007. "Risk management in Islamic banking." in *Handbook of Islamic Banking*. Edited by M. Kabir Hassan and Mervyn K. Lewis, 144-158. Cheltenham: Edward Elgar.

Al-Zuhayli, Wahba. 2003. *Financial Transactions in Islamic Jurisprudence.* Beirut: Dar al-Fikr al-Mouaser.

Al-Dhareer, S. M. Al-Amin. 1997. *Al-Gharar in Contracts and its Effect on Contemporary Transactions.* Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Amin, Mohammed. 2010a. "Shari'ah-compliant finance: UK regulation." *New Horizon*. Issue No. 174.

January-March 2010. [http://www.newhorizon-islamicbanking.com/index.cfm?action=view&id=10934&section=academicarticle]

Amin, Mohammed. 2010b. "Islamic financial products and their challenge to taxation systems." in *Chancellor Guide to the Legal and Shari'ah Aspects of Islamic Finance*. Edited by Humayon Dar and Umer F. Mughal. London: Chancellor Publications Ltd.

Ainley, Michael, Ali Mashayekhi, Robert Hicks, ArshadurRahman and Ali Ravalia. 2007. *Islamic Finance Regulation in the UK: Regulation and Challenges*. London: Financial Services Authority.

Avlonitis, George J., Paulina G. Papastathopoulou, Spiros P. Gounaris. 2001. "An empirically-based typology of product innovations for new financial services: Success and failure scenarios." *The Journal of Product Innovation Management*. 18: 324-42.

Ayub, Muhammad. 2007. *Understanding Islamic Finance*. West Sussex: John Wiley & Sons.

Chapra, Umer. 2008, *Islamic Vision of Development in the Light of Maqasid al Shari'ah.* London: International Institute of Islamic Thought.

Chapra, M. Umer and Habib Ahmed. 2002. *Corporate Governance in Islamic Financial Institutions.* Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Cooper, Robert G. 1994. "Perspective: Third Generation New Product Development Process." *The Journal of Product Innovation Management* 11: 3-14.

Cooper, Robert G. and Scott J. Edgett. 1999. *Product Development for the Service Sector: Lessons from Market Leaders.* New York: Basic Books.

Cooper, Robert G., Christopher J. Easingwood, Scott Edgett, Elko J. Klienschmidt, and Chris Story. 1994. "What Distinguishes the Top Performing New Products in Financial Services." *The Journal of Product Innovation Management* 11: 281-99.

Dar, Humayon. 2007. "A Matter of Principle: BMB Islamic Structuring Shariah Solutions." *Business Islamica.* 31 October 2007.

De Brentani, Ulricke. 1991. "Success Factors in Developing New Business Services." *European Journal of Marketing* 25 (2): 33-59.

DeLorenzo, Yusuf Talal. 2007. "The Total Returns Swap and the Shariah Conversion Technology Strategy," available at http://www.failaka.com/customer/resources.html

Djojosugito, Reza Adirahman. 2005. "Relative Stability of Civil and Common Law Regimes for Islamic Banking." in *Islamic Financial Architecture: Risk Management and Financial Stability.* Edited by Tariqullah Khan and DadangMuljawan, 549-565. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Edgett, Scott J. 1996. "The New Product Development Process for Commercial Financial Services." *Industrial Marketing Management* 25: 507-15.

Edgett, Scott J. and Steven Parkinson. 1994. "The Development of New Financial Services: Identifying Determinants of Success and Failure." *International Journal of Service Industry Management* 5 (4): 24-38.

ElGamal, Mahmoud A. 2001. "An Economic Explication of the Prohibition of *Gharar* in Classical Islamic Jurisprudence." *Islamic Economic Studies* 8 (2): 29-58.

ElGamal, Mahmoud A. 2007. "Mutuality as an Antidote to Rent Seeking Shari'a-Arbitrage in Islamic Finance." *Thunderbird International Business Review* 49(2): 187–202 .

ElGamal, Mahmoud A. 2008. "Incoherence of Contract-based Islamic Financial Jurisprudence in the Age of Financial Engineering." *Wisconsin International Law Journal* 25(4): 605-623.

Ernst & Young. 2011. *A Brave New World of Sustainable Growth, The World Islamic Banking Competitiveness Report 2011-2012,* Dubai: Ernst & Young.

Fadel, Mohammad H. 2008. "Riba, Efficiency, and Prudential Regulation: Preliminary Thoughts." *Wisconsin International Law Journal* 25 (4): 655-702.

Fuller, Gordon W. 2005. *New Food Product Development: From Concept to Marketplace.* Boca Raton: CRC Press LLC.

Grais, W. and M. Pellegrini. 2006. 'Corporate governance and Shariah compliance in Institutions offering Islamic financial services", *World Bank Policy Research Working Paper 4054.* Washington DC: World Bank.

Hamoudi, Haider Ala. 2007. "Jurisprudential Schizophrenia: On Form and Function in Islamic Finance."

Chicago Journal of International Law 7 (2): 605-22.

Holden, Kelly. 2007. "Islamic Finance: 'Legal Hypocrisy' Moot Point, Problematic Future Bigger Concern." *Boston University International Law Journal* 25: 341-68.

IBB. 2012. *On Demand Savings Account Special Conditions.*http://www.islamic-bank.com/personal-banking/savings-products/demand-savings-account/ (accessed 25 September 2012)

IFSB. 2005. *Capital Adequacy Standard for Institutions (other than Insurance Institutions) Offering Only Islamic Financial Services.* Islamic Financial Services Board, December 2005.

Iqbal, Munawar, Ausaf Ahmad, and Tariqullah Khan. 1998. *Challenges facing Islamic Banking.* Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Johne, F. Axel and P. Harborne. 1985. "How Large Commercial Banks Manage Product Innovation." *International Journal of Bank Marketing* 3: 54-71.

Kahf, Monzer. 2004. "Islamic Banks: The Rise of a New Power Alliance of Wealth and Shari'ah Scholarship", in *The Politics of Islamic Finance.* Edited by Clement M. Henry and Rodney Wilson, 17-36. Edinburgh: Edinburgh University Press.

Kahf, Monzer. 2006. "Maqasid al Shariah in the Prohibition of Riba and their Implications for Modern Islamic Finance", Paper presented at IIUM International Conference on Maqasid al Shari'ah, Malaysia, August 8-10, 2006.

Kahf, Monzer and Tariqullah Khan. 1988. *Principles of Islamic Financing: A Survey*. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Kamali, Mohammad Hashim. 2000. *Isalmic Commercial Law: An Introduction*. Oxford: Oneworld Publications.

Kamali, Mohammad Hashim. 2003. *Principles of Islamic Jurisprudence*. Cambridge: The Islamic Texts Society.

Kamali, Mohammad Hashim. 2006. "Legal Maxims and other Genres of Literature in Islamic Jurisprudence." *Arab Law Quarterly* 20 (1): 77-101.

Kelly, David and Chris Storey. 2000. "New Service Development: Initiation Strategies." *International Journal of Service Industry Management* 11 (1): 45-62.

Khan, Feisal. 2010. "How 'Islamic' is Islamic Banking", *Journal of Economic Behavior& Organization* 76: 805-820.

Khan, Mohsin S. 1987. "Islamic Interest-free Banking: A Theoretical Analysis." in *Theoretical Studies in Islamic Banking and Finance*. Edited by Mohsin S. Khan and Abbas Mirakhor, 15-35.Houston: The Institute for Research and Islamic Studies.

Khan, Mohsin S. and Abbas Mirakhor. 1989. Islamic Banking: Experiences in the Islamic Republic of Iran and Pakistan, International Monetary Fund Working Paper WP/89/12.

Lovelock, Christopher H. 1984. "Developing and Implementing New Services." in *Developing New Services.* Edited by William R. George and Claudia E. Marshall. Chicago: American Marketing Association.

Majallah. 2001. *The Majelle: Being an English Translation of Majallah el-Ahkam-i-Adliya and a Complete Code of Islamic Civil Law,* Kuala Lumpur: The Other Press.

Qattan, Muhammad A. 2006. "*Shari'ah* Supervision: The Unique Building Block of Islamic Financial Architecture." Pp. 273-87 in: *Islamic Financial Architecture: Risk Management and Financial Stabilit.* Edited by Tariqullah Khan and DadangMuljawan, 273-87. Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Reinertsen, Donald G. 1997. *Managing the Design Factory: A Product Developer's Toolkit.* New York: The Free Press.

Saleem, Muhammad. 2006a. *Islamic Banking- A $300 Billion Deception*, Xlibris Corporation.

Saleem, Muhammad. 2006b. *Islamic Banking: A Charade: Call for Enlightenment*, BookSurgePublishing.

Scheuing, Eberhard and Eugene M. Johnson. 1989a. "New Product Development and Management in Financial Institutions." *International Journal of Bank Marketing* 7: 17-21.

Scheuing, Eberhard and Eugene M. Johnson. 1989b. "A Proposed Model for New Service Development." *The Journal of Services Marketing* 3: 25-34.

Seniawski, Barbara L. 2001. "Riba Today: Social Equity, the Economy and Doing Business Under Islamic Law." *Columbia Journal of Transnational Law* 39: 700-728.

Shostack, G. Lynn. 1982. "How to Design a Service." *European Journal of Marketing* 16 (1): 19-63.

Shostack, G. Lynn. 1984. "Designing Services that Deliver." *Harvard Business Review* 62 (1): 133-9.

Sfeir, G.N. 1998. *Modernization of the Law in Arab States: An Investigation into Civil Criminal and Constitutional Law in the Arab World.* Bethesda: Austin and Winfield Publishers.

Siddiqi, M. Nejatuallah. 1981. *Banking without Interest.* Lahore: Islamic Publications Ltd.

Siddiqi, M. Nejatuallah. 1983. *Issues in Islamic Banking*, Leicester: The Islamic Foundation.

Siddidi, M. Nejatuallah. 2004. *Riba, Bank Interest and the Rationale of its Prohibition* Jeddah: Islamic Research and Training Institute, Islamic Development Bank.

Siddiqi, M. Nejatuallah. 2006. "Islamic Banking and Finance in Theory and Practice: A Survey of State of Art." *Islamic Economic Studies* 13 (2): 1-48.

Smith, Presten G. And Donald G. Reinertsen. 1998. *Developing Products in Half the Time: New Rules, New Tools*. New York: John Wiley and Sons, Inc.

Sultan, Syed Alwi Mohamed. 2006. *A Mini Guide to Accounting for Islamic Financial Products-A Primer.* Kuala Lumpur: CERT Publications Sdn. Bhd.

Ulrich, Karl T. and Steven D. Eppinger. 2008. *Product Development and Design*, New York: McGraw-Hill.

Usmani, Taqi. 1999. *An Introduction to Islamic Finance.* Karachi: IdaratulMa'arif.

Usmani, Taqi. 2007. "Sukuk and their Contemporary Applications", available at http://www.failaka.com/customer/resources.html

Vogel, Frank E. 2000. *Islamic Law and Legal System: Studies of Saudi Arabia*. Leiden: Brill.

World Bank. 2004. *Doing Business in 2004: Understanding Regulation.* Washington D.C.: Oxford University Press.