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Title: Financial innovation *intra* Muslim capital markets and *inter* global counterparts: implications of differences.

Structured abstract.

Purpose

To investigate the implications for financial innovation and product development of differences between schools of jurisprudence (*fiqh*) pertaining across regional Muslim markets, and the consequences for global financial institutions.

Design/methodology/approach

The methodology is qualitative, drawing upon several sources. First, differences in interpretation regarding the economic and moral responsibilities of financial institutions in Islamic and secular contexts. Second, contrasting tenets of schools of Islamic jurisprudence regarding the permissibility of products traded *intra* Muslim markets. Third, characteristics of complex financial instruments traded in global secular markets prior to the credit crisis of 2007-2008

Findings

Differences between Islamic and global secular interpretations regarding responsibilities of financial institutions militate against integrated markets across which products can be seamlessly traded.

Global financial institutions should recognise that different Islamic schools of jurisprudence prioritise either legal form or substance of financial products, but not both simultaneously. This should be considered when designing new products for regional Muslim markets.

Originality

The study evaluates implications for product development and marketing for global financial institutions active in regional Muslim markets across which different Islamic schools of jurisprudence apply.

Practical implications

Global financial institutions which focus upon the legal (micro) form of new Islamic products should relate in investor prospectuses and marketing materials the extent to which these accommodate Islamic jurisprudence's equal (macro) concern for public interest or *maslahah*. This may comprise the reallocation of risk from those unable to bear it to those willing to assume it for a price, reinforcing rather than compromising economic stability.

Keywords. *Madhabs*. Global financial institutions. Financial innovation. Securitisation, *sukuk*. *Salam*.

Section 1. Introduction

Religious and secular perspectives regarding the economic functions and societal responsibilities of financial institutions have traditionally been seen as dichotomous, presenting a binary choice to the owners of capital and those who manage it on their behalf (Arjoon, 2005).Religion embodies moral values which adherents are urged to incorporate in their interactions with economic entities in which they are stakeholders, for example as shareholders and depositors (Donaldson and Preston, 1995; Arjoon, 2005). For secular financial institutions, the principal foci are profit maximisation and shareholder value. Managers of capital are

required by secular stakeholders to eschew ethical, moral, or religious values in decision-making (Fama and Jensen, 1983), although exceptionally, secular environments can also be imbued with ethical and moral drivers of corporate behaviour (Wilson, 2002; Crossman, 2007). For the purposes of this study, non-Islamic institutions are taken to be secular for the purpose of contrast; it is recognised that stakeholders of other faiths may also have values-rich expectations of managers of capital (Longenecker *et al.* 2004). If secular and religious expectations become dichotomous or diverge significantly, then it becomes difficult to design new financial products which can be traded seamlessly across different geographical and jurisdictional contexts (Dusuki, 2008). This study was motivated by an objective to evaluate the implications for financial innovation of differences between Muslim markets *inter se* in terms of permissibility of certain complex financial instruments and contracts, and between these and global counterparts where a predominantly neoliberal, secular approach prevails (Rahman *et al*., 2020; Al-Salem, 2009; Asni, 2021). It contextualises Islamic jurisprudence or *fiqh* within the credit crisis of 2007-2008 (Kayed and Hassan, 2011; Norton and Molla Imeny, 2021). Muslim capital markets are taken to be geographically defined, including but not limited to certain countries in the Middle East, North Africa, parts of Europe, and Southeast Asia.

The methodology is qualitative, drawing upon several sources. First, differences in interpretation regarding the economic and moral responsibilities of financial institutions in Islamic and secular contexts. Second, the contrasting tenets of the principal schools of Islamic financial jurisprudence (the *madhabs*) regarding the permissibility of specific products and contracts traded *intra* Muslim markets. Third, the characteristics of complex financial instruments traded in global secular markets prior to the credit crisis of 2007-2008, and the extent to which these conformed, invariably unintentionally, to Islamic *fiqh*. The enquiry is timely: neoliberal, secular values and practices of financial institutions have become the subject of criticism in recent years for a perceived lack of moral norms (Kayed and Hassan, 2011;

Graafland and Van de Ven, 2011). The paradox is that whilst secular finance is attempting to find new ethical ways of doing business (Bigoni *et al.,* 2013; Dierksmeier and Seele, 2018), simultaneously Islamic financial institutions are trying to develop new ways to make profit through financial innovation which accommodates religious principles (Hamwi and Aylward, 1999; Haniffa and Hudaib, 2010; Radzi and Lewis, 2015). The research questions are thus. First, what are the implications of different schools of Islamic jurisprudence applied across Muslim markets for financial innovation and the creation of products intended to be traded across geographical borders (Ullah *et al*., 2018)? Second, what are the consequences for global institutions of financial products traded in secular markets not being permissible in Muslim counterparts? Third, what are the implications of these two questions for secular financial institutions looking to establish subsidiaries or joint ventures in regional Muslim markets, and for innovative financial products intended for release across these markets? The study is arranged as follows. The next section provides the literature review. Section 3 considers the implications of divergences between different schools of *fiqh* for financial innovation. Section 4 discusses equity-based financing in Islamic *fiqh* and its principal driver: social justice. Section 5 explains the role of financial innovation in the credit crisis of 2007-2008, and how Islamic financial *fiqh* may have mitigated its consequences. Section 6 considers the implications of findings for global financial institutions intending to launch innovative financial products in regional Muslim markets. Section 7 concludes.

Section 2. Literature review

Neoliberal secular interpretations of the role of financial institutions focus upon efficiency, maximisation of shareholder wealth, and the dynamic of product development to satisfy the ever-changing needs of private and institutional investors (Yahanpath and Joseph, 2011). The secular perspective does not explicitly address issues of social justice, oppression, poverty, or the distribution of power between financial institutions and wider society. Essentially,

financial institutions are values-neutral intermediaries between those who hold capital and those who require it, taking a fee in the intermediation process. Moral misbehaviour which does not break the law and maximizes stakeholder returns, while potentially damaging to an organisation's reputation, is tolerated: the ends can justify the means. Neoliberal economists assert that the integrity of markets, including the ability of shareholders to invest without fear of prices being unfairly distorted by insider dealing or manipulation, is a moral good: there is no need to explicitly embrace moral or religious or ethical values unless these are within the terms of business of the institution as demanded by stakeholders such as green funds (Harmes, 1998). Islamic principles as stated in *Shari'ah* impose wider societal and moral responsibilities which augment and supersede these secular expectations.

2.1 Principles and practice of financial fiqh.

Instead of focusing exclusively upon the intermediation and safeguarding roles of financial institutions, Islamic financial jurisprudence attaches additional weighting to the wellbeing of wider society. For Islam all resources are God-given, and ownership of wealth belongs to God. Individuals are trustees and it is to God that accountability is ultimately due (Lewis, 2001). Self-interest and the profit motive are permitted, but these must be justified in terms of the public interest or *maslahah*, justice, and accountability in preserving society's wellbeing. According to Janahi and Weir (2005, p. 434), for Islamic banks strategies of profit maximisation or risk minimisation are not to be prioritised over strategies oriented towards collective objectives. The evidence for religion exerting influence upon corporate behaviour is inconclusive. Scepticism has been expressed in the literature regarding the 'purity' of products offered by Islamic financial institutions, and the 'sincerity' of those managing those institutions (Haniffa and Hudaib, 2007; Farooq and Selim, 2019). For Nienhaus (2011), there is a

dichotomy between the theory of Islamic finance *per se*, and its implementation in practice. In theory it prohibits uncertainty (*gharar*), and gambling (*maysir*), and requires an apportionment of entrepreneurial risk between those who provide capital and those who utilise it, for example in a small business. However, in practice these substantial distinctions have reduced to subtle differences of interpretation regarding the contractual basis of transactions. For Nienhaus (2011 at p. 614) there is an ongoing replication, with nuanced differences, of conventional financial products and functional equivalents for complex structured products similar to those which contributed to the credit crisis of 2007-2008, and which were approved by prominent scholars on the *Shari'ah* boards of Islamic financial institutions.

2.2 Secular and Islamic perspectives on the role of financial institutions.

In Islamic financial jurisprudence there is no separation between business behaviour and religious values (Kavas *et al.,* 2020); the market exchange between lenders and borrowers should be tempered by religious norms and values. Islam requires the integration of secular and economic endeavour within a wider ethical framework (Wilson, 2002). This is the *tawhidic* paradigm. For Hamid *et al.* (1993, p. 135), 'The neo-classical concept of economic man being subject only to budget constraints in the pursuit of maximizing profits and in equalizing the marginal utility for all goods and services, runs counter to the common effect of Islamic injunctions on economic as well as spiritual life (Siddiqi, 1987)'. The *Quran* is considered the divine word of Allah handed down during a period of 23 years through the Prophet Muhammad (PBUH) until his death. It is the primary source of *Shari'ah* law and provides the moral, political, and economic foundations for society. It stipulates the unity or oneness of Allah (*tawhid*), in which economic life is rooted.

For Grais and Pellegrini (2006) *Shari'ah* requires that an Islamic financial institution pledges: i) not to engage in interest-based transactions, ii) not to conduct pure financial transactions disconnected from real economic activity, iii) not to participate in transactions where there is exploitation of any party, and iv) not to participate in activities regarded as harmful to society. To these requirements can be added the prohibition against transactions involving excessive uncertainty or *gharar*. This may comprise a transaction where the true level of risk is unknown or unquantifiable, constituting speculation which is prohibited. Gambling, for example through exploitation of price fluctuations, is *maisir* or prohibited without exception; this type of activity has no genuine commercial purpose and as such is not permitted.

In common with neoliberal secular goals, maximisation of shareholder wealth is acceptable but with the proviso that it should not be socially destabilising, or breaches edicts against speculation, gambling, hoarding of wealth, or payment of interest (*riba*) (Chong and Liu, 2009). Self-interest and the profit motive are permitted, but these must be justified in terms of the public interest or *maslahah*, justice, and accountability in preserving society's wellbeing (Choudhury and Hoque, 2006). For these reasons the objectives of secular and Islamic financial institutions converge in certain respects but diverge in others. This section has provided a literature overview regarding the contrasting perspectives of the role of financial institutions in secular global markets and Muslim counterparts: the next considers the geographical locations and implications of the different schools of *fiqh*.

3. The schools of Islamic jurisprudence

The principal Sunni *madhhabs* are the Hanafi, Maliki, Shafi'i, and Hanbali schools. The two Shia schools are the Twelver, and Zaidi and Ismaili. The four Sunni schools recognise each other's legal validity and agree upon the ascendancy of the *Quran* and the *Hadiths*, the sayings

and customs of the Prophet Muhammad (PBUH). However, the schools diverge between strict readings of the Holy texts which afford no or limited discretion in interpretation to jurists on the one hand, and more progressive approaches on the other. Maliki predominates in North and West Africa including the Maghreb, the Sahara Desert, and the Sahel. It is the most widely applied Sunni school in Africa. Shafi'i is the second most widely applied Sunni school and predominates in the eastern states of Africa including Ethiopia, Uganda, Somalia, and Yemen. Hanafi is the third most widely applied Sunni school and is dominant in Egypt. It also predominates in the Indian Subcontinent, Turkey, Syria, Lebanon, parts of Russia. The school applies analogy (*Qiyas*) as a method to derive Islamic law when the *Quran* and *Hadiths* are silent or ambiguous in application to a particular situation or set of circumstances. Like all other schools, Maliki uses the *Quran* as the primary source, followed by the *Hadiths*. It is similar to the Hanafi school but unlike Hanafi, does not assign as much weight to analogy or *Qiyas*, deriving its rulings from pragmatism using the principle of *istislah* (public interest) wherever the *Quran* and *Hadiths* do not provide explicit guidance.

Hanbali predominates in Saudi Arabia and Qatar, and in the four Emirates of the United Arab Emirates. In common with the other schools, it derives *Shari'ah* from the *Quran* and the *Hadiths*. If there is no precise ruling to be derived from the sacred texts of Islam to meet a specific situation, the school does not accept juristic discretion as a basis to derive Islamic law, a method of analogy which the other three schools accept. It represents a strictly traditionalist view of the role of jurisprudence and is associated with the Wahhabi-Salafist movement. Shafi'i was founded in the ninth century and rejects two sources of *Shari'ah* that are accepted in other schools: *Istihsan* (juristic preference, promoting the interests of Islam) and *Istislah* (public interest). These schools accepted religious laws that had no textual basis in either the *Quran* or *Hadiths* but were instead based upon the opinions of Islamic scholars. Shafi'i rejected

these two principles: these methods rely on subjective human opinions, and accordingly have potential for corruption and adjustment to political context and time. Hanafi allowed *Istihsan* or juristic preference that allowed rulers flexibility in interpreting the religious law to accommodate their administrative preferences.

Implications of the differences between the schools for financial innovation have been addressed by Soualhi (2012). He noted that although there is a legitimacy of juristic differences as an inherent feature of Islamic law, such differences have the potential to jeopardise a nascent Islamic finance industry, leading to what has come to be termed 'Shari'ah risk' in Islamic finance. Two contrasting blocks are emerging in terms of adherence to different schools: the Middle Eastern and South East Asian markets. Soualhi (2012) proposed that a common framework and set of parameters should be applied to all Islamic banking, Islamic capital market, and *takaful* products to bridge the differences in Islamic finance. This framework would also circumvent juristic disputes. He concluded that juristic dispute resolution in Islamic finance will not be attainable until there is an appreciation of the legal and regulatory differences in which Islamic finance functions worldwide. The difficulties with this approach are twofold. First, it implies that Shari'ah Supervisory Boards will have the knowledge, and the willingness, to apply a standardised framework when evaluating new financial products. Such a harmonised approach, even towards acceptance of a very broad and uncontroversial overarching framework, may be unacceptable if it deviates from adherence to specific principles which eschew compromise on a framework which may appear to have evolved elsewhere, and to be remote as a consequence. Second, an overarching framework to complement the rules of a specific school rather than displace or dilute them may be unacceptable to local stakeholders comprising, for example, depositors and investors, and employees with local financial institutions.

3.1 Islamic fiqh and the structure of contracts.

Schools of *fiqh* differ in determining the basis of contract validity. Some focus almost exclusively upon its legal form while others stress its substance and the intention of the contracting parties. For the latter, validity of all contracts must be determined by *niyyah* (intention), or the purpose or substance of the contract, not by just looking at its form or structure alone. However, it may not be possible to identify the intention of the contracting parties. Also, some *Shari'ah* texts suggest that judging things must be based on their legal form and appearance alone. The first approach states that if the contract form and structure is *Shari'ah* compliant then it could be termed a valid contract. In contrast, if the purposes of the contracting parties, the substance of the contract, are *Shari'ah* compliant, then it is permissible. The first approach reflects the Hanafi and Shafi position, while the Maliki and Hanbali schools emphasise that validity of a contract must be based on the real intention or the substance of the contract (Nienhaus, 2011, at p. 591).

For Soualhi (2012), juristic differences may jeopardise development of an Islamic finance industry, leading to what has been termed '*Shari'ah* risk'. However, juristic disagreements and disputes are regarded by some Muslim scholars as justified and regarded specifically as a 'mercy from the Lawgiver'. However, others regard such differences as having potentially negative consequences for innovation in the Islamic banking sector. For Soualhi (2012), juristic disagreement is justified by the nature of legal texts in the Qur'an and Sunnah, namely the speculative (*zanni*) texts that accept more than one interpretation. Disagreement characterised the early stage of Islamic history, and to some scholars is viewed as a sign of active *ijtihad*, or independent reasoning. Disagreement is found not only in juristic approaches to financial innovation, but also in other branches of law including family and criminal. Rafay *et al.* (2016)

noted that without a universal *Shari'ah* code, the acceptability of products introduced in Islamic finance will remain fragmented.

3.2 Islamic jurisprudence and financial innovation.

Dusuki and Abozaid (2007) noted that Islam advocates an economic vision embedded in which is a social order capable of providing social justice along with economic prosperity. This is the principle of *maqasid al-shar'iah*. In its most visible manifestation, the principle prohibits interest whilst promoting Islamic norms of economic behaviour. They identified potential conflicts between macro *maqasid* and micro *maqasid*, and the possible abuse of *maqasid al-shari'ah* to justify certain financial contracts which in practical contexts contradict the *Shari'ah* texts. Macro *maqasid* focuses upon the overall wellbeing and welfare of society, whilst micro *maqasid* addresses issues pertaining to individual financial transactions. Maximisation of profits alone cannot be a sufficient goal for a Muslim society since this would be to the exclusion of wider requirements for spiritual health as well as justice and 'fair play.' Competition when conducted constructively is permissible as success in life is to obtain ultimate happiness or *farah*. For Dusuki and Abozaid (2007) the legal form of a financial contract should not be the focus when determining *Shari'ah* compliance and acceptability. Instead, the substance of the *Shari'ah* has greater implications for the realisation of *maqasid al-shari'ah* when structuring a new or innovative financial product. Otherwise, Islamic banks are 'just an exercise in semantics', their functions and activities being no different from conventional banks, except in their use of euphemisms to disguise interest and circumvent the many *Shari'ah* prohibitions.

3.3 Legal form versus substance: a dichotomy.

For Nienhaus (2011 at p.605), micro and macro perspectives on the role of financial institutions, and the nature of financial innovation in developing new products, can be dichotomous, with the former being prioritised over the latter in efforts to compete with conventional banks. Macro concepts had located Islamic finance in the broader context of more comprehensive economic and social systems. The micro realities of most Islamic banks are characterised by competition with conventional finance in mixed capitalist systems with a dominant conventional sector. For Nienhaus (2011 at p. 605) many stakeholders have become disappointed that the major differences between conventional and Islamic finance seem to be in form only and not in substance: financing the same kinds of projects with the same kinds of partners on roughly the same commercial terms will not add a new quality to the economic development of the Muslim world. Form has been prioritised over substance, and it would be inaccurate to call new products 'financial innovations', since most were developed through a process of reverse engineering, starting from established conventional products. The result has been less a financial and more a 'contractual' or 'legal' innovation. For Nienhaus (2011 at p608) there was no ethical or ideological justification for these products; instead, they were deemed necessary to improve the efficiency and competitiveness of Islamic finance, measured in terms of profitability. Consequently, there is growing disappointment concerning 'form over substance' in the media and among practitioners and academics.

For Dusuki and Abozaid (2007 at p. 154), Schools of *fiqh* differ regarding contract validity. Some emphasise its legal form while others stress its substance and the intention of the contracting parties. For the latter, validity of all contracts must be determined by *niyyah* (intention), or the purpose or substance of the contract, not by just looking at its form or structure alone. In secular finance intention is largely irrelevant provided legal requirements have been observed. For Islamic finance, however, a quandary arises the answer to which differs according to the school by which a transaction is to be interpreted. Also, some *Shari'ah*

texts suggest that judging things must be based on their form and appearance. The first approach states that if the contract form and structure is *Shari'ah* compliant then it could be termed a valid contract. In contrast, if all the purposes of the contracting parties, the substance of the contract, are *Shari'ah* compliant, then it is permissible. The first approach reflects the Hanafi and Shafi position, while the Maliki and Hanbali schools emphasise that validity of a contract must be based on the real intention or the substance of the contract. This is the legality of form versus legality of substance paradox.

4. Islamic financial *fiqh*: differences of interpretation

Prior literature has discussed the extent to which equity-based financing reflects principal distinguishing factors between Islamic and conventional banking systems: the prohibition of payment and receipt of interest or *riba,* and the sharing of risk of failure of a venture between the entrepreneur and the provider of capital (Nouman *et al*., 20201; Fianto *et al*., 2018). This latter consideration is a practical manifestation of the profit and loss sharing principle in which lenders must participate in the success or failure of a venture which they finance, and not just receive interest on debt for taking no risk. For Dusuki and Abaozaid (2007), equity-based contracts are more able to achieve socio-economic objectives including social justice, economic growth, efficiency, and stability of the wider financial system. However, they noted that genuine risk-sharing in the form of *musharakah* and *mudarabah* are the exceptions rather than the rule in Islamic banking. Instead, contracts such as *bay-al-inah* which is acceptable from an Islamic banking perspective in Malaysia have been criticised for constituting concealed interest. For them, Islamic banks keep interest but just call it by another name such as commissions or profits. Similarly, contracts of sale are often used to circumvent the

prohibition of *riba* by focusing upon legal form rather than the substance or what is being achieved in a contract. *Bai bithaman ajil* or deferred sales contract is widely practiced by Islamic banks in Malaysia and Brunei. While *Shari'ah* requires a selling party to hold liability arising from all defective goods sold based on *khiyar al-Ayb* (option) rules, in practice the Islamic banks hold no such liability. The bank transfers all the risks and liabilities to the customer thereby leaving the bank with almost no risk to bear while securing profits which are fully guaranteed by way of executing a sale contract, *bai bithaman ajil.*

Jurisprudential divergences regarding the permissibility of financial products and the parameters of innovation are found throughout Muslim countries. In Malaysia, Islamic banks have used trade financing instruments which are not acceptable in other predominantly Muslim countries (Hassan and Lewis, 2007; Apaydin, 2018). For example, *Bai-al-Dayn* and *Bai-al-Inah* (sale of debt) or *tawarruq* (deferred payment contracts) are widely available notwithstanding that they do not have widespread approval amongst Islamic scholars (Asni, 2021). Apaydin (2018) observed that the main reason for the controversy is that Islam has a general ban on trading debt. According to *fiqh-al-muamalat* (the religious code to which financial transactions are subject), trading of assets by individuals who do not own them is not allowed. These contracts have allowed new products to be created, increasing the responsiveness of banks to consumer demands for innovation in domestic and regional markets (Iqbal, 2007). While both contracts have been developed in Malaysia when issuing credit cards and loans, *Shari'ah* scholars in the United Arab Emirates consider these to be impermissible, and any resulting profits *haram* and to be donated to charity. This section has explained how divergences between schools of Islamic jurisprudence can impede the process of financial innovation. The credit crisis of 2007-2008 was precipitated in part by complex financial products created and traded in secular markets which were not permitted in Muslim markets, and which manifested this dichotomy: these are considered next.

5. Financial innovation and the credit crisis 2007-2008

The causes of the credit crisis of 2007-2008 have been the subject of prior academic research (Muradoglu, 2010; Brunnermeier, 2009). The crisis originated in excessive lending in the property markets, particularly in the United States. Banks had a prolonged period of access to cheap funding and used this to make loans to borrowers who lacked the earning capability to sustain interest payments over the medium term. Financial products traded prior to the crisis and which contributed to it were prohibited in Muslim markets principally because they were not *Shari'ah* compliant. Abdel-Baki and Leone Sciabolazza (2014) proposed that Islamic banking is a viable and sustainable banking model that showed resilience during the credit crisis of 2007-2008. Nienhaus (2011) challenged the perspective that Islamic banking exhibited greater resilience during the crisis than conventional banks, principally because of observance of ethical standards and prohibition of structures which predominated in secular finance. Islamic banks did perform better than conventional banks which were highly leveraged and deeply involved in speculative trading activities. However, this is an over-simplification and a generalisation that Islamic banks *in toto* performed better than conventional banks: many conventional banks were unaffected because of strong depositor bases, no speculative trading activity, prudent lending policies, and regional commitment. Nienhaus noted (2011 at p. 594) that although Islamic banks tended to fare better in the first half of the credit crisis, many experienced difficulties in the latter stages following a sharp decline in profits. Bailouts and restructurings took place, including The Investment Dar of Kuwait, Gulf Finance House of Bahrain, and Islamic Mortgage providers Tamweel and Amlak of Dubai. There were also twenty *sukuk* defaults. These products manifest differences between the two contexts and are considered in the remainder of this section.

5.1 Securitisation and its Islamic equivalent, sukuk.

This technique was one of the main causes of the credit crisis, involving the 'bundling up' of future cashflows derived from the mortgage markets, their sale to a special purpose vehicle, and the issuance to investors of bonds secured or collateralised by these cashflows. These bonds were often issued in several tranches of differing degrees of riskiness, and a concomitant difference in interest rates payable to investors. The flaws in these bonds were firstly that the cashflow from which payments would be made to investors, the mortgage payments, were unstable, and subsequently fell into default (Wigan, 2010; Wise, 2008), and second, the collateral underpinning the issues had become overvalued, making the rating out of step with the real risk to which the bonds were subject. Financial institutions came to regard securitisation as a means of cleaning up balance sheets by removing assets which had become problematic because there was no appetite for them in the wider marketplace.

5.1.1 Sukuk.

One of the principal distinctions between securitised bond issues and *sukuk* is that whilst the former generates a rate of interest, invariably floating, this is not permissible in *sukuk*, breaching the prohibition against *riba* (Chong and Liu, 2009). In the case of *sukuk* the income generated must be related to the productivity of the assets in respect of which the certificates are issued, thereby enabling investors to share in the success or otherwise of the venture. Securitisation can also be collateralised by either cashflows (for example mortgage payments), or bonds which have been repackaged; *sukuk* does not permit collateralisation, and the certificates must be supported by tangible, productive underlying assets (Rahman *et al.,* 2020; Godlewski *et al*., 2013). In other words, *sukuk* does not permit trading in cashflows alone: there must be a relationship with the underlying asset which must be used for a genuine economic purpose (Dusuki, 2010). One of the reasons why securitisation contributed to the credit crisis was the disconnect between investors and the remoter assets such as housing from the mortgage payments from which the securitised bonds were funded. By investing in repackaged bonds, investors were also participating in derivatives which had no relationship to the project in respect of the funding of which the bonds had originally been issued. Islamic financial *fiqh* stipulates a sustained connection between a financing technique and productive economic

activity and not a trading in cashflows alone, or in products which have reformatted or repackaged those cashflows.

5.1.2 Sukuk: a critique.

For Nienhaus (2011 at p. 600) the income stream from which payments to *sukuk* certificates are issued often comes from the original object, for example a ship or aircraft, the owner of which leases it back from the SPV. The claim to the income stream should be derived from the fact that the certificates constitute (partial) ownership of the SPV's assets from which the income stream is generated. This requires a true transfer of the ownership of title from the originator of the *sukuk* to the SPV and the certificate holders respectively. However, many *sukuk* do not involve a true transfer of ownership; only the usufruct (the right to the income stream) is transferred but not the asset itself. If the *sukuk* issuer (the SPV) becomes insolvent or files for bankruptcy, this retention of ownership has negative consequences for creditors, whose claim will rank below that of the originator. Nienhaus notes that in the case of real title deeds, the holders can hope to recover part of their capital through the sale of the asset. But the capital is lost completely if the certificates only represent the right to the income stream that has dried up. Also, from a *Shari'ah* perspective *sukuk* of the usufruct type are considered not as equity-like but as debt-like papers which are not tradable: they must be held until maturity. *Sukuks* may also have a buy-back guarantee by the issuer for the certificates at face value (the issuing price of the sukuk) at maturity. For Nienhaus (2011 at p. 601) this price guarantee implies that a *de facto* interest-bearing instrument has been created.

5.2. Repurchase agreements or 'repos'.

A repurchase agreement is used by borrowers to raise short-term capital secured by the transfer of assets to a lender. However, the technique can also be used to temporarily remove assets from the borrower's balance sheet where their presence has a negative impact. For accounting purposes, the transaction is treated as a true sale since the seller retains no legal rights in the assets transferred, the lender taking unqualified legal title to the security and holding it pending repurchase by the borrower. Prior to the credit crisis of 2007-2008, in the United States the accounting rule REPO 105 was used by banks to remove illiquid and devalued bonds from portfolios, presenting to the world a healthier balance sheet than was perhaps the case. Islamic finance would not have countenanced this practice for two reasons. First, the forward

agreement- the contract to buy at a future specified date- would not be related to a tangible asset which could be used for a productive purpose. In effect it is a forward agreement relating to a financial asset, or 'making money on money' (Lewis, 2001; Uddin and Ahmad, 2020). Second, the practice, whilst improving the appearance of the company and its perceived financial strength (because bad assets have been temporarily located elsewhere), the wider market would have been adversely affected because the location of risk has been obscured.

5.2.1 A contrast to the Western 'repo': an Islamic form of sale and buy back, bai al inah.

The principle of sale and buy back in Islamic finance is manifested in *bai al inah*. Under this arrangement the seller of the asset, the bank holding the security, will sell it to the buyer, another bank, on a deferred basis, buying back the asset later on a cash basis at a price which is lower than the original selling price. Both contracts are entered into simultaneously, and the margin difference will be the bank's profit. The delay can be reflected in a higher or lower price, depending upon which party is taking a profit. For jurists of the Maliki and Hanbali Schools, this form of contract is illegal because it comprises *riba*, albeit concealed in the mark-up, and is also contaminated by the motives of the parties to the contracts. In contrast, the Shafi'i School permits these contracts provided *riba* is absent since, if the formal mechanisms of the contracts are legal, the motives of the parties are irrelevant. If the transaction was based upon the spot price of the asset at the time the two contracts were entered into, then the transaction would not be perceived as *gharar*, or contaminated by uncertainty (Arbouna, 2007). However, if the buyback of the asset was to be based upon the market price prevailing at the time of the deferred transfer, then this would be *ghara*r and not permitted. Despite the differences between schools, *bai al inah* illustrates the importance in Islamic finance of determining true purpose or motive of parties, and the avoidance of interest. In contrast, secular markets did not address these wider ethical issues during the crisis, hence the use of accounting practices such as repos; although lawful at the time, these were effectively 'window dressing' by banks which wanted to improve the appearance of their balance sheets.

5.3 Collateralised Debt Obligations (CDO's).

CDO's are asset-backed securities the interest payment on which is derived from a portfolio of underlying fixed income assets. Prior to the credit crisis, the advantage of this technique was that it enabled debt to be moved off-balance sheet to be pooled with comparable debt of other institutions, and then brought back into the balance sheet as synthetic CDO's. These latter

instruments obscured the extent of the original risk in the issuer's balance sheet, resulting in higher bond ratings being ascribed to them by ratings agencies which were unable to ascertain the riskiness attached to the underlying security. The collapse of Bear Stearns Bank in March 2008 was in large part attributable to the presence of CDO's in two hedge funds with which it was closely associated and in respect of which it had given financial assurances to investors. At the core of the bank's collapse was an overleveraging of its balance sheet, insufficient stress testing of its underlying collateral, and an aggressive pursuit of management charges. CDO's would have contravened Islamic financing principles for several reasons. First, they offend the prohibition of *riba*: they generate a rate of interest from the assets which have been repackaged, but those assets themselves also generate interest. The driving factor was again to enable banks to improve their balance sheets via a sale (of illiquid assets) and buy-back (of more liquid but opaquer in terms of riskiness assets brought back into the balance sheet at a higher value). CDO's also lacked transparency in terms of risk inherent in the assets being repackaged; investors lacked knowledge of the subject-matter of the transaction and as such, it was speculative (*gharar*) and would have been prohibited.

5.4 Credit default swaps (CDS).

In a CDS the buyer makes payments to the seller, usually a financial institution with substantial capital reserves, in exchange for a commitment by the seller to make a payment to the buyer in the event of default on a specified bond. In practical terms the instrument constitutes a form of insurance: the buyer is hedging the risk of some class of assets within its portfolio going into default. Both the buyer and the seller take a risk on the transaction. The buyer takes the risk that the seller may default in paying out should there be a default on the underlying security, whilst the seller takes the risk that the buyer will default in making further payments on the CDS (Jorion and Zhang, 2007). In both situations risk has become a separated tradable commodity: the CDS exists without reference to an underlying economic activity (it relates to bonds in a portfolio, rather than to the economic activity of the issuer of those bonds). In contrast, Islamic finance strives to sustain this link, an illustration being *salam*. *Salam* is a sale in which a seller enters a contractual undertaking to supply specific goods to a buyer at a future date in exchange for an advanced price paid in the present. The price is paid in cash, with the supply of the goods subject to the contract deferred to a future date (Sakti *et al.,* 2016).

Historically *salam* was intended to provide 'up front finance' for farmers who needed cashflow assistance in advance of a harvest coming to fruition. Since *riba* was not permitted, loans could not be taken out for this purpose; *salam* allowed them to sell their produce in advance, providing them with finance at a time when other sources were not available. However, the buyer also benefited since the price for the commodity sold under *salam* tended to be lower than that prevailing in the spot market at the time of the transaction. *Salam* was an exception to the *Shari'ah* prohibition of forward sales. A prerequisite to *salam* is that payment is made in full at the time of the transaction; less than full payment would amount to a sale of debt against debt, which is expressly prohibited (Rammal, 2010). Also, the genuine purpose of the transaction was to provide funding in full to the farmer against a future harvest; payment of a lesser some would disconnect purpose from legalistic form. *Salam* can only be effected on an 'anonymised' basis: in other words, a farmer could not sell in advance the product of a particular field or orchard since it was always possible that that specific source could be destroyed before the time for delivery, for example by flood or pestilence or drought. Such uncertainty in delivery is impermissible according to *Shari'ah*. The *salam* contract stipulates the quantity and quality of the commodity to be delivered, removing this element of uncertainty (Iqbal, 2007). Financial institutions can engage in *salam* and provide finance to for example suppliers of foodstuffs or agricultural produce. The profit made can be the difference between the spot price at the time of the transaction, and the price paid to the producer in advance of delivery. However, the bank is obliged to actively participate in the underlying transaction: it is not allowed to instead provide a loan on which interest is payable by the producer. It may also enter into a collateral agreement whereby it agrees to sell the product to a third party on the same date as it is to take delivery from the primary *salam* contract, marking up the price and making a further profit on the difference.

6. Implications of findings.

Differences between the *madhabs* as to what is acceptable financial innovation results in new products and financial contracts being tradable in some regional markets but not in others.

Secular banks which have opened Islamic windows are driven by the profit motive, and not by the objective of adhering to religious tenets. Financial innovation can constitute wasted expenditure if it generates products which are tradable in some regional markets but prohibited in others, reducing liquidity, increasing cost, and limiting investor choice. It has been shown that two of the principal schools, Hanafii and Shafi, place emphasis upon legal form, whilst the other two, Maliki and Hanbali, look to substance and intention of the parties. The former has been termed a micro approach by Dusuki and Abozaid (2007) and Nienhaus (2011). In these markets a legalistic approach to innovation in terms of structural characteristics is more likely to generate a wider range of products which are acceptable than those markets where a macro approach is followed, which looks at financial institutions in the wider context of a role which prioritises social justice and the public interest or *maslahah*.

For financial institutions looking to set up subsidiaries in a specific regional Muslim market, it is essential to be aware of the school of *fiqh* which applies. Nienhaus (2011) found that innovation was achieved in contractual engineering by the introduction of unilateral promises (*wa'd*). He noted that, since promises are unilateral declarations of intent and not bilateral contracts, they are not subject to the restrictions of Islamic contract law, particularly with respect to *gharar*. The combination of sales contracts with promises has enabled the creation of a wide range of *Shari'ah* compliant options, including hedging techniques, swaps, and short selling arrangements. Although not widely accepted at present, Nienhaus anticipated that they would gain acceptance within a short time. These innovations in the Islamic finance industry are, according to Nienhaus, replications of conventional instruments that were responsible for excessive leverage, speculation and risk-taking prior to the credit crisis of 2008. An earlier paper by Khan (2010) was of the same view, finding that several decades after its introduction, there remained substantial divergences between Islamic banking and finance ideals and practices: much of it was functionally indistinguishable from conventional banking. However,

Khan also noted that Islamic banking and finance does strengthen a distinctly Islamic identity by providing the appropriate Islamic terminology for *de facto* conventional financial transactions. In other words, legal acronyms differ but the substance remains the same.

6.1 Launching new products through Islamic windows.

The question for financial engineers looking to design products which can be brought to market through Islamic windows has three components. First, it must comply with regulatory requirements: the regional legal architecture within which a financial market exists and functions. Second, it must reconcile the dichotomy between legal form and substance. The former has a narrower remit: provided it does not breach formal contractual rules, it will be acceptable, whilst the latter raises the wider issue of *maslahah* or social justice in which purpose and intent of the parties is relevant. Finally, a conventional bank which is looking to expand into a Muslim regional market will also have to square its local activities with its own overriding objective to maximise profits and shareholder returns: the traditional neoliberal economic model. Guidance of a *Shari'ah* Supervisory Board will be of limited assistance; as noted by Dusuki (2010), these are principally concerned with a narrow consideration of legal form, and not with wider *maslahah*.

6.2 Product prospectus, and marketing to investors.

A prospectus issued to potential regional Muslim investors, private, institutional, or corporate, regarding a new financial product should address the following issues if it is to achieve acceptance and liquidity which may reduce the overall cost of financing. First, products which bundle risk and redistribute it within the economy in the form of securitised assets such as mortgage-backed securities and collateralised debt obligations, whilst intended to be profit-making, may be justified in terms of the wider public interest in the following ways. First, if risk is reallocated from those who cannot bear the financial consequences of it should it

materialise, then arguably wider society benefits: it is in the public interest, in that the protection of one group is reinforced by the reduction of the risk which they hold. Social stability can be discerned in the product's qualities. For example, credit default swaps provide a floor price beneath which an asset held in a portfolio will not fall; if this is reached, the seller of the product must make up the differential. In this way investment portfolios are less susceptible to exogenous shocks, and regional financial institutions have greater stability than would otherwise be the case if they were overtaken by external crises over which they have no control. Second, if society is protected against unanticipated shocks such as short-term oil price volatility or wars by transferring the effects of this to global bond holders, then this too may be argued to be in the wider social interest. Regional financial markets can transfer these risks to the global financial architecture which will be better able, by virtue of depth of capital markets and liquidity, to incur and withstand such shocks. These products provide a risk transmission mechanism from the regional to the global, and in this regard can be socially justifiable notwithstanding the profit motive of those who provide them.

Swaps can be justified when used as a tool by companies to reduce their exposure to foreign exchange volatility. A company which does not protect itself in this way may find that overseas ventures become unprofitable by the time payment is received, generating uncertainty for future retention of the workforce if of a significant scale. Of course, such products can offend the prohibition against speculation and uncertainty, *gharar* and *maysir*, but wider social purpose and benefit can be identified notwithstanding that the driver of such products is the objective of the writer or provider, the financial institution, to make a profit. Again, risk is reallocated to the benefit of the party which does not wish to hold it. As identified by Nienhaus (2011), these products are already on the fringes of Muslim markets but have yet to gain widespread acceptance. The problem appears to be that whilst they satisfy the rules regarding legal form or the narrow approach, they have not been justified in the wider social context, in

terms of *maqqasid* or *maslahah* (Nouman *et al*., 2021). This should be the goal of prospectus issuers and facility providers; they must justify such products in terms of the greater social good, however defined. Social purpose, justice, stability, are not mathematical outcomes: instead, they can be discerned in the function of products which reallocate risk from the weaker to those with the broadest shoulders, principally defined in terms of capital and liquidity resources. In this regard legal form as certified by *Shari'ah* Supervisory Boards can be allied with wider societal purpose. If this can be accomplished or at least addressed in marketing materials to show awareness, the main schools of *fiqh* may be satisfied. Conventional banks will likewise be able to maintain the classical objective of maximising profits through the premiums received for the assumption of such risk.

Section 7. Conclusion

This study has critiqued financial products and contracts which are accepted in some Muslim countries but not in others, in part attributable to the different schools of Islamic jurisprudence or *madhhabs* applied by *Shari'ah* Supervisory Boards which issue *fatwas* regarding the permissibility of innovative new financial products (Asni, 2021). Differences militate against frictionless trading of new products across Muslim markets. It has also been shown that certain financial products traded in the global markets prior to the credit crisis of 2007-2008 were not permissible in Muslim markets, being non-*Shari'ah* compliant. However, this also means that post the crisis, similar products cannot be traded in the same Muslim markets, impeding integration into the global architecture and reducing investment opportunities for managers of funds owned predominantly by Muslim stakeholders. This may be argued to be a beneficial outcome: in a religious environment it is important that managers accommodate the religious requirements of their stakeholders (Fichter, 2018). For these reasons jurisprudential variations

regarding the permissibility of certain financial products in Muslim markets, and seamless trading between these *inter se,* and between these and secular global counterparts, remain a distant prospect. The task for financial engineers looking to introduce new products into regional Muslim markets is to reconcile legal form (micro considerations) with wider social justice, welfare, or general economic stability (macro) considerations, however defined. Khan (2010) warned of the danger of tokenism in which Islamic products are in practical terms indistinguishable from conventional counterparts, albeit with different terminology. This reality risks discrediting financial engineering if it results in products which are the same as conventional equivalents which are driven by the profit motive. Intent also becomes suspect: despite validation of legal form by *Shari'ah* Supervisory Boards, intent or *niyyah* coalesce in both Islamic and conventional contexts around the objective of making a profit without reference to wider social benefit or *maslahah*. This study has suggested that prospectuses and other marketing materials must address these factors: they may be incidental to the profit-making purpose, or even an unintended beneficial outcome, but at least the ethical and wider social contexts have been addressed. Tokenistic observance will damage the concept of financial engineering for Muslim stakeholders. Islamic banks which can square this circle will be able to compete with secular counterparts and at the same time make a profit. In this regard, dichotomies are reduced; Islamic financial institutions are not forced to find artificial justifications in *fiqh* to replicate conventional products which are not genuine attempts to accommodate the religious principles and requirements of stakeholders.

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