

**Embracing Islamic investment in Australia using the  
Malaysian model: challenges and opportunities**



**MAHMOOD NATHIE  
GRIFFITH ISLAMIC RESEARCH UNIT**

**This paper is being considered for publication. Please do not quote.**

**Paper presented at the Conference**

**The Challenges and Opportunities of Islam in the West: The Case of  
Australia**

**Held in March 3-5, 2008**

**Brisbane, Queensland, Australia**

## **ABSTRACT**

Ethically screened mutual funds have allowed many investors concerned with their beliefs and customs to enter the equity market. Islamic ethical funds (IEF's), being new entrants' in this market, are characterised by their shari'ah compliance and have proliferated in Malaysia and the Middle-East.

Public consciousness of SRI's is increasing in Australia. What has not been embraced are IEF's despite evidence of demand from local and overseas investors. Indeed, even the lack of a dedicated stock market Islamic index has isolated the Australian capital market from attracting Islamic investment funds. The trend is quite the opposite in the UK where changes to tax and capital market law have been introduced aimed at establishing London as the global Islamic finance capital.

This paper sets out the principles and application of Islamic law relating to IEF's. It argues that a model incorporating IEF values may be possible for adoption in Australia supported by institutional involvement – some of whom are already actively engaged in managing IEF's overseas through associated financial institutions. It presents evidence of the demand for such investment alternatives, especially from individuals with investments tied up in superannuation funds. It argues that Australia should not ignore the capital market trends in the Asian economies where IEF's are becoming increasingly popular.

## 1 Background

Investment funds continue to play a significant role in equity markets by mobilising investable funds; responding to investors' preferences; minimising portfolio risks through diversification and, providing liquidity through unit redemption. Ethical funds have added new dimensions to equity investments by appealing to investors' beliefs, norms and social concerns. Such ideas arose from the pioneering efforts of church investors in the UK, the USA and Australia based on the 'exclusion' or 'avoidance' principles namely: avoid investments in companies involved in sinful and morally repugnant activities for monetary gain. Shareholder activism during the Vietnam War, opposition to South African's apartheid regime and environmental concerns stemming from the Exxon Valdez oil spillage effectively re-characterised ethical investment as socially responsible investments (SRI) giving it a much wider remit (Sparkes 2002; 2005; Domini 1992; Murningham 1992). Funds constituted under a religious charter constitute a small proportion of socially screened funds within conventional SRI's in western economies and have become increasingly popular in Islamic countries in the last decade (known as Islamic Equity Funds IEF's)

The emergence of IEF's arose from the necessity by Islamic investors to earn *halal* returns from shari'ah compliant equities. Islamic jurists established a number of faith-based 'avoidance' principles aimed at fulfilling this objective. They conveniently developed stock screening methodology mimicking and expanding western-based SRI models. Applying these newly developed filters to stocks listed on the KLCI, the residual stock universe post-filtering constituted the 'shari'ah-compliant stocks' universe (Securities Commission of Malaysia, 2006). The SCM is legally entrusted with the responsibility of continually updating the compliant list and its release in the public domain at the end of April and October each year. the end result of shari'ah screening together with fiqh avoidance principles collectively constitute the investment possibility frontier for Islamic investors, since they effectively define the boundary between the lawful (*halal*) and the forbidden (*haram*) in equity investments.

According to Wilson (2004) avoidance means a certain predisposition by Islamic investors for shari'ah compliant investments closely aligned to a faith-based

ethos. This does not mean Islamic investors do not subscribe to rational equity investment selection criteria (Obaidullah, 2002). The Islamic position is simply that it adds value judgement to the avoidance theory by introducing religio-ethical practices in the behaviour and decision-making of the Islamic investor (Hasan, 2006). Hence strict rationalisation conceived under the von Neumann-Morgenstern and the behavioural assumptions in neo-classical economic theory is not strictly suitable under the Islamic behavioural model. The former does not entertain deviation from rationalism while the latter is prescriptive. These theories have of course been found wanting in Khaneman and Tversky's (1979) prospect theory that opened up a new perspective on neo-classical economics (Camerer & Loewenstein, 2002).

The Islamic behavioural objective, according to DeLorenzo (2004) is not to place effective deterrents through proscriptive fiqh rules on the act of investment per se, but to regulate investment behaviour within prescribed parameters. There are however, no definitive theories in Islamic economics where the avoidance position is sufficiently explained (Pollard & Samers, 2007) and some scholars like Hasan (2006, p. vii) sees this as a lack in the area of Islamic economic thought. There is also little empirical evidence in studies that confirms the upholding of such Islamic ethical values in investment decisions although research by Tahir (2004) indicate that Islamic investors' first preference is risk aversion. Further, lack of behavioural evidence related to decision-making is partly the result of Islamic finance studies being under-theorised according to Pollard and Samers (2007). In the literature, most studies on Islamic ethical funds have inclined towards qualitative evaluation of fund performance with little attention paid to investors' ethical behavioural traits. Behavioural finance research has been confined predominantly to attitudes and perceptions of Islamic banking and bank selection criteria.

In Malaysia early encounters with ethical investments commenced with the Tabung Haji (pilgrims' fund) investment scheme commencing in 1953 although it was not until 1993 when 'Tabung Ittikal' – the first fully fledged Islamic unit trust – was established by Arab-Malaysian Unit Trust (Securities Commission, 2004, p. 101).

## **2      Remainder of this study**

**Section 3** sets out the objectives of the study. **Section 4** provides details of data and sources of information relied on. **Section 5** outlines the characteristics of ethical investments and the principles underlying Islamic investments. The discussion focuses on the ‘avoidance’ principles and their application in Islamic law. **Section 6** concentrates on the Malaysian experience with Islamic ethical funds and their relevance in the country’s Islamic capital market. It deals with Shari’ah regulatory issues. The basics of equity screening methodology are explained as well as its relevance in IEF fund management. **Section 7** provides a discussion of ethical investments in relation to Australia. **Section 8** discusses some of the downsides of Islamic ethical funds. Section 9 presents arguments for the adoption of an Islamic model based on the Malaysian experience

**Section 10** argues the ramifications of the absence of IEF’s to Australia. This issue proceeds from the observation that “...pioneering new frontiers in a different paradigm always poses new challenges and takes time” (Iqbal & Mirakhor, 2004, p. 58).

## **3      Objective of this study**

Islamic investment funds constitute a significant means of attracting investable funds in the Malaysian Islamic capital market (Bank Negara, 2007). Malaysia presently runs a dual capital market financial system in which Islamic finance exists parallel with the traditional conventional financial system inherited from British colonial rule. Hence many banking, corporate and financial regulatory systems resemble those in Australia. For instance in relation to land conveyancing, the Australian Torrens land title system is used to this day as the preferred land registration system in Malaysia. This is because the Torrens title is based on land, not people and there was no necessity to change the law (Searle, 1999). In like manner, the 1983 Banking Act was an attempted to find a symbiosis of two differing financial value systems. Globalisation, petroleum revenue, Basle II and the partial success and robustness of the dual Malaysian banking and finance model has been emulated in countries like Indonesia, Pakistan, Bahrain and Singapore. It may be questioned; why has this trend escaped the

attention of the Australian monetary authorities? Or perhaps, what are the impediments to its adoption in Australia?

This study aims firstly, to highlight the Malaysian model in relation to its Islamic capital market and the role of its equity fund industry. The second objective argues whether this model merits serious consideration for adoption in Australia. With public consciousness of SRI's increasing in Australia, the significance of IEF's has been ignored despite evidence of strong local demand and anecdotal evidence of interest from overseas Islamic investors.

#### **4 Data and scope**

This paper relied on primary survey data collected in 2004 that was used in research studies for the authors' Masters Dissertation at Griffith University. The empirical data in that study was used to test attitudes and perceptions towards Islamic finance in Australia. Secondary data on the determinants of Australian Islamic investment behaviour was available from Tahir's (2004) dissertation but not used in the analysis. Data for studies relating to Malaysian Islamic funds were accessed from publicly available databases compiled by the Securities Commission of Malaysia and Bursa Malaysia.

The scope of this study is limited to the role of collective Islamic investment funds within the Malaysian Islamic capital market.

#### **5 Characterisation of ethical investments**

##### **5.1 Conventional ethical investing**

Ethical investment as an investment alternative incorporates beliefs and values for financial gain (Sparkes, 1994). In explaining ethical investments, Domini and Kinder (1986) suggests that every stock or savings has an ethical dimension and investors need to apply their own standards when evaluating stock investment or the type of savings to invest in. Cowton (1994) argues that ethical investors are concerned not only with financial returns but also the character of the companies they invest in; their

conduct, activities and the products and services they offer. Melton and Keenan (1994) prefer an economic approach to ethical investing proposing a ‘socially responsive portfolio’ that has no specific ethical dimension but where the portfolio is an aggregation of a number of ethical subsets. Each subset has to be considered separately for ethical adherence. In applying ethical standards Kinder and Domini (1997, p. 13-15) distinguish between ‘exclusionary’ (negative) screens and qualitative (positive) screens. They argue that setting guidelines in classifying stocks using this method allows for a more objective assessment of ethical stock selection.

In contrast, what is considered ‘ethical’ by definition has become a perennial interpretive problem (Taylor, 2001) and one idiosyncratic in its application. Schwartz (2003) questions the notion of ethicality and challenges whether ethical mutual funds (motivated by performance) do in fact act in an ethical manner. He argues that ethical values are subsumed by profitability considerations. Hoggett and Nahan (2002) argue that since ethical funds determine their own ‘ethical’ standards, they are self-identified in theory but often not so in practice. They contend that providing investors the choice to simply ‘avoid’ certain activity does not deem funds to be ethical but rather constitutes “...a vehicle for a more-or-less restricted group of personal preferences” (pp. 3-4).

In Islam on the other hand, the ‘avoidance’ (ethical) principles embrace shari’ah-based criteria whereby the desire to manage investment funds correspond with its beliefs in avoiding prohibited goods and services; dubious transactions; and speculative financial dealings bordering on gambling – at the fund and corporate levels (Securities Commission, 2006). Thus for instance, investment in companies dealing in interest (*riba*), alcohol, gambling, casinos, music, pornography and armaments are excluded from an Islamic investors’ desired stock investment universe.<sup>1</sup> Further, transactions involving excessive risk from highly speculative stock market dealings are proscribed. These and other ethical stance characterises Islamic equity funds as being faith-based since it “represents an assertion of religious law in the investment market where the market is free from prohibited activities” according to Bursa Malaysia (n.d., p. 2).

---

<sup>1</sup> See Table 1 for a comprehensive list of proscribed stock sectors.

Since these ethical criteria are firmly entrenched in religious norms, Kahf (1976) argues that they are regarded as *a priori* in the economic behaviour of its adherents. When such behaviour are correct in their economic application, then the act of investment assumes “the character of worship” according to Siddiqi (1976, p.196). Usmani (1998) contends that this position emphasises the importance of ethical conduct in *mua’alat* (Islamic financial matters) – it is then left up to the conduct of the investor to manifest these in his/her financial dealings and decisions. When such requirements are fulfilled, then a well-defined Islamic investment portfolio will include a combination of shari’ah compliant stocks together with other assets (Siddiqi, 2004). Also, economic entities compliant with these criteria are then capable of offering investment alternatives for general public participation.<sup>2</sup>

The ethical argument is not unique to Islam. Jewish teachings resonate with beliefs and laws espoused in the Bible, Talmud, Mishna and responsa (Swhartz, Tamari & Schwab, 2002). The authors argue that Jewish teachings provide sufficient basis for the establishment of Jewish-based ethical funds citing principles premised on “abetting; justive and goodness; abiding by contracts; preserving life; settlement of the world; and Sabbath, festivals and Kosher food” (p. 3). Indeed many of these principles found their way in the ethical values promoted by John Wesley in the 1760’s cited by Sparkes (2005).

## **5.2 Shari’ah principles underlying equity investments**

The first principle relates to the prohibition of *riba* (interest). Investors may not deal in equity (or monetary) transactions involving elements of *riba* (e.g. interest leverage instruments and gearing) nor invest in entities whose primary income is derived from interest (banks). Also prohibited are stocks guaranteeing fixed returns (preference shares). The second principle is that associated with *gharar* (uncertainty accompanied by deceit), excessive speculation and *maysir* (gambling). The third principle requires that the business activities of the companies targeted for investment must fall within shari’ah acceptable parameters. Fourthly, the net assets of a company targeted for

---

<sup>2</sup> The regulatory aspects of these requirements are set out in Chapter 6 of the ‘Guidelines on Unit Trust Funds’ issued by the Malaysian Securities Commission at <http://www.sc.com.my>

investment must not consist of highly liquid assets (cash; deposits and receivables). The fifth principle is that non-shari'ah permissible income must not exceed certain specified thresholds.

The general investment principles underlying commercial and financial transactions in the shari'ah are that claims to reward (profit) on capital must proceed from legitimate contracts; be free of ambiguities and, the contracting parties must accept the risk of loss associated with such contracts (Kamali 2002; Obaidullah 2002). This follows from the general norm in the Qur'an: *let there be among you traffic and trade by mutual goodwill* (4:29). Two well established legal maxims are recognised in shari'ah flowing from these principles.

The first maxim states: "*al-ghorm bil ghonm* – there is no reward without risk" (Rosly, 2005, p. 405). This risk/reward trade-off is consistent with conventional financial and investment practices – namely that all parties to the transactions are fully informed of market conditions and possess sufficient knowledge in decision-making. The risk referred to here is that prevalent in normal transactions such as 'buy/sell' share dealings and unit trust 'buy/redemption' deals. However, risk occasioned by excessive uncertainty is *gharar* which is considered akin to gambling and specifically outlawed (Obaidullah, 2002). As to risk arising from speculation, the underlying *nature* of transactions must be looked at as well as the business decisions and whether excessive uncertainty is prevalent.

The second maxim states: "*al kharaj bil damam* – there should be no guarantee of profits" (Rosly, 2005, p. 405). In the Mejlle (article 87, p. 14) it is stated "the person who obtains the benefit of a thing, takes upon himself also the loss from it". This means that the person who bears the risk in equity investment is entitled to the profits on its sale. This maxim supplements the first meaning that risk-taking inherently excludes profit guarantees. If that was otherwise, the investment would assume a character akin to bank fixed-deposits. Furthermore (Obaidullah, 2002) argues that a claim to guaranteed profits is tantamount to a claim to 'unearned' profits. This he asserts is a negation of informational efficiency since no business is able to guarantee future profits.

### 5.3 Shari'ah and the concept of 'avoidance'

Conventional investment practices had already defined some avoidance principles in the 19<sup>th</sup> century when the Quakers, the Church of England and the Methodist churches pioneered the idea of avoiding investments in companies involved in sinful and morally repugnant activities for monetary gain (Sparkes 2002, p. 27; Ali & Gold 2002, p. 3). Islamic ethical investment has endorsed these values and has added other investment practices prescriptive to the shari'ah, such as *maysir* and *gharar*. Gambling and Karim (1991) discuss the integration of religion and economics and assert that in relation to Islam, there is no separation between business transactions and religious beliefs as the ethical dimension of business is founded on religious precepts existing in the shari'ah.

The norm in Islamic law is that “*all financial transactions are permissible (Qur'an 4:29) ...unless there is a clear injunction to the contrary*” (Kamali, 2002, p. 66). In general, based on this principle, once the prohibited elements are eliminated (avoided) what remains becomes *permissible* (Bank Negara 2007, p.2; Wilson 2004b). This is the fundamental basis used in shari'ah stock screening by the Securities Commission of Malaysia (SCM) whose methodology incorporates two processes. Firstly, an exclusionary (negative) process that separates out the *haram* (prohibited) elements, and a second quantitative process that objectively refines stock selectivity using financial ratios (DeLorenzo 2004; Norman 2004; Siddiqui 2004; Wilson 2004a).

In understanding this shari'ah principle, Moustapha (2004, pp. 3-4) has argued that this maxim relates to the principle of 'permissibility' (or *ibahah*) and does not open the door to *any sort* of financial or commercial transaction since mere presumption of permissibility is a juridical concept applied with great circumspection by the jurists – especially when permissibility is accompanied by doubt. In equity dealings, its practical manifestation lies in the permissibility of dealings on the stock market subject to the avoidance of *riba*, *maysir*, *gharar* and haram goods and services. The SCM has developed a number of criteria as well as guidelines for assessing the legality of listed securities.

The second legal maxim is that relating to the concept of necessity<sup>3</sup>: or ‘*bringing facility and ease (al-taysir) and removing hardship (raf-al-haraj)*’ (Kamali, 2002, p. 66). Here the underlying objective is the removal of unnecessary impediments to enable people to engage in trade and investment unhindered. This, according to Doi (1984, pp. 65-84) is an extremely powerful dictum since it is capable of continuous refinement over time and circumstance and capable of being applied very judiciously. Yaqubi (1998; 2000) explains that this maxim – together with the *maslahah* (public interest) principle – is applied by present-day Islamic institutions, for example, in dividend cleansing. The SCM uses this principle in determining the status of “mixed companies”<sup>4</sup>. This ruling opens the permissibility of trading and investing in the shares of (say) construction companies whose activities are beneficial to the community but whose operations are largely funded from debt borrowings. This departure is based on the doctrine of *umum balwa* (common plight and difficult to avoid) namely, that the non-permissible element is not significant to render the larger investment objective impermissible for, in doing so, its rejection would cause more harm. There are many companies that fall into this category and the extent of permissibility is one determined on the legal maxim of *al-daruriyyat* (necessity)<sup>5</sup>. The SCM has provided detailed explanatory memorandums on its applicability in shari’ah screening.

The third legal maxim deals with permissibility: ‘*what is independently impermissible is permissible<sup>6</sup> when done in accompany with permissible acts*’ (Yaqubi, 2000, pp. 8-9). Al-Qaradawi (1984, pp. 36-37) has expanded on this maxim explaining that a pragmatic line be drawn for its implementation since, if this rule is applied too liberally it may open the door to undesirable practices (e.g. highly

<sup>3</sup> This maxim is found in the *Mejelle*, Article 21. Titled the ‘*Majallah al-Ahkam al-Adliya*’ it is popularly referred to as ‘The *Mejelle*’. It is a collection of Islamic legal doctrines and maxims based on Hanafi jurisprudence. It was a complete code on Islamic civil law compiled during the Ottoman Caliphate for general application in civil administration in territories under its administration. It was replaced by the Swiss civil code in Turkey in 1926, but still widely used today in Iraq, Palestine and Jordan.

<sup>4</sup> Refers to companies whose core activities are permitted but also contain small elements of prohibited activities (also known as *umum balwa*). See Securities Commission (2006, pp. 150-159)

<sup>5</sup> This refers to matters of religion and common affairs, the neglect of which may result in disruption and hardship to people – one of the principles argued by Al-Ghazzali the philosopher and Shafi scholar.

<sup>6</sup> However, Article 24 of the *Mejelle* (p. 6) states: “when the prohibition has faded away, the forbidden thing returns”. This maxim has also been construed as ‘when a prohibition is removed, the things to which such prohibition attaches to, reverts to its former status of legality’ (IIUM Lecture Notes, Fin 5110, 2007).

speculative deals bordering on gambling) and outcomes – something the shari’ah never intended. In finance this line of reasoning has been used to justify the purchase of shares in corporations where some of their income is tainted with interest income. This maxim is analogous to the situation where companies borrow at interest to finance working capital while the underlying nature of their operations are shari’ah compliant (Yaquby, 2000, p. 8). However, the practical endorsement of some of these rules have not been universally accepted by some juristic schools as exemplified by the contentious issue of trading in debt (*bay’ al-dayn*)<sup>7</sup> by Malaysian institutions.

The above maxims are subject to differing interpretations as observed by Yacuby (2000). Consequently, there is considerable divergence in screening criteria employed by the major index providers although fundamentally the methodology seem to be consistent. However, whether some of these filtering criteria has been correctly applied is a moot point since opinions differ on judicial interpretations (Rosly, 2005, pp. 37-38). This does not mean one judicial opinion prevails or provides certainty of knowledge. That this is so, Ibn Ashur (El-Mesawi, 2006, p. 115) argues “this is because all individual proofs are conjectural when considered separately”. Furthermore, Kamali (2004) holds that the benefits of the application of these maxims must not result in the lessening of *maqasid* (the higher purpose of the law). The *maqasid* relating to investment principles are:

- To ensure lawful earnings and investment of savings based on the principles of sharing burden by bearing the risk of liabilities (DeLorenzo, 2004).
- To regulate financial markets through administrative procedures based on the principle of *maslahah al-mursalah* (unrestricted public interest) or the general rule of expediency<sup>8</sup>. However, Obaidullah (2002, p. 8) has argued that “norms that emanate directly from the Qur’an, Sunnah and Ijma must be accorded priority over concerns about *maslahah*”.
- To promote portfolio diversification through shari’ah compliant equities – thereby reducing risk and safeguarding retirement savings and personal wealth of the people (Siddiqui, 2004).

---

<sup>7</sup> Opposing views argued by El Diwani (1997, p. 161); Rosly (2005, p.37) and (El-Gamal, 2002, p. 5) leaves this issue inconclusive. While the Malaysian authorities have accepted the practice as acceptable in its capital market, the Islamic Fiqh Academy in Jeddah does not share this view (Securities Commission, 2006, pp. 16-19)

<sup>8</sup> See Resolution 59/10/6 of the OIC Fiqh Academy, Jeddah, (6<sup>th</sup> session March 14-20, 1990)

In relation to maqasid, Ibn Ashur (El-Mesawi, 2006, p. 271) has argued that:

One of the primary objectives of the Shari'ah concerning the community's wealth is to ensure its preservation and growth. Since that wealth consists of an aggregate, it is protected by establishing appropriate rules for its management both at the public and private levels.

This argument has been applied by regulatory authorities (Iqbal, M., 2007) in many Islamic countries and often used to justify interference in the Islamic capital market<sup>9</sup>. It is also the reason for the establishment of quasi-governmental institutions such as the Islamic Financial Services Board (IFSB) and the Dubai Financial Services Authority (DFSA) to introduce and oversee that prudential financial practices are maintained in the industry – akin to the Australian Prudential and Regulatory Authority (APRA). It is however, unfortunate that such institutions have been politicised, as in Egypt (through its Ministry of Awqaf and the State Security Office) where extra-judicial powers were used to blunt the emergence of institutions not conforming to state ideologies (Soliman, 2004, pp. 272-273). Malaysia has added a further layer by seconding permanent staff on its Shari'ah Advisory Boards (as with the SCM) to ensure seamless integration of shari'ah rulings with banking practices.

The juridical differences noted earlier have however, not distracted attention from investments in global stock markets through Islamic investment funds (Wilson, 1997a; 2004). For this reason, the mobilisation of savings; the need for portfolio diversification and the resurgence in Islamic religious consciousness, scholars are progressively leaning towards arguing the religio-ethical dimensions of modern finance (Henry & Wilson 2004; Warde 2004; Wilson 2004c).

## **6 Islamic ethical funds – the Malaysian experience**

### **6.1 Malaysian Islamic market indexes and stock screening methodology**

The growing importance of SRI's inspired the development of IEF's in Malaysia since SRI's incorporate some important screening elements conforming to shari'ah standards. By mimicking these SRI's and structurally entrenching Islamic 'values'

---

<sup>9</sup> Securities Commission (2001), *Capital Market Master Plan, Malaysia*.

into the model, provided the ideal corporate setting to accommodate Islamic savings and so effectively overcome entry barriers (Jaffer 2004; Norman 2004; De Lorenzo 2004). Iqbal and Mirakhor (2004, p. 58) explain how this is achieved through financial “reverse engineering” and “innovation”. The first concept allows adopting a conventional instrument that is used to evaluate its efficacy in a shari’ah setting, which is subsequently altered or adjusted for compliance. The second alternate is a *de novo* approach under which the instrument is constructed from scratch from prevailing shari’ah rules. The innovative approach is one where new ideas are constructed around existing ones without essentially changing their underlying character.

Perhaps the single most significant stimulus to the ‘innovation’ ideas was the 1987 *fatwa* on equity investment by the Islamic scholars Taqi Usmani (Pakistan), Saleh Tug (Turkey) and Tayyeb al-Najjar (Egypt) according to Siddiqui (2004, p. 48). Their ruling effectively endorsed the creation of Islamic equity funds. This was followed by resolutions adopted by the Islamic Fiqh Academy (Jeddah)<sup>10</sup> in March 1990 and the follow-up resolutions that effectively opened the way for the establishment of IEF’s (Yaquby, 2000).

However, the Tabung Ittikal Islamic unit trust (1993) experience showed shari’ah principles alone are incapable of managing investment funds. They needed to be objectively applied by investors – especially equity funds charged with earning returns for investors commensurate with risks. The prerequisite for this was the necessity of a shari’ah compliant equity domain accessible to Islamic equity funds (Securities Commission, 2004).

The SCM has developed several criteria and guidelines for selecting shari’ah compliant stocks. The SCM uses the Bursa Malaysia main board, secondary board and the Mesdaq market as its stock universe. This process screens out (filters) undesirable stocks leaving an equity domain appropriate for Islamic unit trust to develop their investment portfolios. The list of complaint stocks are maintained by the SCM under the supervision of its Shari’ah Advisory Council. The compliant domain

---

<sup>10</sup> A Fiqh academy set up under the auspices of the Organisation of Islamic Countries. Although its deliberations are primarily in Arabic, the English version of these resolutions are available on [www.fiqhacademyjeddah.org](http://www.fiqhacademyjeddah.org)

is continuously updated from company reports; disclosures to Bursa Malaysia (BM); survey responses, and liaison with company management. The list of approved securities is publicly released by the SCM in April and October each year. Additionally, Bursa Malaysia maintains the EMAS Shari'ah Index,<sup>11</sup> (formerly the KLSI – Kuala Lumpur Shari'ah Index) constructed from the KL Main Board compliant companies. According to Yusoff (2008):

It uses globally-adjusted criteria that make it easier for institutional investors to track our Shari'ah-compliant investment offerings more effectively. This is critical to ensure our Shari'ah market continues maintaining its competitiveness with other international Shari'ah investment destinations.

The stock screening process is a two stage exercise. Firstly, stocks are evaluated in terms of company activities, products and industry. Companies whose activities include the sale, production and distribution (and related activities) of alcohol, tobacco, pork and related products, conventional financial services, weapons, entertainment (hotels, casinos, gaming, cinema, pornography and music) are excluded.

The second stage involves a comparative analysis of company financial data based on a set of key financial ratios against specified benchmarks. Briefly, these ratios are categorised into:

---

<sup>11</sup> The KLSI was deactivated on 1 November 2007, making the FTSE-Bursa Malaysia EMAS Shariah Index the singular benchmark index for Malaysian shari'ah-compliant investments. The EMAS Shariah index is designed to provide investors with a broad benchmark for shari'ah-compliant investment for the Malaysian market. The index takes the constituents of the FTSE Bursa Malaysia EMAS Index, which has been free float weighted and liquidity screened, and overlays the Securities Commission's Shari'ah Advisory Council's (SAC) screening methodology to derive a highly investable and transparent Shari'ah-compliant index. *KLSI (Kuala Lumpur Shariah Index)* Retrieved January 10, 2008 from [http://www.klse.com.my/website/bm/market\\_information/FBM\\_emas\\_shariah.html](http://www.klse.com.my/website/bm/market_information/FBM_emas_shariah.html)

<b>Screen</b>	<b>Threshold</b>
▪ liquid assets	17-49%
▪ interest income	5-15%
▪ debt leverage	30-33%
▪ tolerance parameters:	determining tolerable levels of mixed contributions from permissible/non-permissible sources based on profits and turnover.

The SCM has also set adjustment rules allowing for the disposal of equities found non-compliant between listing dates (April/October) as well as non-compliant securities inadvertently acquired by shari'ah funds.

There are presently no international standards on shari'ah stock screening. Although the principle shari'ah criteria for stock screening are globally recognised, there is nevertheless inconsistent treatment of financial ratios among index providers. Lack of screening standards has created significant problems for fund managers as shown in Table 1. The great divergence in compliant stock domains is clear but with serious consequences for investors' stock selection and portfolio management.

**Table 1 Differences in screening methodologies: Securities Commission Malaysia & Dow Jones-RHB Islamic Malaysia**

	<b>Number of stocks Shari'ah compliant</b>	<b>Number of stocks in Bursa Malaysia</b>	<b>% Shari'ah compliant</b>
SCM – June 1997	371	651	57%
SCM – April 2003	704	804	81%
SCM – May 2005	826	985	84%
DJ-RHB – May 2005	45	985	4.6%

Source: Omar, A. *Islamic Equity Market, Stock Screening & Preference shares*. (IIUM Lecture notes, Fin 5140, 2007); Securities Commission (2006, p. 144); Rosly (2005, p. 416)

The Shari'ah Advisory Committee (SAC) of the SCM has argued the validity of its methodology citing legal maxims as the most compelling argument – that relating to *maslahah*, on the basis that were it not to do so, the absence of a reasonable stock domain would be detrimental to the general public (Rosly 2005, pp. 405-417;

Securities Commission 2006). Also, while recognising judicial differences in treatment, it submits these are minor issues and its position is one aimed at satisfying the needs of investors from different cultural background and economic dispositions (Securities Commission, 2006, p. viii). As proof, Siddiqui (2007) has shown that in the period since its inception, the Dow Jones Islamic Index methodology has changed on two occasions for the same reasons advanced by the SCM.

It is arguable which is the correct position, but Rosly (2005, p. 416) maintains that all index providers have been able to maintain the core screening principles in their applications. Unlike Malaysia, screening services are also performed by the non-regulated private sector. In India for instance, the Parsoli IBF-Net Equity (PIE) Islamic index<sup>12</sup> is maintained by the private Parsoli/IBF Net partnership. Dow Jones and the FTSE remain the biggest Islamic index providers.

## **6.2 The Malaysian Islamic unit trust market**

According to the SCM the market capitalisation of the Malaysian equity stock market was RM 1.1 trillion (April, 2007) of which RM 600 billion (64%) comprised shari'ah compliant stocks<sup>13</sup>. Table 2 provides a breakdown of the sector allocation of compliant stocks.

The low number of financial institutions represented in Table 2 is the result of exclusionary screens applied to entities whose dominant revenues and earnings are from interest income. The 12% component represents stocks in BIMB Holdings Bhd – Malaysia's biggest Islamic bank, a single takaful (Islamic insurance) company and three other financial compliant institutions. Where Islamic unit trust funds invest in non-compliant securities, losses arising from their disposal are to be borne by the trust fund manager. But while the aggregate representation is 86%, critics have argued the high risk character of such a market portfolio since, a significant portion of risk-averse securities (banks) have been excluded from the portfolio universe. This argument however, holds for ethical funds of all persuasions as Ali and Gold (2002)

---

<sup>12</sup> See [http://: www.pasoli.com](http://www.pasoli.com)

<sup>13</sup> Singh, R. A., *FTSE-Bursa Malaysia Hijrah Index Keynote Address*, Securities Commission (May 21, 2007). Retrieved January 20, 2008 from <http://www.sc.com.my>

and Schwartz (2003) have pointed out. Siddiqui (2004, p. 51) produced evidence that Islamic equity funds have not been adversely affected in terms of returns through this exclusionary element. He argues further that, EIF's have been sheltered from highly-g geared companies – such as Enron and Worldcom – through application of strict financial ratio stock filters. A further criticism of IEF's is that the exclusion of highly profitable banking institutions leads to high investment concentrations in other sectors – especially technology stocks (Wilson, 2004c).

**Table 2: Shari'ah-compliant securities on Bursa Malaysia at November 30, 2007**

<b>Main Board/ Second Board/ MESDAQ Market</b>	<b>Shariah-compliant securities</b>	<b>Total securities</b>	<b>Percentage Shariah-compliant</b>
Consumer Products	123	133	92
Industrial Products	280	301	93
Mining	1	1	100
Construction	54	56	96
Trading / Services	167	201	83
Properties	78	95	82
Plantation	37	44	84
Technology	101	104	97
Infrastructure (IPC)	7	8	88
Finance	5	42	12
Hotels	Nil	5	Nil
Closed End Fund	Nil	1	Nil
<b>TOTAL</b>	<b>853</b>	<b>991</b>	<b>86</b>

Source: Securities Commission Malaysia. Retrieved January 20, 2007 from [http://www.sc.com.my/html/resources/press/pr\\_20071130.html](http://www.sc.com.my/html/resources/press/pr_20071130.html)

With shari'ah guidance from the SCM, Bursa Malaysia as well as a dedicated Shari'ah Advisory Council, local and global conventional institutions such as CIMB, Public Bank, Maybank, Prudential, IGI Standard Charter, and HSBC are active in the Islamic investment fund industry.

Table 3 indicates that the number of shari'ah equity funds grew in tandem with the industry. However, the share of net asset values relative to the market has remained subdued considering that the first Islamic equity fund commenced in

January 1993. In trend terms however, the Malaysian Islamic fund market has grown much faster than in other countries according to the 2002 IOSCO Islamic capital market fact finding study.<sup>14</sup> For instance, in June 1986 the first USA Islamic equity fund (Amana Income Fund) was established while the Bahrain-based Dallah Al-Barakah Group established two funds – the Al-Tawfeek (1992) fund operating in Saudi Arabia and the Al-Amin fund (1987). In both instances considering their early entry in the market, their growth has not matched that experienced by some Malaysia funds.

**Table 3 Growth in Malaysian Islamic Unit Trust Funds – at 31 December**

	2005	2006	2007
<b>Number of Approved Funds</b>			
Shari'ah-based	83	100	134
Total industry	340	416	521
<b>Net Asset Value (NAV) of Funds – RM billion</b>			
Shari'ah-based	8.5	9.2	16.9
Total industry	98.5	121.8	169.4
% Shari'ah to Total	8.6%	7.6%	10.0%
<b>Market statistics – all funds</b>			
Market capitalisation – RM billion	695.27	848.70	1106.15
Growth %		22.0%	30.3%
Units in circulation (total)	139,386	154,067	208,342
Growth %		10.5%	35.2%
Number of accounts (total)	10,896,675	11,163,901	12,274,908
Growth %		2.45%	10%

Source: Compiled from statistics provided by Securities Commission Malaysia and Bursa Malaysia

<sup>14</sup> See *Report of the IOSCO Islamic Capital Market Task Force* at <http://www.iosco.org>

## 7 Australia and ethical investment funds

A report by the Ethical Investment Association of Australia<sup>15</sup> (EIA) shows there is considerable public consciousness of religious-based ethical investment. At June 30, 2003, investment assets of religious organisations accounted for \$6.7 billion (31.5%) of total SRI assets (\$21.3 billion). But the report also highlights that the idea of SRI's generally has not evolved as significantly compared to that in the UK, the USA and Europe – also argued by Sparkes (2002). A less acknowledged but evolving niche market identified in the EIA (2003) report are 'community finance programs' designed to assist people experiencing difficulty in accessing finance. Such programs signify interest in community-based ethical finance confirmed in research by Nathie (2004) and Tahir (2004). Another consequence associated with this trend is evidence of changes in attitudes and perceptions relating to financing and investment alternatives.

Australian SRI's have, in common with practices overseas, adopted screening methodologies filtering out obnoxious industries, preferring investment in sectors such as biotechnology, health care and renewable energy. There is however, not much evidence of religious investment practices although, judging by the selection criteria of SRI funds, they share common preferences with SRI practices. A practice identified as "social responsibility overlay" (EIA Report, 2003, p. 9) employs religio-ethical and other ethnocentric practices in addition to SRI practices to embellish fund characteristics – a practice that may well suit Islamic investment funds in Australia.

Community-based investing, another investment trend identified in Australia is concerned with community-specific projects and issues. Often incorporated as cooperatives, they are essentially limited to members only as in the case of MCCA – an Islamic community cooperative. These entities are however, severely limited in their capital structures; management and organisation; in meeting the demands of a wider spectrum of ethical investors; in providing professionally run investment services and, in their advertising reach.

---

<sup>15</sup> *Socially Responsible Investment in Australia – 2003*

## **7.1 Australian religious and community-based investments**

There is not much evidence on the investment activities of Australian religious organisations. Many church organisations are members of the Christian Centre for Socially Responsible Investment<sup>16</sup> – an advocacy group promoting specific church and social issues. The dispersion of various investment funds tied to these groups makes aggregate investment estimates difficult. Research by EIA (2003) indicates growth in SRI investments by religious organisations at: \$6 728 (2003); \$6 705 (2002); \$ 6 283 (2002).

Research by Knowles (1997) suggests that SRI growth experienced periods of strong growth. More recently studies by Hanson and Tranter (2006); McLachlan and Gardner (2004) and Vyvyan (2003) and throw more light on the identity of SRI investors and their expectations and SRI performance. Hoggett and Nahan (2002) seriously question the concept of ‘ethicality’ while arguing that ‘ethicality’ is promoted by fund managers to attract more investment funds. Ali and Gold (2002) provide some evidence on SRI equity selection as well as regulatory issues associated with Australian SRI’s. There appears to be no studies related to investment behaviour among different social and religious groups.

## **7.2 Evidence on profiles and investment behaviour of Australian Islamic investors**

Two research papers examined the importance of Islamic finance in the Australian context. The first study undertaken by the author (Nathie, 2004) was concerned with the attitudes and perceptions towards Islamic banking and finance in Australia. Some of the empirical findings are highlighted below.

The first study is based on a survey of 206 Muslim respondents living in Australia conducted in 2004. This study confirms a high degree of preference for Islamic-based financial products (92%). The survey also found 81% of respondents were either ‘not very familiar’ or ‘not familiar at all’ with Islamic finance. Further, interest in Islamic finance was centred mainly in two age groups: 18-25 (28%) and

---

<sup>16</sup> Members include the following churches: Uniting, Catholic, Anglican, Lutheran, Baptist, Assemblies of God and the Salvation Army (EIA, 2003, p. 20)

26-50 (55%). Other demographic patterns indicate very low exposure to stock market investment (21%) among all age groups. However, there were mixed responses to shari'ah compliant investments in superannuation funds as shown in Table 4 and Table 5 below.

**Table 4** Response to question: *If a Shari-ah compliant super fund existed, would you consider placing your contributions in such a fund?*

		%
<b>I would</b>	132	66.00
<b>I would not</b>	5	2.50
<b>I may give it a thought</b>	37	18.50
<b>I'm not sure</b>	26	13.00

Source: Nathie, (2004).

These results suggest a good inclination towards shari'ah investments given there are no shari'ah compliant investment funds on the market. Dealing with untested concepts seems to be a more plausible reason for 34% not responding positively. This fact is confirmed in Table 5 where the majority of respondents preferred dealing with conventional investment funds. The responses also suggest a strong affinity for conventional funds catering for the needs of special interest groups.

**Table 5** Response to question: *If traditional super funds were to provide Shari'ah compliant investments, would you consider moving your retirement savings to such a fund?*

	<i>N</i>	%
<b>Yes</b>	178	90.4
<b>No</b>	19	9.6

Source: Nathie (2004)

Interestingly, the study also found that although respondents were well educated (82%) possessing either a technical, trade or university education, 80% (166) were either 'not familiar' or 'not familiar at all' about Islamic finance. Furthermore, less than 20% were very familiar with Islamic banking products. These findings corroborate those of Dar (2004) in the UK; research by Gerrard and Cunningham (1997) in Singapore and Haron, Norafifah and Planisek (1994) in Malaysia. Low

awareness of fundamental investment principles was also found among Islamic investors in Tahir's (2004) research.

In the Australian study by Nathie (2004), factor analysis confirmed 'amanah' (trustworthiness) as the most dominant factor in financial institution selection. This explains the reason for the high response for traditional funds in Table 5. The findings in both tables should however, be seen in the investment-specific profiles of Islamic investors shown in Table 6. Respondents placed fairly high importance to all investment factors influencing their decision-making behaviour – traits common among conventional investors as well.

**Table 6 Factors influencing respondents investment decisions**

	Very Important		Important		Not important	
	N	%	N	%	N	%
The type of company	112	54	50	24	43	22
The risk factors	114	55	51	25	41	20
Dividend payments	70	34	78	38	58	28
Company performance	99	48	65	32	41	20
Capital gain	86	42	67	32	53	26
Shari'ah compliance	125	61	41	20	40	19

Source: Nathie (2004)

Table 6 should also be read in conjunction with Table 7 which indicates very low rates of preference for financial products and services. The reason for higher superannuation participation rates can be explained in terms of its mandatory requirement.

**Table 7 Demand for financial products and services**

Type of Product/ Service	Have now		Will consider		Not needed	
	N	%	N	%	N	%
Home loans	32	17	73	38	87	45
Personal loans	15	8	74	40	95	52
Superannuation	67	35	52	27	72	38
Self managed super fund	18	10	59	33	102	57
Private health insurance	47	26	75	41	60	33
Investment Property loans	18	10	72	40	182	51
Managed investments	13	7	75	42	91	51
Share/equity investments	20	11	69	38	93	51

The second study by Tahir (2004) examined the determinants of investment behaviour among Islamic investors in Australia. His study confirms that Islamic investors are risk-averse and display strong preferences for shari'ah compliant stocks on the ASX. Moreover, investors are found to be rational decision-makers when confronted with competing alternatives. Personal demographic attributes such as age, education and income strongly influenced risk/return preferences. The study also indicates close behavioural similarities between Islamic and non-Islamic investors that confirm the theory that Islamic investors are no different in their risk/return expectations even allowing for ethical concerns.

## **8 Some downsides related to Islamic ethical investments**

A number of factors inhibiting investment in ethical funds have been raised in the literature. Compliance costs – raised early by Amy Domini (1986) – have been singled out as the biggest impost in ethical funds management. These include cost of specialist staff acquainted with ethical standards and criteria; ongoing research associated with company screening; dedicated indexes and absence of expense sharing (i.e. economies of scale). With IEF's the problem is compounded with additional costs of maintaining shari'ah advisory boards.

These arguments have been countered in the Malaysian experience – IEF funds are managed by the same institutions offering non-Islamic investment services, ensuring sharing of operational and staff costs. According to the SCM there were 529 approved unit trust funds (at 31 December, 2007) managed by 39 fund management companies. Further, stock screening costs are absorbed by the regulator that was previously borne by fund managers.<sup>17</sup> Kahf (2004) has argued that IEF's have created a new class of Islamic scholars – ones that are high in demand and now come at considerable cost to Islamic financial institutions. For this reason, he proposes the creation of a single shari'ah body in each country, accessible to all institutions and one in which ideas are unified, standardised and costs shared.

---

<sup>17</sup> The RHB Bank for example, had to maintain its own Islamic index and stock screening.

The second downside is that associated with investors' discriminant behaviour. New investment ideas take time to filter into investors psyche and they are more inclined towards old tested ideas in their decision-making (Tversky & Khaneman, 1986). Further, Statman (2005a) and Shwartz (2003) have argued that not all investors are willing to accept lower returns for maintaining an ethical stance. Also, while many investors are sympathetic to the ethical positions taken by funds, they are not willing to commit themselves financially to such ideas. Whether faith-based values are subsumed by risk/return considerations is debatable. These theories however, remain to be tested empirically in the context of Islamic finance and investment.

The third critique of ethical funds is that of financial performance. Ali and Gold (2002) show that many of the 'sin' stocks are star performers on the ASX as well as in other bourses and their exclusion compromise investors' returns. This argument has also been put forward by Schwartz (2003). But Statman (2005a; 2005b) and others dispel this argument on the basis that the 'exclusionary' principle is precisely the cost investors are willing to sacrifice for taking on an ethical stance.

The final concern relating specifically to Islamic funds, is the post 9/11 adverse publicity it has to deal with. Warde (2004, p.48) has argued that:

“the sheer ‘amorality’ of contemporary finance has generated an interest in ethical approaches...and the idea of Islamic finance struck a cord in a context of rising pietism”.

Islamic finance, according to him, provides real potential for bridging gaps in perceptions and narrowing the ideological divide. He also identifies the “insipient hostility of the ‘New World Order’ to Islam” (Warde, 2004, p. 50) as the cause of much of the polarisation between Islam and the West.

## **9 Will a Malaysian investment model provide a ‘good fit’ for Australia?**

### **9.1 Economic argument**

Assume investors are faced with choosing between one of two investment alternatives. At issue is whether Australian investors will embrace an untested

concept. We may apply utility theory to determine choice under uncertainty. How people choose to allocate funds between competing alternatives depends on the objects of choice and the method of choice (Copeland & Weston, 1992). Investors may rank both ‘models’ in terms of riskiness since they are assumed to exhibit risk-averse behaviour (Markowitz, 1952). They prefer to earn as much return at the lowest possible level of risk – the utility function will be strictly concave. If both models are conceived as ‘gambles’, von Neumann and Morgenstern’s axiomatic requires consistent and rational behaviour. Investors will weigh up the ‘cost’ of the gambles and choose the alternative where expected wealth will exceed current wealth.

Kahneman and Tversky (1979) and Tversky and Kahneman (1986) however, dispelled the validity of rationalist behaviour argument on the bases that investors do not behave as suggested by the axioms. They favoured instead a new expected utility theory in which choice is determined in terms of ‘prospects’. The ‘reference point’ in prospect theory would then be where an investor already holds a conventional fund. An Islamic fund (A) would be preferred over a conventional fund (B) (assuming both are on the same utility function) if the choice of A results in higher expected returns for the same level of risk. Thus the manager of fund A would need to out-perform that of B. On the basis of a constrained stock universe this is not possible under the semi-strong market efficiency hypotheses. Fund A would need to exhibit extraordinary investment skills to do this or, be constantly in possession of knowledge superior than that of the market.

Bollen and Cohen (2005) citing Ait-Sahalia et al. (2004) however, suggest IEF’s (socially responsible fund in their paper) be conceived as a form of ‘luxury goods’. Under this utility-maximising paradigm, demand for luxury goods increases as the marginal utility of wealth decreases. Hence, demand for (say) IEF’s increases when performance is good – otherwise investors will switch to conventional funds. Applying what Bollen and Cohen (2005) term as a model of ‘rational learning’, if IEF managers are able to articulate ‘better’ returns in terms of shari’ah compliance, there may be an expected drift away from conventional funds into IEF’s, provided certain essential elements of shari’ah finance are in place. Bollen and Cohen (2005) use a ‘subscription/redemption’ cash flow methodology in their paper to test preferential drifts between SRI and non-SRI funds.

In the Malaysian experience, investors were already ethically ‘conscientised’ in accepting an Islamic alternative. Firstly through the Tabung Haji experience and secondly, through the government sponsored EPF (Employee Provident Fund). Both initiatives encouraged equity investment via collective investment schemes (Securities Commission, 2004). Despite prolonged exposure, Table 3 show increases in all key statistics but the penetration levels of Islamic funds has not shown significant increase. The Australian equivalent of the EPF scheme are the mandatory industry, state, federal and self managed superannuation schemes.

## 9.2 Market commonalities and deficiencies

The economic argument elicits areas of perceived barriers to entry for IEF’s. A closer examination of both countries’ economic regimes shows areas of commonalities as well as deficiencies. Table 8 sets out a number of areas in which the Malaysian capital market models may synthesise with those in Australia.

**Table 8 Malaysian and Australian models of ‘good’ fit & deficiencies**

<i>Area of interest</i>	<i>Malaysia</i>	<i>Australia</i>
<b><i>Regulatory regime</i></b>		
Company regulation	Securities Commission	ASIC
Financial regulation	Securities Commission	APRA
Compliance regulator	Shari’ah Advisory Board	None
<b><i>Industry sources</i></b>		
Industry unit trust body	FMUTM	
<b><i>Schemes</i></b>		
Complaint funds	Shari’ah compliant funds	None
Market Indexes	KLCI composite	ASX All ordinaries

The absence of Islamic indexes in Australia is quite conspicuous from Table 8. Yet this endeavour has been one of the primary drivers of collective investment schemes in Malaysia (Securities Commission, 2004). With it passive Islamic fund investment has been made possible through index tracking, active fund portfolio construction and now used in promoting exchange traded funds. The significance of these initiatives

are reflected in the number of new unit trusts and investment schemes registered with the Securities Commission of Malaysia.

Two areas of special interest that would sit firmly with model synthesis include; the availability of a family of dedicated S&P Australian Islamic indexes modelled on the Dow Jones Islamic Market (DJIM) index group and, the compilation of a shari'ah compliant list of AXS main board companies. The DJIM group has extended these services to a number of countries in the recent past. The FTSE in Malaysia has been equally active in this respect.

The presence of these services in Australia is justified for the following reasons. In Hofstede's 'individualism vs collectivism' paradigm, individuals are assumed to look after their own as well as their immediate families' interest. That is, individuals will always act in their own 'self-interest' as 'rational' persons – ideas proposed by Adam Smith and the classical economics school. On the other hand, collectivism are the values that bind groups into social networks portraying common cultural norms and habits. These two dimensions represent the 'I' and 'we' of peoples' cultural behaviour (Deegan, 2001). Ideas that resonate with the cultural norms and beliefs of a community are quickly assimilated as part of their societal make-up (Hamid, Craig & Clarke (1993). This argument is also manifested in the works of by Gray (1988) and Baydoun and Willet (1995) who showed how distinct cultural values are incorporated in accounting standards.

The second reason relates to the 'economics of religion' argument of Iannaccone (1998). He observed that this area of non-market behaviour has been neglected in economic theory. He argued that economic models may be modified to incorporate issues of culture, beliefs and morality through changes in individual and group behaviour. Iannaccone (1995; 1996) also contends that religious behaviour is neither irrational nor non-rational and that such misconceived ideas have been postulated by economic rationalists who themselves displayed irrationality in their scientific judgements. These ideas are of course is not new for Ibn Khaldun [1332-1406 ]; al-Ghazzali [1058-1111]; al-Shatibi [d1388] and Ibn Ashur [1879-1973] all argued that the economic wellbeing of a society can be promoted by the protection of five elements namely; their beliefs, life, dignity, intellect and property. The last element is the one most often used in Islamic economics to explain individual and group behaviour (Hasan 2006; Kahf 1976, 1978).

### 9.3 Expressing a model to test choice of investment

Access to equity markets for many investors is a matter of exercising ‘choice’ and ‘preferences’. For Muslims, shari’ah compliant investment funds seem to be the most desirable as argued by Wilson (2004), Siddiqui (2004), Al-Rafai (2000) and others.

The choice criteria is summed up by Brailsford et al (2003, p.61) as “the choice of investment vehicle is a function of the amount of investment funds available and the size and sophistication of the investment management group”. There is however no Australian data against which to test this hypothesis. However, if choice is conceived in terms of risk characterisation, the model used by Tahir (2004) may provide a convenient means of testing choice. Constructing a Muslim (A) vs non-Muslim (B) risk aversion paradigm (Islamic vs Conventional funds) he uses the following model:

$$Ret_t = \alpha_0 + \beta_1 SysRisk + \varepsilon \quad (1)$$

where;

$Ret_t$  = continuously compounded returns for the selected period

$\alpha_0$  = a constant term

$\beta_1 SysRisk$  = systematic risk of each fund for the selected period

$\varepsilon$  = error term

After running regressions for both funds, the significance of both  $\beta_1$  are examined and tested for significance.

Significance is expressed by:

$$\frac{\beta_1 B - \beta_1 A}{SE \text{ of } \beta_1 B} \quad (2)$$

Where  $\beta_1$  are the respective betas and SE the standard error of estimate of non-Muslim investors. Using equation (2) Tahir (2004) found  $\beta_1 B$  (0.606) and  $\beta_1 A$  (0.623) was statistically significant at the 1% level and concluded there was no significant evidence in the risk preferences between both groups. On this basis, one

could expect conventional Australian ethical unit trusts with screening criteria closely resembling that of a Malaysian Islamic unit trust to be an acceptable alternative.

Performance evaluations are however not the only choice criteria in fund selection (Vyvyan, 2003). Table 9 provides details of other variables that influence Islamic financial behaviour in Australia (Nathie, 2004, p. 64)

**Table 9 Significant relationships to Riba and Familiarity with Islamic banking**

Relationship	Critical Value	$\chi^2$ Value	p-Value	Null hypotheses
Riba: Age	9.49	12.71	0.013	Reject
Familiarity: gender	5.99	13.41	0.001	Reject
Familiarity: education	9.49	9.92	0.042	Reject
Familiarity: occupation	9.49	11.46	0.022	Reject

It is clear from the above statistics that non-monetary behaviour have much influence on the behaviour of Islamic investors. A more robust analysis could have emerged using structural equation modelling in the above study but for lack of a sufficiently large sample size.

In summary, the missing links in a perceived Australian/ Malaysian investment model are; Islamic indexes; shari'ah complaint stock universe, and; a compliance monitoring regime. These prerequisites are to be applied within a conventional equity unit trust structure overlaid with a shari'ah complaint regime where ethical values are enshrined in a Mission Statement.

#### 9.4 Challenges

This paper presents evidence of emerging trends in global capital markets that seem to have escaped the attention of Australian institutions, investors and lawmakers. The weight of evidence in global capital markets – judging from the volume of *sukuk* underwritings in Malaysia, Indonesia, Singapore, the GCC countries and some European countries – confirms the significance and influence of Islamic finance. It is not anymore a concept derided by academics and institutional sceptics. Those professing a perfectionist finance model ought to look at the failures of the

conventional model itself – much of it arguably caused by heavy reliance on debt and not equity financing (Nienhaus, 2007).

The arguments have moved beyond simplistic generalisations and claims of inconsistencies in Islamic finance and its models. Wilson (2004a; 2004c) has argued that the focus is currently on innovation, quality assurance and stability in the products and services offered by Islamic financial institutions. Chapra (2007, p. 325) has identified challenges facing the Islamic finance industry as those considered to be “sound and efficient and free from crisis and instability”. He proposes “actualizing justice” (p. 325) as the soundest measure to ameliorate shortcomings with the system.

Iqbal (2007) argues regulatory solutions to problems facing Islamic finance and has identified several international institutions charged with developing the institutional framework supporting the operations of Islamic financial institutions. These include the IDB, AAOIFI, the IFSB, IIRA and GCIBFI<sup>18</sup>. Finally, Wilson (2007) has focussed attention on actual developments in Islamic banking predominantly in the UK and the USA and its integration in conventional finance. He argues that far from being construed as a maladjustment to conventional riba-based finance, Islamic finance is accepted as a financial alternative in those countries, albeit being a very miniscule competitor to its conventional counterpart.

However, Islamic mutual funds also have a history of failures. In the UK the Kleinwort Benson Islamic mutual fund ceased operations in the 1980’s with great loss to the merchant bank ostensibly because of lack of sufficient investors and shari’ah expertise. The Flemings Oasis Fund and the Halal Mutual Fund ceased in the 1990’s through lack of interest (Wilson, 2007, p. 425).

Questions that consistently arise in Islamic finance conferences and forums are: where is Australia? Why has it kept aloof? What are the challenges and opportunities for Australia and, does it have a role to play?

---

<sup>18</sup> Islamic Development Bank (IDB); Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI); Islamic Financial Services Board (IFSB); International Islamic Ratings Agency (IIRA); General Council of Islamic Banks and Financial Institutions (GCIBFI).

## **10 Prospects in embracing an Islamic finance model in Australia**

There are important lessons to be learnt from the UK and USA experience identified by Wilson (2007) that may be emulated in Australia.

The shari'ah principles underlying equity investments point to a number of commonalities shared between SRI and IEF's in terms of equity screening, investor goals and perceptions. Importantly, it demonstrates the closeness in economic ethical ideals shared by the three Abrahamic faiths, notwithstanding criticism with ethicality (Schwartz, 2003) and religious paradigms (Statman, 2005b). Australian investors' familiarity with faith-based investors is confirmed in the EIA research but there is no evidence to suggest that IEF's will encounter similar reception. The most compelling evidence of assimilation is to be found in the Malaysian experience where a dual capital investment market has found favour with both Islamic and non-Islamic investors. Given ethical commonalities, it is argued that IEF's can be assimilated in the Australian funds industry without resorting to enabling legislation or challenges from local SRI funds. The model describes the behaviour of a subset of faith-based investors. The evidence is in the number of funds across a multitude of disciplines dedicated to one or other core values inspired through concerns over issues such as the environment, corporate social responsibility and social justice.

Another observation with respect to the legality of IEF's is that Malaysian unit trust legislation is modelled on English trust law – being a carry-over of inherited colonial legislation – when the first unit trust (the Malayan Unit Trusts Limited) was registered in 1959. Hence the adoption of a Malaysian IEF model merely entails the adoption of an Australian unit trust entity overlaid with an appropriate shari'ah-based 'social responsibility' charter. This format will mimic that presently adopted by other Australian socially responsible equity funds.

A third issue deals with integration – the assimilation of IEF's model in conventional finance. There is no exclusivity in Islamic finance – it is not confined to those professing the Islamic faith. Ethical investment does not lay claim to exclusivity

in ideas and principles. It merely takes a principled position on an issue(s) and promotes that line through shareholder activism or active participation through the markets. It reinforces traditional values in people through active financial participation. In this sense it poses no threat to any financial system, class of investors or moral order. On the contrary it adds confidence to the market by introducing new entrants that hitherto remained outside traditional investment realms. Agil Natt<sup>19</sup> the current CEO of INCEIF<sup>20</sup> revealed at a conference<sup>21</sup> that “more than 65% of Islamic banking and finance in Malaysia was conducted with the Chinese community” – the majority of whom do not profess the Islamic faith. Contextualised geographically and to ensure relevance, Islamic finance and investment should remain non-exclusive, borderless and appealing to investors from all persuasions. Australian IEF’s incorporating these attributes will appeal especially to foreign investors.

The current state of play in capital markets show that ethical funds come in many flavours: mutual funds for Catholics, Lutherans, Anglican and followers of Islam. But how do religious investors balance moral principles with the need to earn decent or acceptable returns? Is faith compromised at the expense of profit or returns? These are difficult questions but as the growth in SRI’s has shown, particularly in the USA, investors seem to be indifferent to such clash of ideals. As argued earlier in this paper, growth in SRI’s has consistently risen in developed economies and sophisticated investors have looked beyond national borders to diversify investment portfolios.

What is the Australian experience with SRI’s? Why has it not embraced *any* form of Islamic investment? Are there inherent resistance to such ideas? If so, the US and UK experience may rebut such notions. The first foreign IEF (the Amanah fund) commenced operations in the USA driven predominantly by activism from small investors. There is some indication of a wider recognition of Australian interest in

---

<sup>19</sup> Former CEO of Aseambankers Malaysia Bhd and Regional Chief Representative of Kleinwort Benson merchant bank.

See also <http://www.bnm.gov.my/index.php?ch=8&pg=14&ac=1235&print=1> for more personal details.

<sup>20</sup> International Centre for Education in Islamic Finance, based in Kuala Lumpur.

<sup>21</sup> IIUM International Conference on Islamic Banking & Finance 2007, April 23-25, 2007, Crowne Plaza Mutiara, Kuala Lumpur.

Islamic finance, apart from a low level presence through MCCA<sup>22</sup>. In a recent radio interview<sup>23</sup>, an officer of accountants KPMG Islamic Finance Initiative indicated there would be interest in shari'ah compliant products from non-Muslim investors in Australia if these were available. In the same interview, strong interest from Australian investors for equities linked to Islamic indexes was expressed by a spokesman from Standard & Poors. These observations have at yet not materialised despite strong growth in equity funds in Malaysia, Indonesia, Singapore and Hong Kong and points to lost opportunities for Australian institutions. Moreover, Australia being a leader in financial services, its pre-emptive expertise have been overshadowed by the efforts of Singapore for instance, in embracing Islamic finance. It has placed Singapore in a commanding position in the region and globally.

Another aspect overlooked in regional affairs is the influence of economic coexistence. The Malaysian model shows the duality of conventional and Islamic capital markets has not hindered the economy nor compromised its financial infrastructure. In fact growth in sukuk issuance has greatly enhanced its financial status. Other countries vying for a share of the same market include the GCC countries and the UK government. In November 2007 the United Kingdom Debt Office through HM Treasury issued a consultation paper titled "Government sterling sukuk issuance: a consultation"<sup>24</sup> for general distribution calling for submissions on a number of questions relating to sukuk and its desirability as sovereign debt instruments. This paper sets out various legislative reforms to UK tax laws, amendments to its Finance Act 2006 and other regulatory changes introduced by the UK authorities designed to capture a share of this emerging market. Here is tangible evidence of major interest in Islamic debt instruments hitherto ignored in conventional capital markets. There is some local institutional interest in this market by the ANZ bank through its 25% associated interest in AmBank Malaysia – the fifth largest financial services group in that country.

---

<sup>22</sup> Muslim Community Cooperative Australia. The first corporate entity engaged in Islamic finance in Australia.

<sup>23</sup> Sue Lannin, ABC News, Thursday, 6 December 2007, 12:AM. Retrieved from <http://www.investortv.com/stories/54983,1076-18270,45896.html> February 20, 2008.

<sup>24</sup> This document is accessible from the UK HM Treasury website [hm-treasury.gov.uk](http://hm-treasury.gov.uk)

It is disappointing that the Australian department of Trade has not seized on this opportunity in its foreign trade endeavours. Perhaps the recent change in government may pursue this opportunity.

There are of course also some downsides to fully fledged Islamic finance and investments in Australia. The first has to do with the size of the market. This remains the biggest challenge and obstacle. If the concept is narrowly defined, it would appeal only to a fraction of the Australian population. The 2006 population census reveals a Muslim population of less than half million. It may be argued that this number is far too small to sustain a viable dedicated financial entity. More broadly defined, as the empirical evidence suggests, domestic potential for Islamic finance points to home finance, lease financing and wealth and superannuation management. These arguments of course ignore two important sources of interest. The first is demand from non-Muslim clients desirous of financing alternatives. The second is demand from foreign investors looking for asset diversification through equity and other asset classes. The resilience of the Australian ASX, its prudential banking and finance regime and low country and market risks are factors attractive to many investors. Indeed, these factors mitigate against some Asian countries as preferred destinations for foreign investment. Furthermore, in terms of a shari'ah compliant equity spread and risk mitigation, the ASX provides a significant sectoral spread of equity as well as a host of mining and resources companies that fall outside the portfolio domain of present Malaysian equity stocks.

Another factor driving the Islamic capital markets is that relating to asset diversification. Most GCC Islamic investment funds now flow to the US, UK and now increasingly to China and the sub-continent (Wilson, 2004). He argues that capital flight from the US has fuelled much of the growth in Malaysian and Asian equity funds and local bourses. Warde (2004) has made similar observations and argues that post 9/11 events has reduced the attractiveness of US mutual funds to Islamic investors.

An area that holds out great expectations for Australian financial institutions, equity trusts and academics is in knowledge transfer and financial services expertise. Shortage of skilled financial/investment personnel in Islamic countries remains a problem and great impediment to growth. Where is Australia's involvement? It has

great potential in helping with issues such as corporate governance, compliance monitoring and prudential financial regulation.

A further consideration is the geopolitical motive flowing from active financial engagement. Australia's image has been badly dented with the Iraq experience and the general perception of treatment of indigenous people and Muslims. Presently, Australia is not a leader but a laggard in political persuasion! 'Howardian' idiosyncratic ideas need to be reversed and *seen* to be at work through active participation and cooperation! Can Islamic finance help! Does it have the potential to influence? This new idea has not been tested but one needs to look at the UK effort. Gordon Brown was and remains very active in "promoting London as the Islamic financial hub of the world".

So, whereto from here! First, create awareness in the investment market for Islamic finance. Next, encourage exchange of ideas. Next, create links – through treasury and finance ministry, department of trade and through academic cooperation and collaboration. It may be a good time to 'sell' ideas by inviting private enterprise and government to participate.

## REFERENCES

- Al Rafai, T. (2000). Monitoring the performance of Islamic equity funds. *New Horizon*(103), 6-11.
- Ali, P. U., & Gold, M. (2002). *An appraisal of Socially Responsible Investments and Implications for Trustees and other investment fiduciaries* Melbourne: The University of Melbourne: Centre for Corporate Law and Securities Legislation.
- al-Qaradawi, Y. (1984). *The Lawful and the Prohibited in Islam* (1 ed.). Beirut: The Holy Qur'an Publishing House.
- Bank Negara, M. (2007). *Shariah Resolutions in Islamic Finance* (1 ed.). Kuala Lumpur: Author.
- Baydoun, N., & Willet, R. (1995). Cultural Relevance of Western Accounting System to Developing Countries. *ABACUS*, 31(1), 67-92.
- Bollen, N. P. B., & Cohen, M. A. (2005). Mutual Fund Attributes and Investor Behaviour. Vanderbilt University.
- Bursa, M. (n.d.). *The Islamic Capital Market [Brochure]*. Kuala Lumpur: Bursa Malaysia.
- Chapra, U. M. (2007). Challenges facing the Islamic financial industry. In K. M. Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking* (pp. 325-360). Cheltenham: Edward Elgar Publishing.
- Copeland, T. E., & Weston, J. F. (1992). *Financial Theory and Corporate Policy* (3 ed.). Menlo Park CA: Addison Wesley Longman.
- Cowton, C. J. (1994). The Development of Ethical Investment Products. In *ACT Guide to Ethical Conflicts in Finance*: Blackwell.
- Deegan, C. (2001). *Financial Accounting Theory*. Roseville, Australia: McGraw-Hill Book Company Australia.
- DeLorenzo, Y. T. (2004). The Religious foundations of Islamic Finance. In S. Archer & R. A. Abdel-Karim (Eds.), *Islamic Finance: Innovation and Growth*. London: Euromoney Books.
- Doi, A. R. (1984). *Sharia'h: The Islamic Law* (1 ed.). London: Ta-Ha Publishers Ltd.
- Domini, A. L. (1992). What is Social Investing? Who are Social Investors? In P. D. Kinder, S. D. Lydenberg & A. L. Domini (Eds.), *The Social Investment Almanac*. New York: Henry Holt & Company.
- Domini, A. L., & Kinder, P. D. (1986). *Ethical Investing*. Reading, Massachusetts: Addison-Wesley.
- El-Mesawi, M. E.T. (2006). *Ibn Ashur: Treatise on Maqasid al-Shari'ah*. Kuala Lumpur: Islamic Book Trust Malaysia.
- Ethical Investment Association Australia. (2003). Socially Responsible Investment in Australia - 2003. Retrieved January, 30, 2008, from <http://www.google.com.au/search?hl=en&q=ethical+investment+association+of+australia+report+2003&btnG=Search&meta=>
- Gambling, T., & Karim, R. A. (1991). *Business and Accounting Ethics in Islam*. London: Mansell.
- Gerrard, P., & Cunningham, J. B. (1997). Islamic Banking: a study in Singapore. *International Journal of Bank Marketing*, 15(6), 204-216.
- Hamid, S., Craig, R., & Clarke, F. (1993). Religion: A Confounding Cultural Element in the International Harmonization of Accounting. *Abacus*, 29(2), 131-148.

- Hanson, D., & Tranter, B. (2006). Who are the Shareholders in Australia and what are their Ethical Opinions/ An Empirical Analysis. *Corporate Governance Oxford, 14*(1).
- Haron, S., Norafifah, A., & Planisek, S. L. (1994). Bank Patronage Factors of Muslim and non-Muslim Customers. *International Journal of Bank Marketing, 12*(1), 32-40.
- Hasan, Z. (2006). *Introduction to Microeconomics: An Islamic Perspective* (1 ed.). Kuala Lumpur: Prentice Hall.
- Henry, C. M., & Wilson, R. (2004). *The Politics of Islamic Finance*. Edinburgh: Edinburgh University Press.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-related Values*: Sage Publications.
- Hoggett, J., & Nahan, M. (2002). Ethical Investment - Deconstructing the Myth. *Review - Institute of Public Affairs, 54*(3), 3-6.
- Iannaccone, L. R. (1995). Risk, Rationality and Religious Portfolios. *Economic Enquiry, 33*(2), 285-295.
- Iannaccone, L. R. (1998). Introduction to the Economics of Religion. *Journal of Economic Literature, XXXVI*(36), 1465-1496.
- Iqbal, M. (2007). International Islamic Financial Institutions. In K. M. Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking* (pp. 361-383). Cheltenham: Edward Elgar Publishing.
- Iqbal, M. (2007). International Islamic Financial Institutions. In K. M. Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking* (pp. 361-383). Cheltenham: Edward Elgar Publishing.
- Iqbal, Z., & Mirakhor, A. (2004). The development of Islamic financial institutions and future challenges. In S. Archer & R. A. Abdel Karim (Eds.), *Islamic Finance: Innovation and Growth*. London: Euromoney Books.
- Jaffer, S. (2004). Editor's Introduction. In S. Jaffer (Ed.), *Islamic Asset Management* (1 ed., pp. xx-xxii). London: Euromoney Books.
- Kahf, M. (1976). A Contribution to the Theory of Consumer Behaviour in an Islamic Society. In K. Ahmed (Ed.), *Studies in Islamic Economics* (1981 ed., pp. 19-36). Leicester, UK.: The Islamic Foundation.
- Kahf, M. (1978). *The Islamic economy* (1 ed.). Indiana: Muslim Students Association of the USA.
- Kahf, M. (2004). Islamic Banks: Rise of a New Power Alliance of Wealth and Shari'ah Scholarship. In C. M. Henry & R. Wilson (Eds.), *The Politics of Islamic Finance*. Edinburgh: Edinburgh University Press.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica, 47*(2), 263-291.
- Kamali, M. H. (2002). *Islamic Commercial Law - An Analysis of Futures and Options* (2 ed.). Kuala Lumpur: Ilmiah Publishers.
- Kamali, M. H. (2004). *Principles of Islamic Jurisprudence* (2 ed.). Kuala Lumpur: Ilmiah Publishers.
- Kinder, P. D., & Domini, A. L. (Winter, 1997). Social Screening: Paradigms Old and New. *The Journal of Investing, 6*(4), 12.
- Mackenzie, C. (1997). *Ethical Investment and the Challenge of Corporate Reform: A critical assessment of the procedures and purposes of UK ethical unit trusts*. University of Bath, Bath.
- McLachlan, J., & Gardner, J. (2004). A Comparison of Socially Responsible and Conventional Investors. *Journal of Business Ethics, 52*(1), 11-25.

- Melton, J., & Keenan, M. (1994). *The Socially Responsive Portfolio: Balancing Politics & Profits in Institutional Money Management* (1 ed.). Chicago: Probus Publishing Company.
- Moustafa, S. K. (2004). *The Shari'ah Principles of Financial Contracts and Islamic Banking*. Paper presented at the Third Southern African Islamic Insurance, Banking and Finance Seminar, Durban.
- Murningham, M. (1992). Corporations and Social Responsibility: A Historical Perspective. In P. D. Kinder, S. D. Lydenberg & A. L. Domini (Eds.), *The Social Investment Almanac*. New York: Henry Holt & Company.
- Nathie, M. (2004). Islamic Banking: Significance to Australian Muslims. Unpublished Masters Dissertation. Griffith University.
- Nienhaus, V. (2007). Governance of Islamic Banks. In K. M. Hassan & M. K. Lewis (Eds.), *Handbook of Islamic Banking* (pp. 128 - 143). Cheltenham: Edward Elgar Publishing Ltd.
- Norman, T. L. (2004). Islamic Investment Funds. In S. Jaffer (Ed.), *Islamic Asset Management*. London: Euromoney Books.
- Obaidullah, M. (2002). Ethics and Efficiency in Islamic Stock Markets. *Islamic Financial Services*, 3(2).
- Pollard, J., & Samers, M. (2007). Islamic banking and finance: postcolonial political economy and the decentring of economic geography. *The Institute of British Geographers*(32), 313-330.
- Rosly, S. A. (2005). *Critical Issues on Islamic Banking and Financial Markets* (1 ed.). Kuala Lumpur: Dinamas Publishing.
- Schwartz, M. S. (2003). The 'Ethics' of Ethical Investing. *Journal of Business Ethics* (43), 195-213.
- Schwartz, M. S., Tamari, M., & Schwab, D. (2002). Capital Markets and Jewish Teachings. University of Pennsylvania.
- Securities Commission, Malaysia. (2004). *Capital Market Development in Malaysia: History and Perspectives*. Kuala Lumpur: Author.
- Securities Commission, Malaysia. (2006). *Resolutions of the Securities Commission Shariah Advisory Council* (2 ed.). Kuala Lumpur: Author.
- Siddiqi, M. N. (1976). Muslim Economic Thinking: A Survey of Contemporary Literature. In K. Ahmed (Ed.), *Studies in Islamic Economics* (1981 ed., pp. 191-269). Leicester, UK.: The Islamic Foundation.
- Siddiqui, R. (2004). Islamic Indexes: the DJIM framework. In S. Jaffer (Ed.), *Islamic Asset Management*. London: Euromoney Books.
- Siddiqui, R. (2007). Shari'ah Compliance, Performance and Conversion: The Case of the Dow Jones Islamic Market Index *Chicago Journal of International Law*, 7(2), 495-520.
- Social Investment Forum. (2005). *2005 Report on Socially Responsible Investment Trends in the United States*. Washington: Social Investment Forum.
- Soliman, S. (2004). The Rise and Decline of the Islamic Banking Model in Egypt. In R. Wilson & C. M. Henry (Eds.), *The Politics of Islamic Finance* (pp. 265-285). Edinburgh: Edinburgh University Press.
- Sparkes, R. (1994). *The Ethical Investor*. London: Harper Collins.
- Sparkes, R. (2002). *Socially Responsible Investment: A Global Revolution*. Sussex, England: John Wiley & Sons
- Sparkes, R. (2005). *A Historical Perspective on the Growth of Socially Responsible Investment*. Sheffield, UK: Greenleaf Publishing

- Stark, R., Iannaccone, L. R., & Finke, R. (1996). Linkages between Economics and Religion. *The American Economic Review*, 86(2), 433-437.
- Statman, M. (2005a). Normal Investors, Then and Now. *Financial Analysts Journal*, 61(2), 31-38.
- Statman, M. (2005b). The Religions of Social Responsibility. *Journal of Investing*, 14(3), 14-22.
- Tahir, I. (2004). Determinants of Investment Behaviour. Unpublished Honours Dissertation. Griffith University.
- Taylor, R. (2001). Putting Ethics into Investment. *Business Ethics: A European Review*, 10(1), 53-60.
- Tversky, A., & Kahneman, D. (1986). Rational choice and the framing of decisions. *Journal of Business* 59(4, pt. 2), 251-278.
- Tyser, D. S., Demetriades, D. G., & Effendi, I. H. (2003). *The Mejelle - Majallah El-Ahkam-I-Adliya* (Tyser, D.S., Demetriades, D.G., Effendi, I.H., Trans.) (2 ed.). Kuala Lumpur: The Other Press (Original work published circa 1839).
- Usmani, M. T. (1998). *An Introduction to Islamic Finance* (1 ed.). Karachi: Idaratul Ma'arif.
- Vyvyan, V. K. J. (2003). *Socially Responsible Investing: Preferences and Attitudes*. Griffith University, Brisbane.
- Warde, I. (2004). Global Politics, Islamic Finance and Islamist Politics before and after 11 September 2001. In C. M. Henry & R. Wilson (Eds.), *The Politics of Islamic Finance* (pp. 37-62). Edinburgh: Edinburgh University Press.
- Wilson, R. (1997a). Islamic Finance and Ethical Investment. *International Journal of Social Economics*, 24(11), 1325-1342.
- Wilson, R. (1997b). *Economics, Ethics and Religion*. : Macmillan, London and New York University Press.
- Wilson, R. (2004a). Screening criteria for Islamic equity funds. In S. Jaffer (Ed.), *Islamic Asset Management* (pp. 35-45). London: Euromoney Books.
- Wilson, R. (2004b). Screening Criteria for Islamic Equity Funds In S. Jaffer (Ed.), *Islamic Asset Management*. London: Euromoney Books.
- Wilson, R. (2004c). Capital Flight through Islamic Managed Funds. In C. M. Henry & R. Wilson (Eds.), *The Politics of Islamic Finance* (pp. 129-154). Edinburgh: Edinburgh University Press.
- Yaqubi, N. (October 1-10, 1998). *Islamic Finance in View of the Shari'ah*. Paper presented at the Second Harvard University Forum on Islamic Finance: Islamic Finance into the 21st Century, Harvard University, Cambridge, Massachusetts.
- Yaqubi, N. (October 30-1, 2000). *Participation and Trading in Equities of Companies whose main business is primarily Lawful but fraught with some Prohibited transactions*. Paper presented at the Fourth Harvard University Forum on Islamic Finance: Islamic Finance -The Task Ahead, Harvard University, Cambridge, Massachusetts