RELIGIOUS ETHICAL VALUES AND EARNINGS QUALITY: SOME EVIDENCE FROM MALAYSIA

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ABSTRACT

The main purpose of this thesis is to examine the association between religious ethical values and earnings quality. This study builds upon the principals and ethical framework of Islamic teachings (*Shariah*). It analyses how such ethical values affect the earnings quality of Malaysian listed firms. *Shariah* is the Islamic code for day-to-day conduct of individuals under Islam. It provides principles of good practices including accountability at both individual and organizational levels. It promotes justice and welfare in society by encouraging better ethical conduct. Based on these premises, it is hypothesised in this thesis that *Shariah* is associated with high quality reported earnings.

Two different attributes of earnings quality are used to test the above hypothesis. These are earnings management and accounting conservatism. A sample of 1,878 firm-year observations from 2000 to 2007 of Malaysian firms is used for examining the association between *Shariah* and earnings quality.

The study finds a significant negative association between *Shariah*, and real and accrual-based earnings management. In particular, this study finds that *Shariah* is associated with lower abnormal discretionary accruals, abnormal cash flow from operations, and abnormal discretionary expenses. Further, results of the study reveal that *Shariah* is associated with higher levels of accounting conservatism. Overall, the results suggest that *Shariah* is an important monitoring mechanism in limiting managerial opportunism and, consequently, enhances the quality of accounting earnings.

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LIST OF ABBREVIATIONS

AAOIFI	Accounting, Auditing Organisations of Islamic Financial Institutions
ACC	Discretionary Accounting Accrual
AEM	Accrual-based Earnings Management
BAFIA	Banking and Financial Institutions Act 1989
BIMB	Bank Islam Malaysia Berhad
BNM	Bank Negara Malaysia
CEO	Chief executive officer
CMP	Capital market master plan
CMSA	Capital Markets and Services Act 2007
COGS	Cost of goods sold
CON-ACC	Accrual-based measure of accounting conservatism
CON-KW	C-Score measure of accounting conservatism
CSR	Corporate social reporting
EPF	Employees Provident Fund
FCCG	Finance Committee on Corporate Governance
GCC	Gulf Cooperation Council
GLC	Government-linked companies
GLIC	Government-linked investment companies
GRI	Global reporting initiative
ICM	Islamic capital market
IFSB	Islamic Financial Services Board
IPO	Initial public offering
ITA	Income tax act 1967
KLSE	Kuala Lumpur Stock Exchange
LOFSA	Labuan Offshore Financial Services Authority
MASB	Malaysian Accounting Standard Board
MICG	Malaysian Institute of Corporate Governance
MSWG	Minority Shareholder Watchdog Group
NAV	Net asset value

R&D	Research and development
RCFO	Abnormal cashflow from operation
RDE	Abnormal discretionary expenses
REM	Real Earnings Management
RLR	Revised Listing Requirement
ROA	Return on assets
RPC	Abnormal production cost
SAC	*Shariah* Advisory Council
SC	Securities Commission
SEO	Seasoned equity offerings
SOX	Sarbanes Oxley Act
SPI	Skim Perbankan Islam
VAS	Value added statement
VIF	Variance inflation factor

CHAPTER 1

OVERVIEW

1.1 BACKGROUND AND MOTIVATION

The importance of ethics in the financial reporting process has long been recognised. Ethics enhance the quality of reported accounting numbers (Elias 2002; 2004; Noreen, 1988; Schwartz, 2004). Indeed, many authors have noted that unethical business activities such as financial fraud, financial restatement, and opportunistic earnings management can be attributed to the ethics failures in corporate financial reporting (Brief, Dukerich, Brown, & Brett, 1996; Rockness & Rockness, 2005; Staubus, 2005).

Ethics play an important role in reducing agency costs (Noreen, 1988). They act as a monitoring mechanism in constraining opportunistic behaviour among managers, and consequently reduce the managerial incentives to manage accounting numbers. This, in turn enhances the reliability of financial information and the integrity of the financial reporting process.

It has been acknowledged that religion[1] is a potential source of ethical norms. Several scholars highlight the role of religion in promoting ethical behaviour in business organisations (Conroy & Emerson, 2004; Kennedy & Lawton, 1998; Longenecker, McKinney, & Moore, 2004; Noreen, 1988; Weaver & Agle, 2002). For example, Noreen (1988) examines the boundaries of human behaviour in agency settings and argues that agency contracts alone cannot restrain opportunistic behaviour. He suggests that religion functions as one of the enforcement mechanisms for better ethical behaviour in business organisations.

[1] McDaniel and Burnett (1990, p.103) defined religion as "a belief in God accompanied by a commitment to follow principles believed to be set forth by God."

Empirical evidence seems to support this viewpoint (Dyreng, Mayew, & Williams, 2010; Hillary & Hui, 2009; Grullon, Kanatas, & Weston, 2010; McGuire, Omer, & Sharp, 2010). For example, McGuire et al. (2010) find that religion-influenced firms have a lower likelihood of accounting restatement and accounting irregularities that result in shareholder lawsuits. In a similar vein, Dyreng et al. (2010) report that religion-influenced firms have higher accruals quality and a lower risk of fraudulent accounting. The results suggest that religion is a key social mechanism for controlling managers' behaviour, which in turn limits unethical corporate practices.

Prior studies, however, define religion-influenced firms as firms with headquarters in settings where there are a large number of religious adherents. In other words, they examine the impact of religious ethical values on financial reporting practices in settings where there are no clear guidelines to make a distinction between a religious mode of business and a non-religious mode of business. Contrary to prior research that assumed certain kinds of firms will be more or less religious in nature, this study examines the effect of Islamic ethical values, *Shariah*, on financial reporting in a setting where the firms driven by religious ethics are distinctly classified through well-defined institutional arrangements. Institutionalised religious ethics in a capital market setting create a strong ethical environment promoting greater levels of ethical decision-making in joining firms (*Shariah* firms) than non-joining firms (non-*Shariah* firms).

Further, obtaining *Shariah* status is optional because this decision lies with the senior management, thus, managers of *Shariah* firms make a conscious choice about whether their firms should gain *Shariah* status or be *Shariah* compliant. This choice reflects the ethical values of management. According to Jones (1995), and Lee and Mitchell (1994), through a process of self-selection, moral people are more likely to join or work in

moral firms because such individuals will find the values of the firm compatible with their own values. Thus, managers with higher moral standards are likely to join a *Shariah* firm or choose to make their firm *Shariah* compliant. These ethical values are likely to be reflected in their managerial reporting practices. In other words, since managers of *Shariah* firms are likely to have higher moral standards, they are less likely to be involved in inferior business practices and manipulate the accounts of their firms in the event of poor performance. Likewise, with regards to accounting, it is hypothesised in this study that *Shariah* firms have higher-quality accounting information.

More specifically, this study examines the impact of *Shariah* on a key accounting information issue, the quality of accounting earnings. In particular this study focuses on two different attributes of earnings quality: earnings management and accounting conservatism. The first objective of this thesis is to examine the effect of Islamic ethical values on a practice that is considered unethical, the practice of earnings management. Therefore, primarily, this study attempts to acquire an understanding of whether an Islamic ethical framework, *Shariah*, is an effective controlling and monitoring mechanism for reducing opportunistic earnings management.

The second objective of this thesis is to examine the effect of religious ethical values, *Shariah*, on accounting conservatism. Lobo et al. (2008) argue that firms that have less pronounced incentives to follow aggressive reporting policies exhibit higher levels of conservatism in accounting. Dyreng et al. (2010) find that religion-influenced firms exhibit less aggressive financial reporting as such firms are less likely to be engaged in aggressive earnings management and are less likely to meet or beat analyst forecasted earnings. Thus, the *Shariah* setting provides an opportunity to carry out the current

study by investigating how religious ethical values affect the level of accounting conservatism.

To examine the association between *Shariah* and earnings management, this study focuses on two different types of earnings management; accrual–based earnings management and real earnings management. To measure accrual-based earnings management, this study uses the absolute value of discretionary accruals based on the regression of the Modified Jones (1991) Model. This study uses three different proxies, namely abnormal cash flow from operations, abnormal production costs and abnormal discretionary expenses to measure real earnings management. All are estimated using the models developed by Roychowdhury (2006).

Further, to examine the association between *Shariah* and accounting conservatism, this study employs two proxies to capture the level of accounting conservatism. The proxies are the C-Score measure of conservatism developed by Khan and Watts (2009) and the accrual-based measure of conservatism of Givoly and Hayn (2000).

This thesis uses Malaysia as its research setting. It is one of the countries that attempts to institutionalise religious ethics through the adoption of Islamic ethics in its capital market setting. It has an Islamic Capital Market (ICM) in which firms are classified as *Shariah* firms if they practise the tenets of Islam for their business activities. Typically, the ICM can be defined as a market where activities are carried out in ways which do not conflict with the principles of *Shariah*. In Malaysia, the ICM plays an important complementary role to the conventional market, functioning as a significantly large alternative market for capital seekers and providers. It provides a range of instruments which comply with Islamic principles and are available to all investors who would like

to invest in investments that abide by those principles or simply want to invest in ethical investments.

At 31 May 2010, there were 847 listed firms on Bursa Malaysia that were *Shariah* compliant. This was 88 per cent of the total listed securities in Bursa Malaysia or 62.54 per cent of the market capitalisation of Malaysian listed firms (Securities Commission, 2010). These *Shariah* firms were in three sub-markets, namely the Main Board, the Second Board and the Mesdaq market. The number of *Shariah* firms has increased over time from 562 on 31 December 1998 to 847 firms by May 2010. It is an increase is 50.72 per cent. This indicates the growth in importance of *Shariah* firms in Malaysia.

Given this unique capital market feature, Malaysia provides a suitable setting in which the study can robustly examine the relation between religious ethical values in the form of Islamic values and reported earnings quality. The Malaysian ICM provides a well-defined institutionalised setting that distinguishes religion-based firms from conventional firms.

Using 1,883 firm-year observations (1,621 firm-year observations for accounting conservatism study) from 2000 to 2007, the earnings management component study finds that *Shariah* has a significant negative association with discretionary accounting accruals, abnormal cash flow from operations, and abnormal discretionary expenses. This indicates that *Shariah* firms have lower levels of accrual-based and real earnings management. The results suggest that *Shariah* firms have better earnings quality than their non-*Shariah* counterparts. However, the findings of this study are contrary to those of McGuire et al. (2010) who found that religious ethical values are unable to limit earnings manipulation via real economic transactions. The reason for their weak result

could be that religious ethics are not institutionalised in their research setting. Given the comprehensive and stringent nature of Islamic ethical framework in the Malaysian setting, this study provides evidence that such ethical codes can limit both the accrual-based and the real earnings management practices.

Furthermore, the results of the accounting conservatism empirical study indicate that *Shariah* influences the level of accounting conservatism. Specifically, the study finds a significant positive association between *Shariah* and the two measures of accounting conservatism (CON-KW and CON-ACC). The findings reveal that *Shariah* firms exhibit more conservative reporting than non-*Shariah* firms. This supports the view that religious ethical values limit managerial opportunism and aggressive reporting behaviour, which in turn increases the level of accounting conservatism. This result supports the contentions of prior studies on the influence of religious ethical values on earnings management (Dyreng et al., 2010; McGuire et al., 2010).

1.2 THESIS ORGANISATION

The thesis is organised into six chapters, including this introduction. Chapter Two discusses the institutional background of the thesis. Since Malaysia is used as a research setting to examine the relation between Islamic ethical values and financial reporting quality, the chapter begins by providing information on the Malaysian financial system and its capital market. It then describes the components of the ICM in Malaysia, and the regulatory framework that governs this market. This chapter also discusses the reasons for the participation of Malaysian firms in the ICM. Finally, it elaborates the statutory requirements and the reporting framework for Malaysian firms.

Chapter Three discusses the theoretical background of the thesis. As this study builds upon the principles and ethical framework of Islamic teachings (*Shariah*), the chapter provides a discussion on the concept of Islamic ethics and its core values. The chapter also elaborates the implication of Islamic ethics on business and accounting practices.

Chapter Four presents the first empirical study of the thesis. The main purpose of this chapter is to examine the impact of *Shariah* on the first proxy of earnings quality, earnings management. It begins with a review of prior studies on earnings management and the monitoring mechanisms that constrain such practices. This review of the literature is carried out to form a basis and foundation for relating *Shariah* and earnings management. This chapter then develops the research hypotheses predicting the association between *Shariah* and earnings management. The research methods employed in the study are also discussed in this chapter. Finally, the chapter reports the findings of the study.

Chapter Five presents the second empirical study of the thesis. The chapter examines the influence of *Shariah* on the level of accounting conservatism. The chapter begins by providing a review of the concept of accounting conservatism and its determinants. Next, the chapter develops the research hypothesis predicting the association between *Shariah* and accounting conservatism. The chapter also outlines the research methods used in the study. Finally, the chapter reports and discusses the findings of the study.

Chapter Six concludes the research by summarizing the major findings and drawing conclusions from the findings. This chapter also presents a discussion on the contributions and limitations of the study, and makes suggestions for future research.

CHAPTER 2

THE ISLAMIC FINANCIAL SYSTEM AND ISLAMIC CAPITAL MARKET IN MALAYSIA

2.1 INTRODUCTION

This chapter discusses the institutional background of the study. Since Malaysia is used as a research setting to examine the impact of religion on Malaysian corporate financial reporting, this chapter provides information on the institutional environment within which Malaysian Islamic finance and the Islamic Capital Market (ICM) operate.

Specifically, Section 2.2 provides a rendition on the evolution of Malaysian Islamic financial system and ICM. Section 2.3 discusses the philosophical background of the Islamic financial services industry as well as ICM. Section 2.4 elaborates the elements and current development of the ICM. This is followed by Section 2.5, which provides an overview of the regulatory framework, legislation and guidelines that govern the ICM. Section 2.6 discusses the reasons Malaysian firms participate in the ICM, while Section 2.7 describes the Malaysian reporting environment, focusing on the statutory requirements and other measures undertaken to ensure high quality reporting. Finally, Section 2.8 summarises the present chapter.

2.2 THE MALAYSIAN ISLAMIC FINANCIAL SYSTEM

Islamic finance has emerged as one of the fastest growing and resilient components of the global financial system (Laldin, 2008). The current global Islamic financial industries' assets have reached a size of US$750 billion and are expected to expand to US$1.6 trillion by 2012 (Securities Commission, 2009d). Islamic finance generally refers to financial market transactions, operations and services that comply with Islamic rules, principles, philosophy and code of practices. The Islamic financial institutions perform the same essential functions as financial institutions do in the conventional system, except they need to carry out their transactions in accordance with the rules and principles of Islam (Securities Commission, 2009e).

In Malaysia, Islamic finance has evolved to provide a diverse range of viable investment and financing alternatives to Muslim and non-Muslim investors in both the domestic and international markets. Historically, the commencement of the Islamic financial institutions was triggered by the financing and investment needs of Muslims of the country.

Malaysia is a multicultural society with a population of about 28.31 million which can be classified into three major groups, Malay (61.5%), Chinese (26%) and Indians (7.7%) (Abdullah et al., 2007). Moreover, Malaysia regards itself as a multi-religious country. Religion in Malaysia is found to be highly correlated with ethnicity and most of the Malay population are Muslims. Likewise, Muslims represent more than 50 percent of Malaysia's total population.

Muslim investors differ in their preferences based on their risk threshold, liquidity needs and their needs to comply with religious requirements (Abdullah et al., 2007). The

Malaysian financial services industry has been growing at a fast pace for many years in order to support the various complex needs of the country. However, initially it was unable to attract Muslim investors to participate in most of the investment vehicles being offered. This was because the industry was mainly based on interest, a concept prohibited in Islam. Many ardent Muslims refused to deposit their money and preferred to keep it in their homes. Others used the safe deposit services of banks or would have accounts but did not take the interest credited to their accounts, while others gave the interest away to charity (Ibrahim, 2000). Therefore, to alleviate the difficulties faced by Muslim investors, the Malaysian government introduced the Islamic financial system as an alternative to conventional practices.

2.2.1 The Evolution of the Islamic Financial System

The modern Islamic financial system in Malaysia comprises three major sectors. It includes Islamic banking, Islamic insurance (*takaful*) and the Islamic capital market (ICM). Its evolution can be divided into three phases: the period of discovery (1969-1992), followed by the period of acceptance (1993-2000) and then, from 2001 until today, the period of strategic development (Securities Commission, 2009e). Table 2.1 below highlights the key development of the Islamic financial industry in Malaysia.

Table 2.1: Development of the Malaysian Islamic Financial Industry

	Key developments of the Islamic financial industry in Malaysia
Phase 1:	
1969	Establishment of the Pilgrim Fund Board or Tabung Haji.
1983	Establishment of Islamic bank, Bank Islam Malaysia Berhad under Islamic Banking Act 1983.
1984	Establishment of the first Islamic insurance company, Syarikat Takaful Malaysia Berhad.
1990	Issuance of the first Islamic corporate bond by Shell MDS Sdn Bhd.
Phase 2:	
1993	Interest-free Banking Scheme was introduced, encourages conventional banks to operate Islamic banking divisions. Launch of the first Islamic equity unit trust fund, Tabung Ittikal.
1994	Establishment of Islamic Inter-bank Money Market. Establishment of the first full-fledged Islamic stockbroking company, BIMB Securities Sdn Bhd.
1995	The Securities Commission (SC) formed an ICM unit, which later evolved into a full-fledged department.
1996	Establishment of the Shariah Advisory Council (SAC) by the SC to advise on Shariah compliance matters for ICM activities.
1997	The Shariah Advisory Council for Islamic Banking and Takaful was formed. Introduction of an official list of Shariah-approved securities traded on the Kuala Lumpur Stock Exchange (KLSE) by the SC.
1997-1998	Asian financial crisis.
1999	Establishment of the second Islamic bank, Bank Muamalat Malaysia Berhad. Lunch of the country's second Islamic equity index, the KLSE Shariah index.

Table 2.1: Continues…	
Phase 3:	
2001	Launched the first global corporate *sukuk*, the Guthrie Sukuk, which created a paradigm shift in the international Islamic financial market. Issuance of the first Islamic accounting standard MASB 1-*i* on Presentation of Financial Statements of Islamic Financial Institutions by the Malaysian Accounting Standards Board (MASB).
2002	Establishment of Islamic Financial Services Board (IFSB) and International Islamic Financial Market, to hasten the integration of Islamic finance.
2003	Bank Negara Malaysia's review call for the setting-up of 'Islamic subsidiary'. Legal reforms adopted to improve the efficiency of Islamic finance. i. High Court judges preside over matters relating to Islamic banking and finance. ii. At Bank Negara level, Shariah Advisory Council and Law Review committees set up.
2005-2007	Islamic bank subsidiaries and foreign Islamic banks commence operation: • Hong Leong Islamic Bank (28 March 2005). • Kuwait Finance House (17 February 2006). • Affin Islamic Bank Berhad and EONCAP Islamic Bank (1 April 2006). • AmIslamic Bank (1 May 2006). • Al Rajhi Bank (October 2006). • Asian Finance Bank Berhad (19 January 2007).
2008	Maybank Islamic Bank Berhad begins to operate.
2010	The Islamic banking and finance industry is 20% of the overall market and the Malaysian ICM emerges as international centre for Islamic capital markets.

Source: Securities Commission (2009e)

2.2.1.1 Phase 1: The period of discovery (1969-1992)

The period of discovery started with the establishment of the first Islamic financial institution in Malaysia, namely the Pilgrimage Management and Fund Board or Tabung Haji[2] in 1969 under Act 8 of the Pilgrimage Management and Fund Board 1969. The primary objective of this board is to enable Malaysian Muslims to save gradually to support their expenditure during pilgrimage. Further, it also plays an important role in protecting and safeguarding the interests and welfare of pilgrims during pilgrimage by providing various facilities and services (Laldin, 2008). Apart from managing pilgrimage matters, the board has become an alternative entity that manages investments of Muslims in accordance with Islamic teachings.

In 1983, the government expanded the Islamic financial landscape by setting up the first Islamic bank, Bank Islam Malaysia Berhad (BIMB)[3] by virtue of the Islamic Banking Act 1983. Generally, Islamic banks perform the same essential functions as banks do in the conventional system, except that they have to fulfil the requirement to carry out their transactions in accordance with the rules and principles of Islam (Dusuki & Abdullah, 2006).

Islamic banking can be distinguished from conventional banking in four basic ways. Those ways are interest-free transactions, risk sharing, asset and service backing and contractual certainty (Ibrahim, 2000). Additionally, Islamic banking differs from other types of banks in term of its relationship with customers. In conventional banking, the relationship between the bank and its deposit holders is that of a debtor and a creditor.

[2] In 1997, the name of the Pilgrimage Management and Fund Board was changed to Pilgrimage Board or Lembaga Tabung Haji under the Pilgrimage Board Act 1995.

[3] At BIMB inception, it had a paid-up capital of RM80 million. Its shareholders include, government of Malaysia (RM30 million), Tabung Haji (RM10 million), Muslim Welfare Organisation Malaysia (RM5 million), State religious councils (RM20 million), State religious agencies (RM3 million) and Federal agencies (RM12 million).

However, Islamic banks, depending upon on the type of deposits, act either as a trustee for deposits or as a business partner. In the case of current and saving accounts, Islamic banks may give a gift (*hibah*) instead of interest to depositors based on the profit of the bank. Meanwhile, for the investment accounts, the bank and its partner (customer) will enter the trust financing partnership called *mudharabah*. In this relationship, both parties are entitled to share profit according to a pre-determined ratio (Ibrahim, 2000).

The wide acceptance received by Islamic banks, led to the introduction of Islamic insurance in 1984. Islamic insurance plays an important role in mobilising long term funds. However, the funds must be invested in *Shariah*-compliant investment instruments. Any profit gained is shared between the Islamic insurance firm and the contributors in a pre-agreed ratio, and at the end of the policy term, a contributor will receive the amount of his contributions together with the share of profit, if any. They operate as co-operative savings and mutual help schemes by providing risk protection based on the principles of compensation and shared responsibility with the community (IOSCO, 2004). The Islamic insurance concept is different from conventional insurance because in the latter the insurance firm is a risk taker while in the former it is mainly a manager of funds (Ibrahim, 2000).

As the Islamic financial institutions expanded and developed, the management of liquidity became a challenge due to the scarcity of market instruments that were based on Islamic principles (IOSCO, 2004). In response, the Malaysian government and private organisations introduced various types of short and long-term Islamic debt instruments such as Islamic bonds. The first issue of Islamic bonds, the Government Investment Issue was initiated by the Malaysian Government in 1983 (IOSCO, 2004) to assist Islamic banks to meet the prescribed liquidity requirements as well as to invest

their surplus funds. It was followed by the issue of private Islamic bonds in 1990 by Shell MDS Sdn Bhd. Further, the period also witnessed the commencement of the first Islamic unit trust in Malaysia, namely Tabung Al-Ittikal by Arab-Malaysian Bank in 1991.

2.2.1.2 Phase 2: The acceptance period (1993-2000)

The second stage, (1993 to 2000) is known as the acceptance period. In this period Islamic banking was no longer regarded as a novelty. In fact, non-Muslims also started banking with Islamic banks (http://www.Islamic-world.net/islamic-state/malay_islambank.htm). In 1993, Bank Negara Malaysia (Central Bank of Malaysia) introduced the Islamic window concept under the Interest-free Banking Scheme[4] (SPI) to conventional banks to allow those banks to open an Islamic counter to serve the needs of their clients, particularly Muslim customers and other investors who were looking for socially responsible or ethical investments. Banks participating in SPI, however, are required to have firewalls between their conventional and Islamic funds. Particularly they are required to establish Islamic banking units, create an Islamic banking fund and appoint at least one *Shariah* consultant to advise on day-to-day operations of the Islamic banking division (Securities Commission, 2009e).

In 1994, the Islamic Inter-bank Money Market was introduced as a short term intermediary between the Islamic banks and conventional banks with Islamic banking windows. Additionally, the first fully fledged Islamic stock brokerage services were launched by BIMB Securities Sdn Bhd (a subsidiary of Bank Islam Malaysia Berhad) in the same year. In 1995, the Securities Commission (SC) formed an Islamic Capital Unit employing researchers trained in both Islamic commercial law and Islamic capital

[4] Also known as the Islamic Banking Scheme (Skim Perbankan Islam).

market (ICM) practices to undertake research on Islamic product origination and ICM operations (http://www.sc.com.my). In 1996, the SC developed the *Shariah* Advisory Council (SAC), consisting of Islamic scholars, academics and Islamic finance experts, to monitor the development of ICM. Further, in October 1996, Bank Negara Malaysia issued a model financial statement for the banking institutions participating in the SPI requiring the banks to disclose the Islamic banking operations (balance sheet and profit and loss account) as an additional item under the Notes to the Accounts.

In 1997, the SC introduced an official SAC list of *Shariah* - compliant securities to guide the investors who wanted to invest in Islamic securities traded on Bursa Malaysia (the Malaysian stock exchange). The availability of a *Shariah*-compliant securities list led to the commencement of the Islamic equity index, the Kuala Lumpur *Shariah* Index in 1999 to provide a benchmark for the performance of all *Shariah*-compliant securities listed on the Main Board of Bursa Malaysia. The second Islamic bank, Bank Muamalat Malaysia Berhad also was launched in the same year.

The economic crisis that swept through Southeast Asia in 1997 also added impetus for the development of the Malaysian ICM (Securities Commission, 2006a). Generally, the crisis exposed the shaky financial foundations of Malaysia's financial services sector. Before the financial crisis, corporate entities obtained funds from the capital market and banks to optimise their financial assets. However, due to the economic downturn, most companies faced financial problems (Wilson, 2006). This reduced the investment opportunities for the banks. To make matters worse, many commercial banks faced liquidity problems and could not offer debt capital. The bearish equity market made it difficult for companies to float new shares, and offshore loans became costly due to the depreciation of Malaysian currency. The government also suffered tight budgetary

constraints due to a decline in revenues from traditional sources (IOSCO, 2004). Therefore, the ICM became an alternative source of funds for the private and public sectors (Naughton & Naughton, 2000).

2.2.1.3 Phase 3: The period of strategic development (2000 until today)

The third phase, the period of strategic development, was initiated with the issue of the first global corporate Islamic bond by the financial firm, Kumpulan Guthrie Berhad, in 2001. Further, in 2003, Bank Negara Malaysia's review called for setting up an Islamic subsidiary. The Islamic subsidiary was eventually formed to give greater strategic focus and resources as well as higher autonomy and governance for Islamic banks (Securities Commission, 2009e). To date, the commercial banks that have set up distinct Islamic subsidiaries are Hong Leong Islamic Bank, Affin Islamic Bank Berhad, AmIslamic Bank and Maybank Islamic Bank Berhad. The integration of local Islamic banks with international Islamic banks also began in the same year. In 2003, three foreign Islamic banks were granted license by Bank Negara Malaysia to undertake Islamic banking business in Malaysia (Securities Commission, 2009e). These banks are the Kuwait Finance House, Al-Rajhi Bank and Asian Finance Bank Berhad. In 2006, the first Islamic bond index, known as the Dow Jones Citigroup Sukuk Index, was introduced to measure the performance of global Islamic fixed-income securities. In January 2007, Bursa Malaysia collaborated with FTSE Group, to develop a new *Shariah* benchmark index, namely the FTSE Bursa Malaysia EMAS *Shariah* Index (Securities Commission, 2006b) to evaluate the performance of *Shariah*-compliant investment for the Malaysian market (Securities Commission, 2006b) in order to stimulate the fast growth of ICM at the international level.

The Islamic financial industry is expected to continuously expand in parallel with its conventional counterpart. This will eventually make Malaysia the international centre for the Islamic capital market (Securities Commission, 2009e).

2.3 PHILOSOPHICAL BACKGROUND OF THE ISLAMIC FINANCIAL SYSTEM

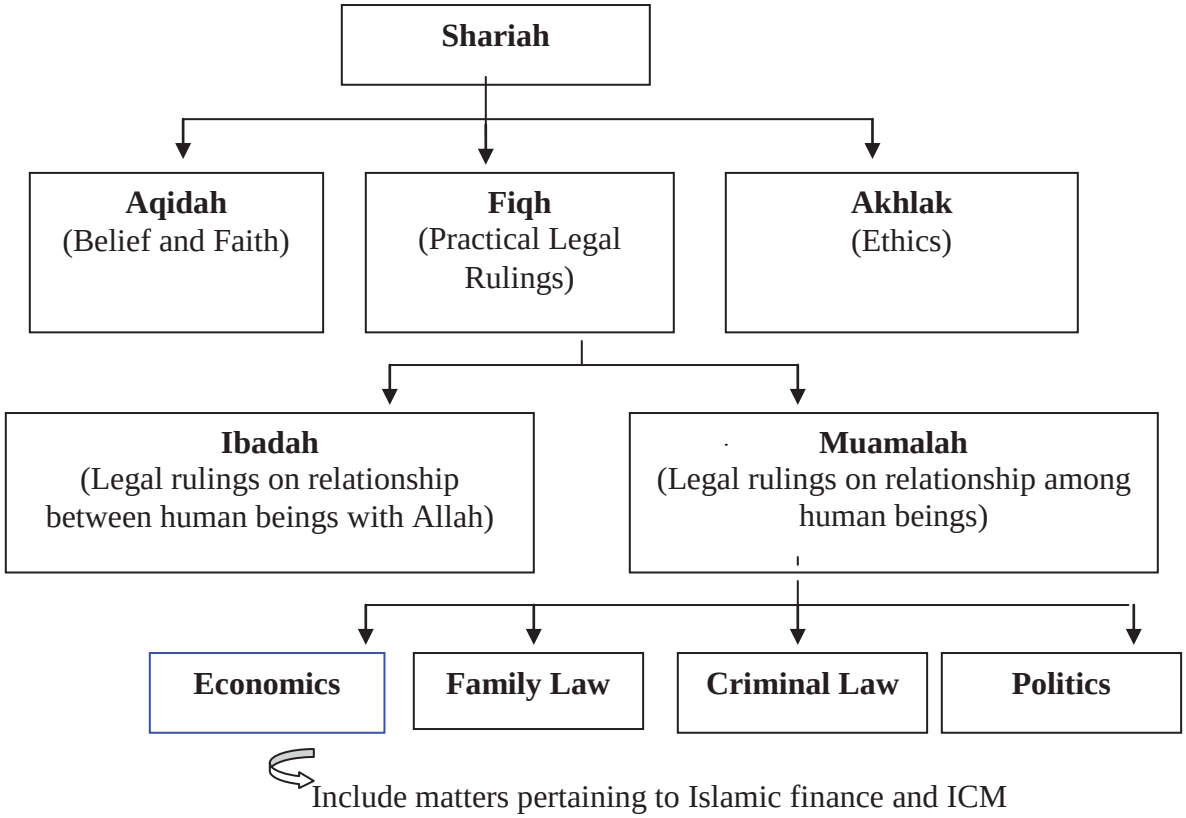
As mentioned in the earlier section, the Islamic financial system broadly refers to financial market transactions, operations and services which comply with *Shariah* principles. *Shariah* is a set of norms, ethics, values and laws that guide the Islamic way of life. It is originates from the rules of *Al-Quran*, from the practices of the holy Prophet Mohammed (*Hadith*) and further elaboration of the rules by scholars in Islamic jurisprudence through the process of deduction (*Qiyas*) and consensus (*Ijma*) (Iqbal & Tsubota, 2006).

Shariah can be divided into three main components, belief and faith (*aqidah*), practical legal rulings (*fiqh*), and ethics and morality (*akhlak*) (Securities Commission, 2009d). *Aqidah* deals with transcendental matters such as belief in the oneness of Allah with all His attributes, Prophethood, the hereafter, hell and paradise. The second division of *Shariah* concerns the practical legal rulings in all aspects of human life, including the relationship of human beings with Allah (*ibadah*) and the relationships among human beings themselves (*muamalat*). The ethics element provides a basic foundation for the morality of human beings such as trustworthiness and respect for others. Figure 2.1 shows *Shariah* and its components.

The main objective of *Shariah* is "to promote the well-being of all mankind, which lies in safeguarding their faith, their human self, their intellect, their posterity and their

wealth. Whatever ensures the safeguard of these five serves public interest and is desirable." (Imam Al–Ghazali as cited by Securities Commission, 2009d, p.15). In other words, *Shariah* emphasises the benefits of the individual and that of the community, and its laws are designed to protect these benefits, and facilitate improvement and perfection of human lives. However, the preservation of faith, life, posterity, intellect and wealth must be within the concept of compassion and guidance, which promote justice and welfare of society (*al-adl and al-ihsan*) and must seek the pleasure of Allah (Securities Commission, 2009e; Haniffa & Hudaib, 2002).

Figure 2.1 *Shariah* and its Components



Source: Securities Commission (2009e)

As depicted in Figure 2.1 above, economic matters are not alien to Islam, as they reside firmly in one of the important components of *Shariah*. Therefore, Islamic economics, including Islamic finance, is not independent of *Shariah* or of the basic beliefs, values, ethics and objectives of Islam. In fact, the subject is regarded as a science that studies human behaviour in using and organising resources for an individual's needs and, at the same time, for the welfare of the society, in order to get the blessings of Allah (Securities Commission, 2009e).

The Islamic economic system is underpinned by four core values comprising unity (*tawhid*), justice (*adl*), free will (*ikhtiyar*) and responsibility (*fardh*) (Haniffa & Hudaib, 2002; Naqvi, 1994). The concept of unity is derived from the belief in one god. According to this concept, Allah is the only god and creator of everything in the heavens and earth. Allah assigned human beings the task of being His vicegerent (*khalifah*) on earth. As vicegerent of Allah, a Muslim surrenders unconditionally to the will of Allah. Man in his capacity as vicegerent acts as a steward or representative on earth to administer it according to Allah's will. Based on this core value, man must realise that he is responsible for other human beings, society, the environment and nature. Man is answerable to Allah for his stewardship and will be punished if he abuses this role by not fulfilling the responsibility to protect the earth since it stresses that everything in the heaven and the earth belongs to Allah and man is only a trustee of Allah's resources. This concept, thus, could impact the economic market including financial systems. In Islamic finance, corporations, as groups of individuals, assume the roles and responsibilities of servants and vicegerents in all situations. Therefore, they are ultimately responsible to Allah, the owner of their very selves and the resources they utilise and manage.

The second concept in Islamic economics is justice. The concept of justice is integral to the concept of property rights in Islam as it should flow through all levels of social life, and through all relationships and dealings, from the level of the family up to the level of state (Securities Commission, 2009d). Adherence to this concept establishes equilibrium in society through social responsibility and the fulfilling of rights and obligations. For example, based on the concept of justice, Islamic business is prohibited from expanding its capital by lending on interest since it increases the gap between the rich and the poor leading to disequilibrium in society. Furthermore, the prevailing practice of interest also involves injustice to the borrowers since the interest on their loans has to be paid irrespective of the outcome of their business.

The third core value of the Islamic economic system relates to the concept of free will. In Islam, every individual and organisation has the freedom to choose (free will). However, a Muslim's free will to choose is guided by the will of Allah (Rahman, 1998). Therefore, a Muslim who strives to gain Allah's favour and blessings is obliged to follow the divine commandments. Freedom of choice allows one to be ethical or unethical in business transactions. However, to seek the pleasure of Allah, a Muslim will fulfil all obligations as prescribed in Al-Quran, be generous and look after the needy. Thus, Muslims and Islamic businesses are expected to contribute to society, fulfil all obligations pertaining to their social responsibility and care for the less fortunate. Islamic businesses have a choice not to engage in such activities, but being an Islamic organisation motivates them to contribute to the well-being of society in accordance with *Shariah*.

Finally, the Islamic economic system is grounded on the concept of responsibility. The concept is related to free will, since freedom to choose must be counterbalanced by

responsibility. Responsibility refers to the obligation each individual has towards Allah, oneself and the wider society (Rahman, 1998; 2003). Since man is responsible for all that he does, man must be accountable to Allah in the hereafter for every deed on this earth. Accountability to Allah drives a Muslim to act in accordance with *Shariah* and adhere to ethical business practices, avoid forbidden activities and participate in legitimate transactions. Islam prescribes certain specific guidelines for governing businesses by identifying the ethical desirable forms of business and by specifying the undesirable modes of transactions in the business context. These guidelines are dictated primarily by the notions of *halal* (lawful or permitted) and *haram* (unlawful or prohibited) which are clearly prescribed in Al-Quran. In Islam, lawful refers to everything that is wholesome and pure for mankind, while unlawful is considered as harmful or can hurt human beings and society as a whole. Therefore, the concept of *halal* (permissible) and *haram* (prohibited) must be strictly adhered to in all business transactions.

2.3.1 The Prohibited (*Haram*) Business Activities

As Islamic finance is the integral part of the Islamic economic system, it prohibits involvement in any activity which is forbidden in Islam, such as *riba* (interest), *gharar* (uncertainty), *maisir* (gambling), non-*halal* (prohibited) food and drinks and immoral activities. These are elaborated below:

2.3.1.1 *Riba* (Usury)

One of the major prohibited elements for Islamic finance is *riba*. In Arabic, *riba* refers to something that has increased. Nevertheless, it does not mean that everything that increases is *riba* (Securities Commission, 2006a). For instance, in the case of return or profit on capital, this increase is encouraged in Islam because profit is determined *ex-*

post, and symbolises successful entrepreneurship and the creation of additional wealth. *Riba*, however, is determined *ex ante*, and is a cost that is accrued irrespective of the outcome of business operations and may not create wealth if there are business losses (Iqbal & Tsubota, 2006). Naughton and Naughton (2000) argued that *riba* has a much wider definition than simply referring to interest. It encompasses all forms of exploitation and excessive charges in business dealings. For example, in the capital market, *riba* can relate to the problem of asymmetric information: one investor may have superior information to another and this could create a situation where that information is used to the disadvantage of the other investor.

One of the reasons given in Al-Quran for the prohibition of *riba* is that *riba* violates the principle of social justice as there is an unequal distribution of risk and reward in the transaction. In Islam all rewards must be the result of effort. *Riba* rewards people without making the effort. In *riba* transactions, one party bears the risk, while the other party receives a reward irrespective of the outcome of the use of the borrowed amount (Ibrahim, 2000). Additionally, *riba* is forbidden because it leads to a concentration of wealth in the hands of a few as it causes the transfer of wealth from the poor to the rich resulting in disequilibrium in society.

In conventional financial practices, interest is regarded as the price of capital and the rental value of using money. The elimination of interest would then, from this viewpoint, seem to be irrational, i.e., given that loans provide for development or investment it would be unreasonable for the lender not to share in the gain (Ibrahim, 2000). However, in Islam, money is regarded as a medium of exchange or as a measuring tool for value and it is not a commodity to be traded (Sulaiman, 2003). Thus, one should not be able to receive income from money alone. The generation of money

from money is considered as *riba* (Sulaiman, 2003). Nevertheless, Islam does not bar the association of capital and entrepreneurship. It prohibits only interest-based loans because the predetermined fixed return to the lender occurs irrespective of the performance of the business.

2.3.1.2 *Maisir* (Gambling)

In Arabic, *maisir* means activities which involve betting, whereby the winner will take all the bets and the loser will lose all (Securities Commission, 2006a). The gain accruing from these games is unlawful in Islam as it is derived from a nonproductive employment of capital. Thus, it is considered an immoral inducement by the person involved in making a profit at the expense of another party. As a result Muslims are forbidden from gambling or in developing and supporting companies which carry out businesses based on gambling. In the case of the Islamic equity market the issue of gambling includes speculation. Speculation is not acceptable in Islam since it may lead to uncertainty in the market due to the trading in securities for short term gain. Besides, rash speculation also creates systemic risk and may lead to destabilising the economy. However, in conventional markets, moderate levels of speculation are quite acceptable as they might help to keep the market efficient and improve liquidity (Naughton & Naughton, 2000).

2.3.1.3 *Gharar* (Ambiguity)

Gharar can be regarded as *khatar* in Arabic which means something dangerous. It also carries the meaning of *khida* which means cheating (Securities Commission, 2006a). Several Islamic jurists have defined *gharar* as something with unknown consequences. From these terms, *gharar* can be seen as an element of cheating that can expose someone to danger due to the unknown consequences. Trades based on uncertainty were

prohibited because one party could be disadvantaged. That is why conventional insurance is forbidden in Islam. In conventional insurance, the policyholder needs to pay a certain premium and as a return the insurance company guarantees to pay a certain sum of compensation in the event of disaster. However, the amount of compensation is still uncertain and depends on the occurrence of specific events in the future. This arrangement is prohibited in Islam due to the existence of uncertainty (*gharar*).

2.3.1.4 Immoral activities

Islam has clearly prohibited anything that is harmful to individuals or hazardous to the environment, for example, alcohol and tobacco (IOSCO, 2004). Thus, Islamic finance and ICM do not deal with finance of alcohol and tobacco related businesses, nor any business that is harmful to mankind. Further, Islam also forbids any business dealing pertaining to immoral activities such as investing in casinos. Although such investment creates many jobs and provides employment and income, it might ruin families and disrupt the social balance through gambling. Thus, this sector is excluded from the operations of Islamic finance and ICM in order to have a socially responsible capital market.

Therefore, grounded on the legal form of business according to *Shariah*, both the Islamic financial system and ICM have been structured based on the concepts of participation such as profit and loss sharing arrangements (*Musharakah*), trust financing (*Mudharabah*) and other acceptable modes of financing through the concept of exchange and leasing-based transactions (*ijarah*).

2.4 THE MALAYSIAN ICM

In Malaysia, the ICM is one of the main components of the Islamic financial industry. The ICM comprises two main markets which are the Islamic equity market and the Islamic debt market (*sukuk*). Regardless of the types of markets, all Islamic-compliant securities must be structured upon *Shariah* principles such as trust financing, leasing and profit sharing arrangements. This is a unique attribute of ICM relative to the conventional market (IOSCO, 2004).

2.4.1 The Islamic Equity Market

The main sector in the Malaysian ICM is the Islamic equity market. The emergence of the market has resulted from initiatives in 1983 by Bank Islam Malaysia Berhad (BIMB) through the introduction of the list of *Shariah*-compliant stocks. The list excluded shares of non- *Shariah*-approved companies (Securities Commission, 2007a). The list acts as a guideline for investors who wish to participate in equity and common stock trading of companies which comply with *Shariah*.

In general, the Islamic equity products serve the same functions and have almost similar features as conventional equity products. However, all Islamic equity products must comply with two main requirements (Securities Commission, 2009e). First, Islamic equity products must be structured according to *Shariah*. For example, the issue of the company shares must be structured based on profit sharing (*Musharakah*[5]) principles. Under the *Musharakah* principles, the investor who holds the shares of a company must participate in the company's performance. In other words, the investor is entitled to the profits of the firm, but bears the residual risk associated with the ownership.

[5] This is a contract which involves two or more parties in a project or business where each of the parties contributes to the capital and is actively involved in the management of the project or business (Securities Commission, 2009a, p.11).

The second requirement pertains to the underlying instrument of the share or profit of the company. As profits accrue from the company's business activities, the investor should not hold stocks of a company where its business activities are related to interest bearing elements, gambling, uncertainty (*gharar*), liquor, pork and other activities forbidden according to *Shariah*. On the other hand, conventional investors are free to choose any stocks that match their investment appetites and strategies.

In order to fulfil this second requirement of the Islamic equity products, Muslim scholars have introduced the *Shariah* screening process whereby prohibited activities are detectable. Such a screening process enables Muslim investors to invest in companies that conduct permissible business activities. Examples of the Islamic indices offering screening processes include the Dow Jones Islamic Index, the FTSE-*Shariah* Index and the Kuala Lumpur *Shariah* Index.

In Malaysia, since 1997, the *Shariah* screening process has been performed by the *Shariah* Advisory Council (SAC) of the Securities Commission. The list of *Shariah*-compliant securities is released by the SAC twice a year, in May and November. In order to provide the list of the *Shariah* securities to the public, the SAC needs to classify the status of Malaysian public listed companies as being *Shariah*-compliant or not. The SAC uses two levels of screening. In the first level, the SAC scrutinizes the primary activities of the companies to determine whether or not they are contrary to *Shariah* principles. Basically, the companies are regarded as *Shariah*-approved if their core activities are not involved in the following activities (Bursa Malaysia, 2005):

i. financial services based on *riba* (interest)

ii. gambling

iii. manufacture or sale of non-*halal* (prohibited) products or related products

iv. conventional insurance

v. entertainment activities that are non-permissible according to *Shariah*

vi. manufacture or sale of tobacco-based products or related products

vii. stock broking or share trading in non-*Shariah* approved securities

viii. other activities deemed non-permissible according to *Shariah.*

If the company's core activities is in any of the forbidden activities above, it is classified as non-*Shariah* and its securities are excluded from the list of *Shariah*-approved companies

The second level of screening is applied in the case of companies engaging in both *Shariah*-permissible and *Shariah* non-permissible activities. For these companies, the SAC considers four other criteria, including (Bursa Malaysia, 2005):

i. The core activities of the company must not be in the forbidden activities as outlined above.

ii. Any peripheral or subsidiary activity which occurs in these forbidden areas must be measurably insignificant relative to the core activities.

iii. The public perception or image of the company must be exemplary.

iv. The core activities of the company must be considered *maslahah* (in the public interest) to the Muslim *ummah* (nation) and the country, and the non-permissible elements present must be minimal and involve matters such as *umum balwa* (common plight and difficult to avoid) and *uruf* (custom) (Bursa Malaysia, 2005).

Furthermore, the SAC also develops quantitative parameters based on *ijtihad* (reasoning based on *Shariah* by qualified *Shariah* scholars) to determine the tolerable level of

mixed contributions from permissible and non-permissible activities towards revenue and profit before tax of this company. The securities of the company will only be classified as *Shariah*-approved if the total contributions from non-permissible activities do not exceed the benchmark. The following benchmarks[6] are applied in the evaluation process (Bursa Malaysia, 2005):

i. The 5 per cent benchmark

   The benchmark will be utilised to assess the level of mixed contributions from the clearly prohibited activities such as *riba* (interest-based companies like conventional banks), gambling, and activities derived from liquor and pork.

ii. The 10 per cent benchmark

   This benchmark is used to assess the level of mixed contributions from the activities that involve the element of *umum balwa* (a prohibited element affecting most people and difficult to avoid) such as interest income from fixed deposits placed in conventional banks. The benchmark is also applied for tobacco-related activities.

iii. The 25 per cent benchmark

   This benchmark is used to assess the level of mixed contributions from the activities that are generally permissible according to *Shariah* and have an element of *maslahah* (public interest), although there may be other elements that could affect the *Shariah* status of these activities. This benchmark is used for hotel and resort operations, share trading and stockbroking.

Nevertheless, the status of being *Shariah*-compliant is not permanent. The SAC undertakes periodic reviews to ensure that *Shariah*-approved companies have not

[6] In 2004, SAC introduced the 20 per cent benchmark to assess the level of contribution from mixed rental payment from non- *Shariah* compliant activities such as rental payment from premises involved in gambling, sale of liquor etc. (Securities Commission, 2008a).

embraced non-permissible elements. The SAC analyses the companies' annual financial reports and responses received from a survey aimed at obtaining detailed company information and also makes specific enquiries to management of the respective company (Securities Commission, 2007a). The reviewing process may lead to the reclassification of companies in either direction: *Shariah*-approved companies can be classified as non-*Shariah*-approved companies and vice versa.

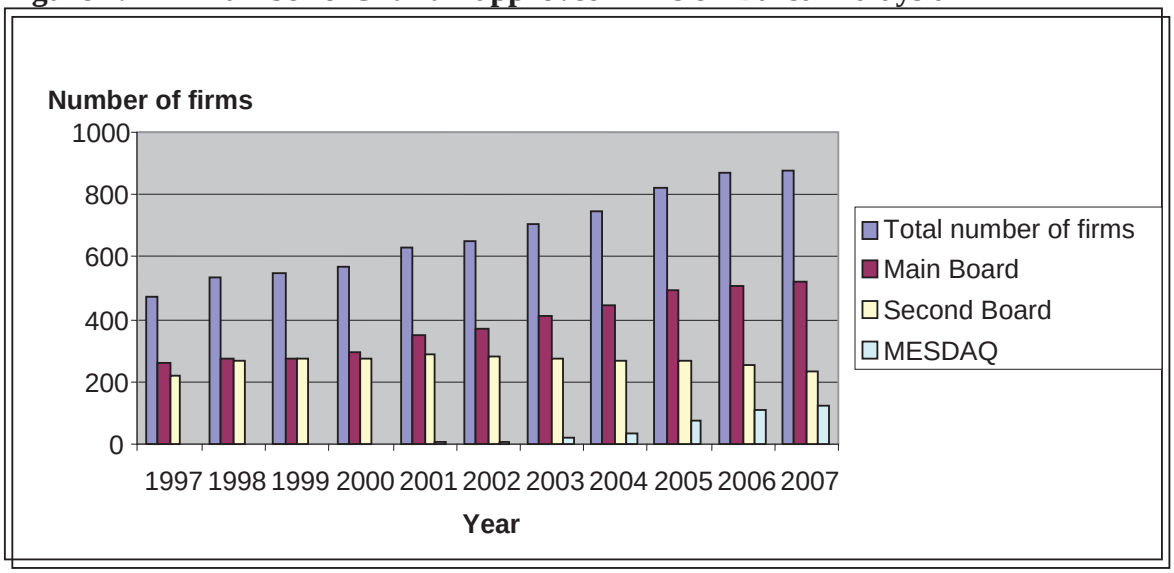
Currently, the listed companies on Bursa Malaysia (previously Kuala Lumpur Stock Exchange) can be classified into two main groups, *Shariah*-approved companies and non- *Shariah*-approved companies. As at 31 May 2010, there were 847 listed companies on Bursa Malaysia that are *Shariah*-compliant, representing 88 per cent of the total listed securities in Bursa Malaysia or 62.54 per cent of the market capitalisation of Malaysian listed firms (Table 2.2). These *Shariah*-compliant companies are present in the three sub-markets, the Main Board, Second Board and the Mesdaq market and the number of companies has increased over time (Figure 2.2).

Table 2.2: *Shariah*-compliant companies

	Number and percentage
Number of *Shariah*-compliant securities	847
Percentage of *Shariah*-compliant securities to total listed securities	88%
Market capitalisation (end-September 2010)	**RM Billion**
Shariah-compliant securities	719.25
Total market capitalization	1150.12
Percentage of *Shariah*-compliant securities to total market capitalization	62.54%

Source: Securities Commission (2010)

Figure 2.2 Number of *Shariah*-approved firms on Bursa Malaysia



* All data are based on the list of securities approved by the *Shariah* Advisory Council as at 30 April of each year.

Sources: Securities Commission (1997-2007)

2.4.2 The Islamic Debt Market (*Sukuk*)

The *sukuk*[7] market began operations due to the introduction of the Islamic bond by Malaysian government in response to liquidity management challenges faced by Islamic banks and Islamic insurance operators. Since the first issue of *sukuk* in 1983 by the Malaysian government, the country has witnessed rapid growth in the market and an increase in investment opportunities for investors who wish to invest in ringgit or non-ringgit denominated Islamic bonds.

The concept of *sukuk* has its origin in the prohibition of utilisation of a pure debt security (Iqbal & Tsubota, 2006). A conventional bond is likely to fail any test of acceptability in Islam as it usually represents interest-based funding for non-specific general corporate purposes which guarantees a fixed return to bondholders during the period of the debt. In Islam, only obligations which are linked to the performance of a real asset are permitted. In other words, *Shariah* accepts the validity of a financial asset which derives its return from the performance of a real asset. Thus, based on this principle, the Islamic bond has been developed by transforming traditional interest-bearing bonds to transaction-based securities which require an exchange of a *Shariah*-compliant underlying asset for financial consideration. In this regard, all Islamic bond returns and cash flows should be linked to assets purchased, or those generated from an asset once constructed and not simply be income that is interest-based. Further, Islamic bonds also must grant the investor a share of an asset along with the cash flows and risk commensurate with such ownership (Securities Commission, 2009b).

[7] *Sukuk* is the plural of *sak* and can be defined as certificates.

Guidelines on the Offering of Islamic Securities (2004) defines sukuk as "...any securities issued pursuant to any Shariah principles and concepts approved by the Shariah Advisory Council of the SC, which represents the value of an asset" (Securities Commission, 2009b, p.9).

In the early stage of the market, from 1990 to 2000, s*ukuk* were introduced as the Islamic alternative to bonds or debt securities which function more as fixed-income instruments. During this period, *sukuk* issues were limited and confined to the Malaysian domestic market and s*ukuk* structures were also limited to the debt-based *sukuk* in the forms of either deferred sale (*bai' bithaman ajil*) or make-up sale (*murabahah*). Unfortunately, these types of *sukuk* did not enjoy wider global acceptance, particularly from the Gulf Cooperation Council (GCC) mainly due to the differences in *Shariah* interpretation on the mechanism of primary debt creation as well as the debts trading on the secondary market (Securities Commission, 2009b).

However, as the *sukuk* market developed, it became increasingly distinct from bond instruments. Indeed, from the year 2002 onwards, there was a gradual transition in market understanding on the nature of *sukuk* in that the market started to realise that *sukuk* do not necessarily represent debt and can also include non-debt assets.[8] For example, in December 2001 and 2002, Kumpulan Guthrie and the Malaysian government issued global *sukuk* based on the lease-based (*ijarah*) concept. This *sukuk* represents undivided proportionate ownership of the tangible asset under lease that gives the right to receive the lease-based rental streams. Thus, such *sukuk* are not strictly debt securities, but may also represent common ownership of tangible assets. Examples of non-debt *sukuk* are *sukuk ijarah*, *sukuk mudharabah*, and *sukuk musharakah*. The transition in the market, from debt to non-debt *sukuk* was a break-through, achieving

[8] Today, *sukuk* do not necessarily represent the amount of debt, but might represent debts arising from the deferred sale price of goods; goods to be received under a purchase order; undivided common ownership of tangible assets under a lease contract; rights in a project under *Mudharabah* or *Musharakah* partnership; or a portfolio of assets combining debt receivables arising from deferred sale contracts, as well as undivided common ownership of tangible assets under a lease contract (Securities Commission, 2009b).
The issuer of sukuk can be either a buyer in a sale contract with the subscribers, a lessee in a lease contract with the subscribers, or a partner in a partnership contract with the subscribers (Securities Commission, 2009b).

better acceptance of the *sukuk* instruments not only in Malaysia but also in the global market. This is also an example of how Malaysia is reconciling Islamic principles with modern finance principles.

Indeed, the growth and development of the Islamic bond market has been impressive. As at 31 December 2009, the total outstanding amount of Malaysian corporate Islamic bonds was RM172 billion, or 57 per cent of the total of outstanding corporate bonds. Most of the corporate Islamic bonds are issued by the infrastructure/utilities and property/real estate sectors to finance infrastructure projects such as water projects, education, healthcare, roads and other projects that will contribute to society as a whole (Albrar, 2007). This is consistent with the objective of the ICM to ensure the equitable allocation of capital to sectors which would yield the best returns to the owners of capital and the whole community.

On the global *sukuk* front, Malaysia accounts for over two-thirds of the world's *sukuk* issues (Jaafar, 2007; Securities Commission, 2009b). Thus, Malaysia has maintained its position as a leader in the global *sukuk* market. In fact, the Malaysian Global *Sukuk* and Guthrie *Sukuk* issued in 2002 are regarded as catalysts of the phenomenal growth of global Islamic bonds. The former was issued by the Malaysian government in June 2002 on the international market, amounting to US$600 million. It has been listed on the following exchanges: the Luxembourg Stock Exchange, the Labuan International Financial Stock Exchange (LFX) and the Bahrain Stock Exchange. This issue achieved a wide geographical distribution of investors: 51 per cent from the Middle East, 30 per cent from Asia, 15 per cent from Europe and 4 per cent from the US (Securities Commission, 2006c).

In September 2006, the Malaysian *sukuk* created another milestone by introducing the first exchangeable Islamic bond in the world through the issue of US$750 million Khazanah Exchangeable *Sukuk* which could be converted into ordinary shares held by the company. More recently, in June 2007, the company issued another exchangeable Islamic bond totalling US$850 million which has been listed on the Dubai International Financial Exchange, Hong Kong Stock Exchange, and Malaysia's Labuan International Financial Exchange. Apart from that, two out of seven Islamic bonds listed in the Citigroup-Dow Jones *Sukuk* Index originated from Malaysia, namely the Malaysian Global *Sukuk* and Sarawak *Sukuk* (Securities Commission, 2009b). All these achievements boosted the market.

2.5 THE LEGAL AND REGULATORY FRAMEWORK OF THE ICM

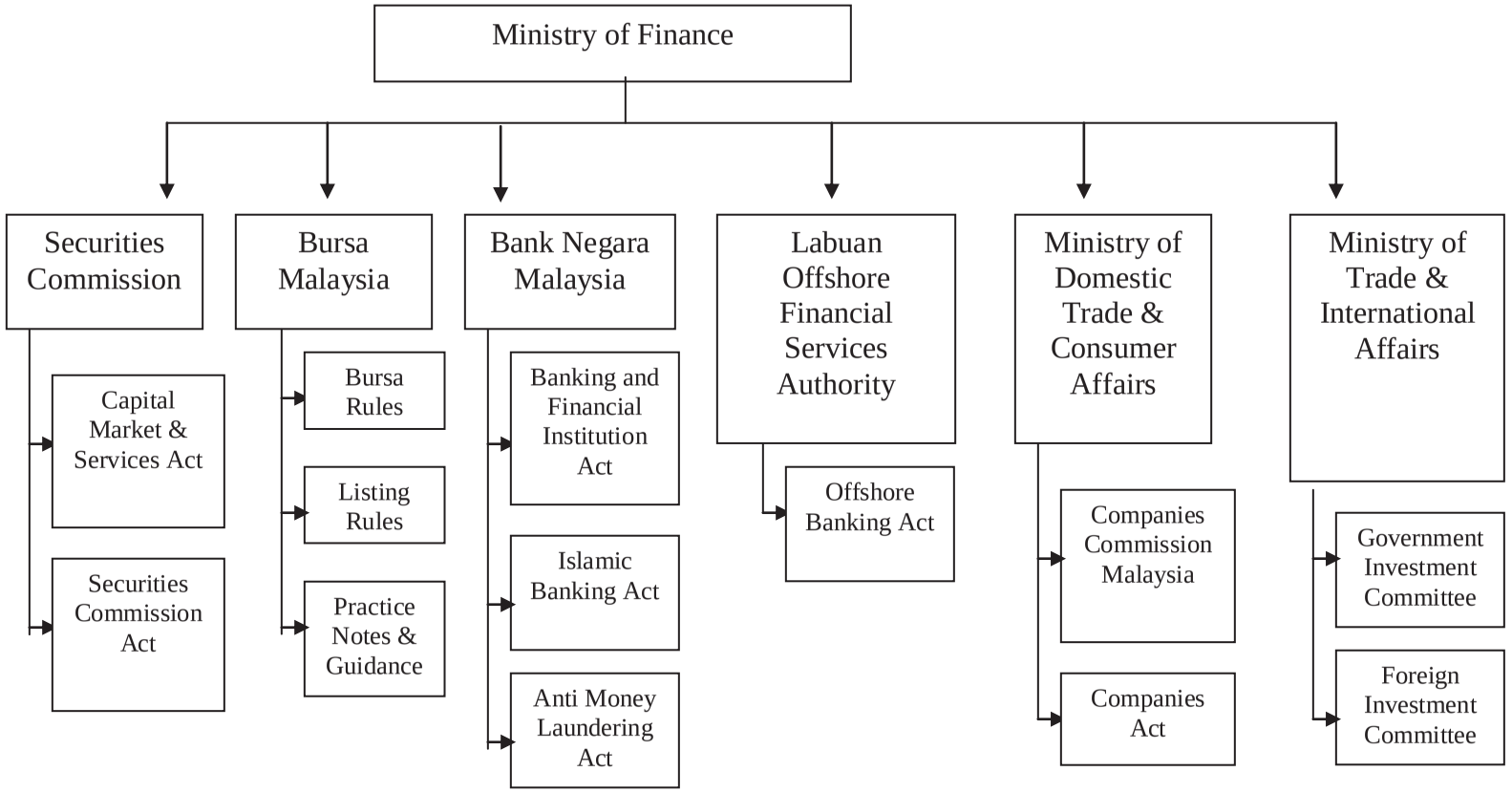
In Malaysia, the ICM runs a parallel market to the conventional capital market for capital seekers and providers. The regulatory framework of the conventional capital market is similarly applicable to the ICM, except in a few exceptional circumstances where specific laws, regulations and guidelines are provided for the operation of ICM.

2.5.1 The Regulatory Structure of the ICM

Matters pertaining to the Malaysian capital market, including the ICM come under the jurisdiction of the Ministry of Finance which is looking after all the finance matters of the country. The Ministry is facilitated by the Securities Commission, Bank Negara Malaysia, Labuan Offshore Financial Services Authority (LOFSA), Bursa Malaysia, the Ministry of Domestic Trade and Consumer Affairs, and the Ministry of Trade and International Affairs (Securities Commission, 2009e).

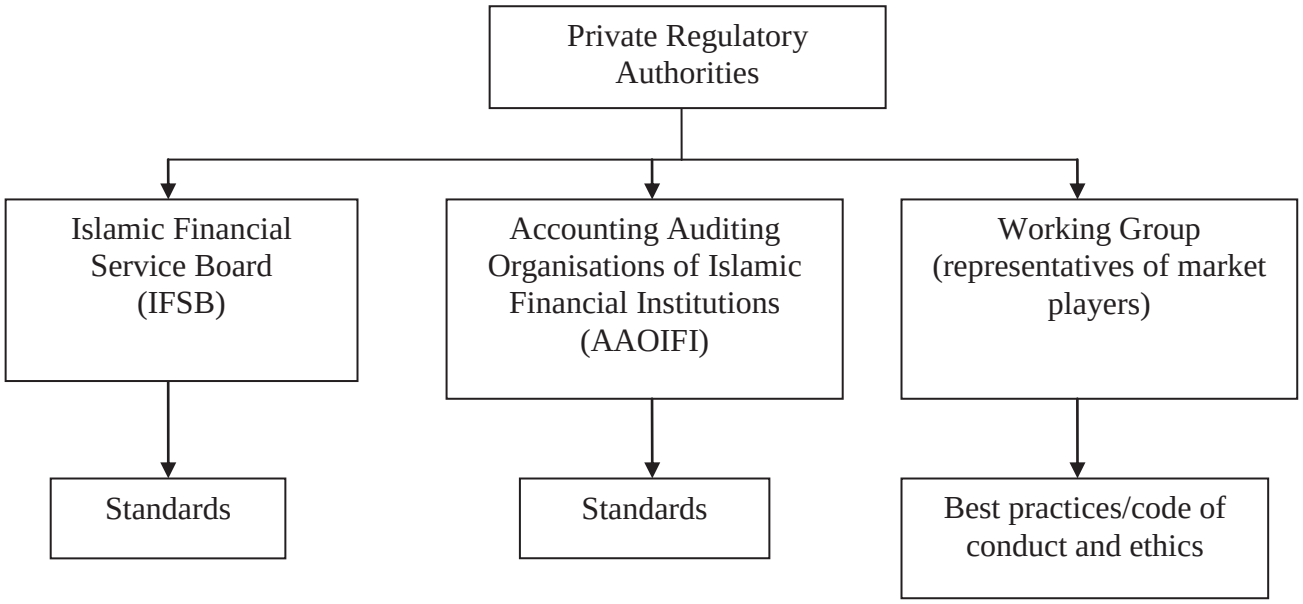
Basically, the regulatory authorities that play significant roles in shaping the ICM in Malaysia can be divided into public regulatory institutions and private regulatory institutions. Figure 2.3 and Figure 2.4 illustrate the structure of the public and private regulatory authority of the ICM in Malaysia. The contents of these figures are discussed below.

Figure 2.3 Public Regulatory Authority of the ICM in Malaysia



Source: Securities Commission (2009e)

Figure 2.4 Private Regulatory Authority of the ICM in Malaysia



Source: Securities Commission (2009e)

2.5.1.1 The public regulatory authorities

The public regulatory authorities of the ICM include the Securities Commission, the Bursa Malaysia, the Bank Negara Malaysia and the Labuan Offshore Financial Authority (Securities Commission, 2009e). These institutions are described below:

2.5.1.1.1 The Securities Commission

The SC was established in March 1993 as a self-funding statutory body with investigative and enforcement powers under the Securities Commission Act 1993. The SC is the main regulatory authority that is responsible for the regulation, development and promotion of capital market activities in Malaysia. It regulates the offerings and issues of securities by public companies and debentures by private companies, as well as matters relating to take-overs and mergers of companies and unit trust schemes. The SC also has been given the mandate to supervise and develop the Malaysian ICM via its Islamic capital market department. The ICM department is responsible for conducting research and the development of ICM products in the equity, debt and derivatives sectors. It also analyses and monitors the securities of listed companies.

2.5.1.1.2 Bank Negara Malaysia

Another public regulatory authority for the capital market, including the ICM in Malaysia is the central bank of Malaysia, Bank Negara Malaysia. Bank Negara Malaysia acts as a monetary authority to regulate and supervise the overall financial system in Malaysia in banking and insurance, in Islamic banking and *takaful*, in development other financial institutions. In addition, Bank Negara Malaysia also has power to approve issues of securities and control of shareholding in licensed financial institutions under its jurisdiction.

In 1997, Bank Negara Malaysia established the *Shariah* Advisory Council of Bank Negara Malaysia to advise the central bank on any *Shariah* issues relating to Islamic financial business or transactions. The *Shariah* Advisory Council of Bank Negara Malaysia has been given the authority to ascertain Islamic law for those activities which it supervises and regulates: Islamic banking business, *takaful* business, Islamic financial business, and Islamic development financial business.

2.5.1.1.3 Bursa Malaysia

Bursa Malaysia, previously known as the Kuala Lumpur Stock Exchange, is an exchange holding company approved under Section 15 of the Capital Markets and Services Act 2007. It operates a fully-integrated exchange, offering a complete range of exchange-related services including trading, clearing, settlement and depository services. With regards to the ICM, Bursa Malaysia is responsible for the introduction of new rules under the Listing Requirements for the listing of Islamic Securities.

2.5.1.1.4 Labuan Offshore Financial Services Authority

The Labuan Offshore Financial Services Authority (LOFSA) was established on 15 February 1996 as a one-stop agency for the development of Labuan as an offshore financial centre. It is responsible for administrating and coordinating the development of the offshore financial industry. LOFSA emphasis is on the integration of financial services including banking, insurance, trust business, fund management and, cross-border trade, as well as on hosting investment holding companies and management companies and offering expertise and services specific to offshore Islamic financing.

2.5.1.2 Private regulatory authorities

The private regulatory authorities comprise two international bodies, the Islamic Financial Services Board (IFSB), and the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) and working groups from local institutions such as the Federation of Malaysian Unit Trust Managers and the Life Insurance Association Malaysia (Securities Commission, 2009e).

2.5.1.2.1 The Islamic Financial Services Board (IFSB)

The Islamic Financial Services Board (IFSB) was established in 2002 as an international organisation that issues guiding principles and standards in the areas of capital adequacy, corporate governance, risk management and transparency, and other pertinent matters relating to the Islamic financial services. IFSB has regulatory and supervisory power, by virtue of Islamic Financial Services Board Act 2002, in order to ensure the stability of the Islamic financial services industry.

2.5.1.2.2 The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI)

AAOIFI was established on 26 February 1990 in Algiers. It is an autonomous Islamic international not-for-profit corporate body that prepares accounting, auditing, governance, ethics and *Shariah* standards for Islamic financial institutions and the industry as a whole.

2.5.1.2.3 Working groups from local organisations

There are several local organisations that play significant roles in setting up regulations for the ICM. These organisations have issued specific standards and best practice

guidelines for the market players in the ICM. These self-regulations are issued with proper consultations with the SC which supervises the activities of all the organisations. Examples of the organisations or associations include: the Federation of Malaysian Unit Trust Managers, the Malaysian Investment Banking Association, the Association of Stockbroking Companies Malaysia, and the Life Insurance Association Malaysia.

2.5.2 Legislation and Guidelines on the ICM

The ICM is regulated by the Capital Markets and Services Act 2007, the Securities Commission Act 1993, the Companies Act 1965, the Banking and Financial Institutions Act 1989, and the Islamic Banking Act 1983.

The Capital Markets and Services Act 2007 (CMSA) is the main legislation for the regulation of ICM in Malaysia. The CMSA was passed by Parliament in May 2007 and consolidates three key legislations, the Security Industry Act 1983, the Futures Industry Act 1993 and Part IV of the Securities Commission Act 1993. The CMSA also provides clear statutory provisions for recognising ICM's products. For example, Section 316 and 317 of the CMSA grants the Minister and the SC the power to prescribe modifications to give full effect to the principles of *Shariah* in respect of Islamic securities.

The Securities Commission Act 1993 (SCA) was enacted to establish the SC as the single regulatory body in the Malaysian capital market. The Company Act 1965 governs all companies in Malaysia including *Shariah* firms. Meanwhile, the Banking and Financial Institutions Act 1989 (BAFIA) provides laws for the licensing and regulation of institutions and businesses engaging in banking and finance, merchant banking,

discount house, money broking, along with financial institutions that carrying on other financial businesses and matters connected therewith. BAFIA plays an important role in Islamic finance in Malaysia as it provides for conventional banks licensed under the Act to carry out Islamic banking in addition to their conventional banking businesses. Furthermore, the Islamic Banking Act 1983 is the first legal infrastructure developed to facilitate the operations of Islamic banks in Malaysia.

The SC also has introduced several guidelines for the best practices of ICM operations. The guidelines and regulations govern (or affect) the following areas: Islamic Fund Management, Islamic real estate investment trusts, the offering of Islamic securities, unit trust funds, the offering of structured products and the offering of asset-backed securities. In general, the guidelines require *Shariah* compliance in the operation and management of investment activities, maintenance of accounts, and risk management. Further, the guidelines also require a company's management to appoint a *Shariah* adviser to advise on all aspects of the business including structuring investment instruments and documentation to ensure compliance with the relevant regulations and *Shariah* principles.

2.6 REASONS WHY MALAYSIAN FIRMS PARTICIPATE IN THE ICM

The development of the ICM in Malaysia over the last few years can be attributed to the greater acceptance and recognition among corporations, issuers and advisers on the use of the ICM as a viable alternative for fund-raising and corporate restructuring activities in the capital market. The acceptance of the ICM is driven by various factors including a strong commitment and support from the Malaysian government, a comprehensive tax

framework, and high demand for Islamic financial instruments. These are elaborated below.

2.6.1 Government Commitment towards ICM

The government's commitment to the ICM is reflected by the Capital Market Master Plan (CMP) of 2001. The CMP is a comprehensive plan for the future direction of the Malaysian capital market for the next 10 years to provide a strategic road map to facilitate future business development and assist in the creation of an efficient and competitive capital market. It is also seeks to provide market participants, particularly Malaysian public and private entities, with strategic clarity for the vision and objectives of the capital market in the midst of a changing marketplace.

The CMP articulates three visions for the Malaysian capital market: international competitiveness, high efficiency for the mobilisation and allocation of funds, and a strong and facilitative regulatory framework (CMP, 2001). In order to achieve the visions, six key objectives have been identified to form the basis of the CMP's main strategic initiatives and specific recommendations. The six key objectives include:

i. to be the preferred fund-raising centre for Malaysian companies
ii. to promote an effective investment management industry and a more conducive environment for investors
iii. to enhance the competitive position and efficiency of market institutions
iv. to develop a strong and competitive environment for intermediation services
v. to ensure a stronger and more facilitative regulatory regime
vi. to establish Malaysia as an international Islamic capital market centre.

The CMP sets up 152 detailed recommendations to achieve these objectives and outlines the framework for their implementation. The recommendations relating to the ICM are summarised in Table 2.3:

Table 2.3 Capital Market Master Plan's Recommendations for ICM

1.	To actively introduce more competitive and innovative Islamic financial products and services.
2.	To introduce and promote a wider range of Islamic collective investment schemes.
3.	To liberalise the investment restrictions for the Takaful industry in order to facilitate greater mobilisation of Takaful funds into the ICM.
4.	To mobilise untapped Islamic assets through securitisation.
5.	To increase the pool of ICM expertise through training and education.
6.	To establish a single *Shariah* Advisory Council for the Islamic financial sector.
7.	To establish a facilitative tax and legal framework for the ICM.
8.	To develop an appropriate financial reporting framework for the ICM in collaboration with Malaysia Accounting Standard Board (MASB).
9.	To enhance the awareness of Malaysia's ICM at the domestic and international level.
10.	To establish strategic alliances between Malaysia and other ICMs.
11.	To propose to the government and government-related entities to consider issuing Islamic debt securities in the global market.
12.	To pursue for the listing of Malaysian Islamic equity funds in international markets.
13.	To provide incentives to encourage the entry of foreign intermediaries and professionals with expertise in ICM-related business.

Source: Capital Market Master Plan (2001)

In a nutshell, the long term strategy outlined in the country's CMP has guided the development of the ICM. It also encourages Malaysian corporations to participate in the

market thereby supporting the government's aspiration to promote Malaysia as an international Islamic capital market centre.

2.6.2 Facilitative Tax Framework

A comprehensive tax framework including incentives facilitates wider opportunities for Malaysian firms to use the ICM as a platform to raise long term funds to finance their business activities. The main legislation governing taxation matters in Malaysia is the Income Tax Act, 1967 (ITA). The ITA prescribes rules for the taxability of income and the deductibility of expenses. The ITA also has made certain provisions on Islamic transactions. For example, section 2(7)[9] of the ITA provides the basis of treating profits in relation to *sukuk* transactions similarly to that of interest for tax purposes. It means that the profits associated with *sukuk* will be taxable, similar to interest income under conventional financing.

Apart from that, the ITA also has some provisions pertaining to tax neutrality and incentives for Islamic finance products. The tax treatment of certain Islamic financial transactions is not always consistent with that of conventional financial transactions. Generally, the former is more likely to be subjected to an additional tax burden. It is because most of the Islamic financing products require the existence of underlying assets or transactions such as the sale and purchase of the company's properties. The unique underlying structure of Islamic transactions thus triggers additional taxes such as real property gains tax and double stamp duty.

[9] Section 2(7) of ITA states "… any reference in this Act to interest shall apply, mutatis mutandis, to gains or profit received and expenses incurred, in lieu of interest, in transactions conducted in accordance with *Shariah*."

In response to this limitation, the ITA has made provisions to provide tax neutrality to the Islamic financing products. Section 2(8) of the ITA allows the underlying sale of assets or leases to be ignored for tax purposes, so that any additional tax as a result of the underlying transaction would not arise. This enables Islamic financing to continue without any tax issue relating to asset transfer or lease, hence placing the Islamic financing transaction on the same footing as conventional financing.

Furthermore, the exemption of stamp duty applicable to the Islamic financing products ensures that any additional stamp duty as a result of the underlying asset transaction will be exempted. For example, all instruments executed between a customer and a financier under an asset sale agreement or an asset lease agreement based on the principles of *Shariah* for the purpose of renewing any Islamic revolving financing facility (Stamp Duty (Exemption) (No.2) Order 2004) will be exempted from stamp duty (Securities Commission, 2009e). This means that stamp duty on Islamic financing transactions will not exceed that for a conventional transaction.

In addition to addressing the tax anomalies for the Islamic finance products, the Malaysian government also provides appropriate tax incentives to further accelerate the development of the ICM. Indeed, appropriate tax incentives would certainly further encourage Malaysian firms to use the ICM to raise long term funds to finance their business activities and expansion. In Budget 2003, the government provided a tax deduction incentive on the cost of issuing Islamic securities. Normally, the cost of issuing bonds and borrowing expenses are not tax deductible in Malaysia, as these are seen as capital costs. However, where such costs are related to the issue of Islamic bonds, the costs will be specifically tax deductible. For example, tax deductions are

allowed on expenses incurred on the issue of Islamic securities based on the *Shariah* principles of trust partnership (*mudharabah*), partnership (*musyarakah*) and leasing (*ijarah*). In Budget 2004, a similar tax deduction incentive was provided on expenses incurred on the issue of Islamic securities based on *Shariah* principles of purchase order (*istisna'*).

Furthermore, the cost incurred by an Islamic stockbroking company in setting up an Islamic stockbroking business approved by the Bursa Malaysia is tax deductible against its business upon commencement. These costs may include consultancy and legal fees, any feasibility study, or cost of market research, and the cost of obtaining license and business approval for the purpose of establishing an Islamic stockbroking business (Securities Commission, 2009e).

Incentives to Islamic banking and *takaful* business are also provided in the ITA (Income Tax (Exemption) (No. 12) Order 2007). A 10-year tax exemption on statutory income is given to the Islamic banks and Islamic banking units of commercial banks (licensed under Islamic Banking Act 1983) and *takaful* companies and *takaful* units (licensed under the Takaful Act 1984).

In Budget 2009, another tax exemption for corporate advisors in a non-ringgit *sukuk* transaction has been made on the following items (Securities Commission, 2009d):

i. fees earned by qualified institutions in undertaking activities related to the arranging, underwriting and distributing non-ringgit *sukuk* issued in Malaysia and distributed outside Malaysia

ii. profits received by qualified institutions from the trading of non-ringgit *sukuk* issued in Malaysia.

With such a facilitative tax framework, the Malaysian firms have responded positively to the government's aspiration in positioning Malaysia as a global ICM hub. The number of Malaysian firms that are *Shariah*-compliant increases from year to year. At 31 May 2010, there were 847 *Shariah* firms in Malaysia, making up 88 per cent of the Malaysian public listed companies on Bursa Malaysia. Table 2.4 highlights some of the special incentives for the ICM participants including Malaysian *Shariah* firms.

Table 2.4: Special Incentives for ICM's Participants

Recipient	Incentives	Reference Legislation (if any)
Investor	Profits received by foreign investors are exempted from tax if such profits are from: i. Any bank or financial institution licensed under the Banking and Financial Institutions Act 1989 or the Islamic Banking Act 1983; ii. Securities or bonds issued or guaranteed by the Government; iii. Islamic securities or debentures, other than convertible loan stocks, approved by the SC.	Income Tax (Exemption) (No.6) Order 2008-24 July 2008
	Profit paid or credited to non-resident companies for ringgit-denominated *sukuk* approved by SC is exempt from income tax.	ITA (Schedule 6: Section 33A)
	Profit paid or credited to any individual, unit trust and listed closed-end fund in respect of sukuk approved by SC is exempt from	ITA (Schedule 6: Section 35)

	income tax.	
	Profit paid or credited to any person for non-ringgit *sukuk* approved by SC is exempt from income tax.	ITA (Amendment of Schedule 6: Section 33B)
Issuer/SPV	Tax deduction up to year 2015 on cost of issuing Islamic securities incurred by either the financier or a special purpose vehicles (SPV). The issuance must be approved by the SC.	ITA (Deduction for expenditure on Issuance of Islamic Securities) Rules 2007-11 Jan 2007
	To ensure tax neutrality with conventional products, any additional tax or duty is exempted or given specific treatment provided that the products are approved by the SC.	ITA 1967-Section 2(8) Stamp Act-Schedule 1 "General Exemptions"
	Additional 20 percent exemption on stamp duty to the principal or primary instrument of financing made according to *Shariah*, upon approval by the SC.	ITA (Section 2 (8)) Stamp Act-Schedule 1 "General Exemptions"
	As the SPV is established solely to channel funds, it is exempted from income tax.	ITA (Exemption) (No. 14) Order 2007-2 May 2007.
	Tax exemption for a period of three years for fees and profits earned by institutions undertaking activities on the arranging, underwriting, distributing and trading of non-ringgit *sukuk* issued in Malaysia and distributed outside Malaysia; and profit received by qualified institutions from the trading of non-ringgit *sukuk* issued in Malaysia.	Finance Act 2007-Amendment to the ITA-Amendment of Schedule 6: Section 33B
Islamic stockbroking services	Establishment expenditure incurred prior to the commencement of an Islamic stockbroking business is tax deductible.	ITA (Deduction on Expenditure for Establishment of an

		Islamic Stock Broking Business) Rules 2007-15 February 2007
Islamic fund management	Local and foreign-owned companies managing Islamic funds of local and foreign investors to be given income tax exemption on all fees received from managing the funds. Islamic fund management companies are allowed to have 100% foreign ownership.	ITA (Exemption) (No.6) Order 2008-24 July 2008
Non-resident experts in Islamic finance	Income tax exemption to be given to income received by non-resident experts in Islamic finance.	ITA (Exemption) (No.3) Order 2008-17 May 2008

Sources: Securities Commission (2008a; 2009e)

2.6.3 High Demand for Islamic Investment Instruments Including *Shariah*-Compliant Firms

In Malaysia, *Shariah*-compliant firms are regarded as an attractive investment instrument for Muslim investors as well as Islamic financial institutions such as Islamic banks, *takaful* operators, and Islamic fund management companies. The Malaysian regulatory policy that disallows "Islamic money" flowing into non-*Shariah*-compliant activities, including the conventional financial markets seems to be a main factor creating a real demand for Islamic investment instruments including *Shariah*-compliant firms. The demand is due to the abundance of Islamic liquidity that can only flow to Islamic investments. For example, the proceeds from any *sukuk* issue must be used only for *Shariah* compliant purposes and cannot be leaked into activities or businesses that are not approved by the SAC (Securities Commission, 2009e).

The increase in *Shariah*-compliant investment products as well as the number of *Shariah* firms is mainly driven by the growth of the Islamic financial industry in Malaysia. Indeed, as at September 2009, Islamic banking assets were approximately 19 per cent of the total banking assets at RM213.8 billion (US$62.9 billion). Takaful assets constitute 7.5 per cent of the total insurance assets at RM10.57 billion (US$3.11 billion) (Securities Commission, 2009d).

The Islamic unit trust segment also shows similar achievement. From a total of two Islamic unit trust funds in 1993, there are currently, 150 Islamic unit trust funds operating with a total net asset value (NAV) amounting to RM22.8 billion, representing 11.52 per cent of the total NAV of the unit trust industry. This also represents 27 percent of NAV of the global Islamic unit trust industry. Out of the 150 *Shariah*-compliant funds, 72 are equity funds, 22 are balanced funds, and 20 are *sukuk* funds. The remainder is comprised of money market funds, structured products, feeder funds, fixed income funds and mixed asset funds. Table 2.5 below delineates the total of the *Shariah*-managed funds in the ICM.

Table 2.5 Total *Shariah*-managed funds as at 31 December 2009

Name of fund	***Shariah*-compliant funds**	**Islamic exchange-traded funds**	**Islamic real estate investment trusts**
Number of approved funds:			
Shariah-compliant	150	1	3
Total industry	565	3	12
Net asset value of approved funds:			
Shariah-compliant	RM22.08 billion	RM656.6 million	RM1,827 million
Total industry	RM191.71 billion	RM1,177.9 million	RM5,268 million
Percentage to total industry	11.52%	56%	34.7%

Source: Securities Commission (2009d)

This growth is expected to strengthen even further on the back of various deregulatory and liberalisation measures introduced by the Malaysian government in the Islamic investment management industry. Currently, there are eight international Islamic fund management companies operating in Malaysia under liberalisation schemes. They include: the Kuwait Finance House (Malaysia), the DBS Asset Management, the CIMB-Principal Asset Management, the Global Investment House, the Reliance Asset Management, the Aberdeen Islamic Asset Management Sdn Bhd, the BNP Paribas Islamic Asset Management Sdn Bhd and the Nomura Islamic Asset Management Sdn Bhd. These companies are expected to play a catalytic role in the internationalisation of the Malaysian ICM and provide greater opportunities for international investors, particularly from the Middle East, to participate in the Malaysian market (Securities Commission, 2009a).[10] Further, in Budget 2008, the government allocated approximately RM7 billion through its government-linked investment companies (GLIC), namely the Employees Provident funds to be managed by Islamic fund management companies.

As the Islamic financial industry grows, it is more apparent that there will be more demand for *Shariah*–compliant products by the investors, and other market players such as Islamic banks, *Shariah*-compliant financial institutions, *takaful* companies, Islamic brokerages and Islamic fund management companies around the globe. This might offer tremendous opportunities for Malaysian *Shariah* firms to supply *Shariah*-compliant products, both equities and *sukuk*, in the domestic and global markets.

[10] McKinsey projects US$2 to US$3 trillion revenues from the Gulf states over the next decade that will need to be recycled and will be available to be placed in Islamic assets (Securities Commission, 2008a). In Malaysia, the Middle Eastern investors are making significant investments in *Shariah* firms engaging in the construction and telecommunication sectors (Securities Commission, 2008c).

2.7 THE MALAYSIAN REPORTING ENVIRONMENT

All listed companies in Malaysia including *Shariah* firms are required under the Companies Act 1965 to publish annual reports and comply with the accounting standards of the Malaysian Accounting Standard Board (MASB). Further, to enhance the quality of financial reporting, the government called for corporate governance reforms. The efforts started with the establishment of the Finance Committee on Corporate Governance and the Malaysian Institute of Corporate Governance. The objective of these institutions was to look into the issue of corporate governance in Malaysia. As a result, the Malaysian Code on Corporate Governance (MCCG) was published in 1999. It provides guidelines on the principles and best practices in corporate governance and the direction for their implementation. The MCCG best practices[11] are essentially aimed at improving board independence, transparency and accountability to the company's shareholders and other stakeholders, and the effectiveness of the board in fulfilling both its conformance and performance functions (Wahab et al., 2007). Since these practices help to alleviate the agency problem by monitoring and controlling the opportunistic behaviour of management, it is expected that the financial reporting quality of Malaysian public firms will improve alongside these changes.

In addition, another major breakthrough in Malaysian corporate governance development was the establishment of the Minority Shareholder Watchdog Group (MSWG) in 2000. The MSWG comprises five large Malaysian institutional investors: the Employees Provident Fund, the Armed Forces Fund Board (Lembaga Tabung

[11] Compliance to the MCCG best practices is voluntary but the Revised Listing Requirements (RLR) of Bursa Malaysia requires companies to disclose in their annual reports the extent of their compliance and an explanation for any departure. Failure by public listed companies to make the disclosures, as well as making false or misleading disclosure, are considered as non-compliance to Bursa Malaysia RLR. Sanctions for non-compliance may result in a reprimand, a suspension of trading in their securities, delisting or the Bursa Malaysia may issue other penalties/conditions as it deems appropriate (RLR, 2001).

Angkatan Tentera), the National Equity Corporation (Permodalan Nasional Berhad), the Social Security Organisation (Pertubuhan Keselamatan Sosial) and the Pilgrimage Board (Lembaga Tabung Haji). The main objective of MSWG is to monitor and fight abuses by company insiders against minority shareholders through shareholder activism. This objective is important as Malaysia has been characterised by concentrated shareholding. The existence of ownership concentration, particularly in the hands of family/individual and the state, in more than half of Malaysian corporations, creates agency conflict between large and minority shareholders (La Porta et al., 1999; Shleifer & Vishny, 1997). Shleifer and Vishny (1997) highlight that owners of large shareholdings gain nearly full control when ownership gets beyond a certain point, and they may use their position and controlling power to achieve their financial and personal interests at the expense of the minority shareholders. As a monitoring organisation, MSWG is responsible for monitoring the corporate governance and financial performance of the public companies including topical issues such as related party transactions, acquisitions and disposals, privatisations and directors' remuneration in order to protect the minority shareholders' interests (http://www.mswg.org.my).

In summary, the government has put effort into improving the Malaysian business environment including its corporate reporting by enhancing corporate governance systems and introducing a religious ethical framework in the capital market setting. However, the effectiveness of such mechanisms still remains an empirical issue. Thus, the current study attempts to provide a better understanding of the impact of the ICM on Malaysian corporate financial reporting.

2.8 SUMMARY

This chapter describes the institutional background of the thesis. It has provided an overview of the Malaysian Islamic financial system and the ICM. It shows that the ICM was triggered by the financing and investment needs of Muslims in Malaysia. Since the establishment of the first Islamic financial institution, namely the Pilgrimage Management and Fund Board in 1969, there has been a significant development in the Islamic finance landscape.

The ICM performs the same essential functions as in the conventional system, except that there is a need for ICM to carry out its transactions in accordance to the rules and principles of *Shariah*. The emergence of ICM leads to the classification of listed firms on Bursa Malaysia into two main groups: *Shariah* firms and non-*Shariah* firms. In general, these groups possess different characteristics. *Shariah* firms are firms whose operations, products and policies are consistent with *Shariah*. Although the primary objective of *Shariah* firms is similar to non-*Shariah* firms, to maximize profit, such firms allow gaining profit only within the ambit of *Shariah*. In other words, *Shariah* firms are prohibited from involvement in the production, or distribution of alcohol, tobacco and non-*halal* foods. They may not profit from interest-based transactions, nor be involved in gambling, hotels and airlines which serve alcohol on their premises, nor any immoral activity according to *Shariah*, such as pornography.

Further, *Shariah* firms also need to follow institutionalised requirements such as passing the Islamic ethics screening every six months by following the rules and guidelines concerning desirable and undesirable modes of business transactions according to *Shariah.* They must also demonstrate a good public image. In addition, as *Shariah* firms

are closely monitored by SAC, such firms are required to disclose more information on a timely basis to SAC regarding their primary activities to enable them to maintain their *Shariah* status.

A study between *Shariah* and non-*Shariah* firms' financial reporting will enhance the understanding of how these differing firms report. Overall, this chapter has demonstrated that Malaysia is an interesting and unique research setting for examining whether religious ethics affect reporting quality. Since Malaysia provides a strong institutionalised option for following religious ethics, it is a better setting to test the effects of religious ethics than prior studies (Dyreng et al., 2010; Grullon et al., 2010; McGuire et al., 2010) which examine the impact of religious ethical values on financial reporting practices in settings where there are no clear guidelines to make a selection between a religious mode of business and a non-religious mode of business.

Having discussed the background to the Malaysian ICM and *Shariah* firms, the theory explaining the operation and accounting practice of *Shariah* firms is provided in the next chapter.

CHAPTER 3

THE ISLAMIC ETHICAL SYSTEM AND ITS IMPLICATION FOR BUSINESS AND ACCOUNTING

3.1 INTRODUCTION

The preceding chapter, Chapter 2, highlights that ICM and *Shariah* firms operate within the boundaries of *Shariah* and its ethical framework. Given the importance of *Shariah* and its ethical code in the operation of the ICM and *Shariah* firms, this chapter provides a discussion on the theoretical background of Islamic ethics that is used in guiding the empirical investigation of this thesis.

The structure of this chapter is as follows: Section 3.2 discusses Islamic ethics and its core values. Section 3.3 elaborates the implication of Islamic ethics for business practices. This is followed by Section 3.4, which provides a discussion on the implication of the Islamic ethical system for accounting practices. Finally, Section 3.5 presents the chapter summary.

3.2 THE ISLAMIC ETHICAL SYSTEM

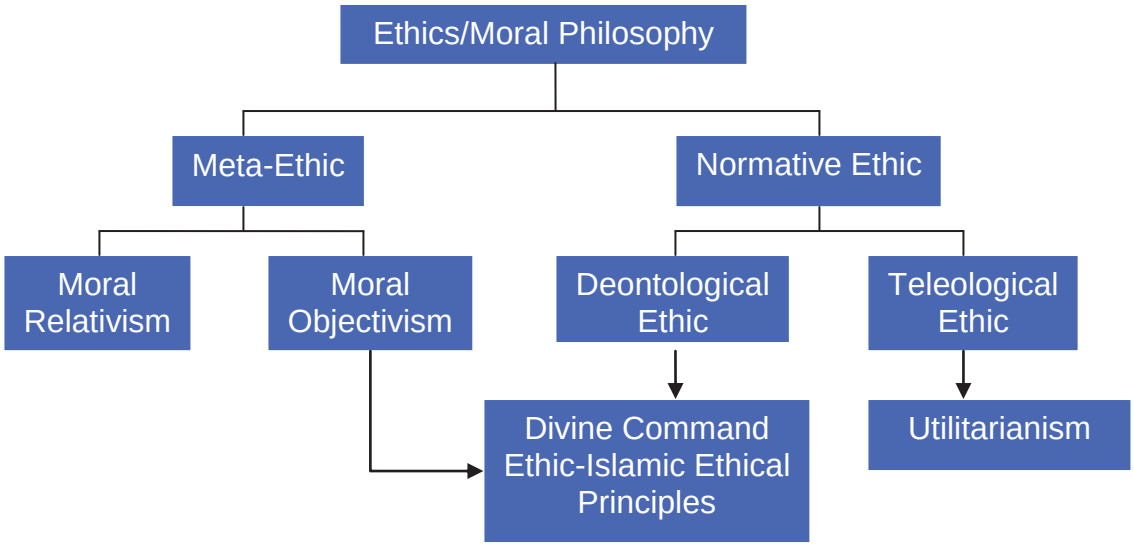
The term ethics is derived from the Greek word *ethos*, which means the character, spirit and attitudes of a group of people or culture (Rahman, 2003). It can be defined as a set of standards, or code, by which human actions are determined as humanly right or wrong, good or evil (Owens, 1978). It may also be defined as a study of the rules or standards governing the conduct of a person or members of a profession, for example medical ethics and business ethics (Ibrahim, 2000). There are two main branches of ethics: metaethics and normative ethics (Newall, 2005). Metaethics is the study of where ethical notions came from and what they mean. Normative ethics is a set of

principles that guide or regulate human conduct. The Islamic ethical system generally resides within the domain of normative ethics.

There are two main approaches to normative ethics, namely teleological and deontological. The former takes the view that whether an action is right or wrong depends on the consequences of the action (Simoes, 2009). Utilitarianism is one of the main forms of teleological ethics and adopted in business ethics (Ibrahim, 2000). The theory was formulated by Jeremy Bentham. Utilitarianism attempts to measure the pleasure and pain associated with an action to determine its morality. Generally, an action will be considered as morally right if it leads to the least pain or the greatest pleasure. Utilitarianism however, has been criticised as being unable to account for justice (Ibrahim, 2000). The utilitarian calculation can sometimes result in injustice as the rights of people do not fully depend on the consequences of an action.

The deontological approach, on the other hand, is based on the theory of duty which emphasizes on the duty of individuals and organisations to others. This approach denies that morality depends on the consequences of actions (Ibrahim, 2000). Basically, moral deontological concepts comprise three main elements: moral requirement (obligation), moral permission (rightness) and moral prohibition (wrongness) (Quinn, 2000). The earlier deontological ethics relied on religion, known as theological ethics or divine command ethics. According to the divine command conception, actions are morally wrong because God forbids them; actions are morally right because God does not forbid them; and actions are morally obligatory because God commands them (Quinn, 2000). Figure 3.1 shows the components of ethics and moral philosophy.

Figure 3.1: Moral Philosophy and its Components



Source: Ibrahim (2000)

As depicted in Figure 3.1, the Islamic ethical system is one of the theological ethics or divine command ethics. Islamic ethics are based on divine commandment derived from *Al-Qur'an* and *Sunnah.* This ethical system comprises cohesive rules which govern all religious, political, social and economic affairs including business. In Islam, adherence to this ethical code is a part of faith (Haniffa & Hudaib, 2002).

Further, the study of the origin and meaning of morality (meta-ethics), has divided morality into two main groups, moral relativism and moral objectivism. Moral relativism considers that what is right or wrong is not absolute but variable and relative, depending on the person, circumstances, or social situation (Lewis & Unerman, 1999). In other words, morality is just a function of what a particular society takes to be right

or wrong. It is happens because what people think will vary with time and place. Abortion, for example, is condemned as immoral by communities in Malaysia but is practiced as a morally neutral form of birth control in Japan and China. Thus, what is right in one place may be wrong in another, because the only criterion for distinguishing right from wrong is the moral system of the society in which the act occurs.

Moral objectivism considers certain acts are objectively right or wrong, independently of human opinion (Lewis & Unerman, 1999). Many codes of objective morality hold that moral codes originate in some divine entity, either God or a cosmic force such as Karma. Thus, as the Islamic moral or ethical system is based on divine commandment rather than the perceptions of individuals and community (Dusuki & Abdullah, 2006; Mohammed, 2007), Muslims are known as moral absolutists.

The Islamic ethical system is underpinned by two core values: unity (*tawhid*), and justice (*adl*) (Alhabshi, 1987). These core values have a tremendous impact on how Islamic ethics guide economic activities and business dealings. These two values are elaborated below.

3.2.1 The Concept of Unity of God (*Tawhid*)

The key value of the Islamic ethical system lies in a person's relationship with God (Allah), His people and His universe (Zinkin & Williams, 2006; Rahman, 2003). The first relationship (i.e. man and Allah) signifies that Allah is the only god and creator of everything in the heavens and earth.[12] It requires mankind to follow the commandments of Allah by fulfilling all obligations, and avoiding unethical conduct which is

[12] "To God belongs exclusively (the right to grant) intercession: To Him belongs the domination of the heavens and the earth: and in the end, unto Him you will all be brought back" (*Al-Qur'an*, 39:44)

detrimental to all beings on this planet. Every thought and behaviour of a Muslim is directed towards attaining the blessing of Allah.

Allah has appointed man as His vicegerent on earth, and requires him to act as His trustee and deputy in dealing with the universe and its environment, wealth, and other creatures (Zinkin & Williams, 2006). Man has the right to own property and wealth, and this right is protected as long as the means of acquisition is lawful and within the ethical framework devised by Allah. The right to use and benefit from one's wealth and property must not be exercised at the expense of the interest of the community (Graafland et al., 2006).

The concept of unity also emphasises the relationship between humans (i.e. universal brotherhood) (Zinkin & Williams, 2006). In Islam, all human beings are vicegerents of Allah regardless of colour, sex, and their diversification into various peoples and tribes. No one is superior or inferior except on the basis of piety and good character (Securities Commission, 2009a). They should, therefore, not attempt to dominate nor wrong each other, but rather cooperate and support each other towards fulfilling their role of vicegerency. The relationships should be inspired by the values of trust, truthfulness, respect, tolerance, equity and justice.

The concept of unity also signifies that man should accept and protect everything in the world as valuable. As a vicegerent of Allah, people are encouraged to utilise the natural resources made available to them in a socially responsible manner (Graafland et al., 2006).[13] No one is allowed to destroy or waste resources given by Allah.

[13] "And remember how we made you inheritors after the 'Ad people and gave you habitations in the land: ye build for yourselves palaces and castles in (open) plains, and carve out homes in the mountains: so

3.2.2 The Concept of Justice

The second core value of Islamic ethics is justice. Justice is the utmost ethical principle in Islam (Securities Commission, 2009d). Establishment of justice and eradication of all forms of injustice in economic activities and business dealings are stressed in Al-Qu'ran, through either direct or indirect expressions. For example, it is stated in Al-Qur'an:

> "Allah commands justice, the doing of good and liberality to kith and kin,
> and He forbids all shameful deeds, and injustice and rebellion"
>
> (Al-Qur'an, 16:90)

Justice refers to being fair with everyone (Maali et al., 2006). Thus, Muslims are prohibited from engaging in activities that includes any kind of exploitation, or leads to injustice or harm to anyone.

3.3 THE IMPLICATIONS OF THE ISLAMIC ETHICAL SYSTEM FOR BUSINESS

Based on the concepts of unity and justice discussed above, *Shariah* has set, clear ethical guidelines governing economic activities and business conduct. The Islamic code of ethics has laid down strict rules and regulations regarding prohibited activities in business, and prescribed certain ethical guidelines in maintaining good relationships between the firm and its shareholders, other stakeholders and the natural environment.

The concept of unity emphasises the responsibility of man as a vicegerent and trustee of Allah on the earth. In the business setting, it has a significant impact on the ethical conduct of the management as a trustee of shareholders' wealth. For example, managers

---

bring to remembrance the benefits (ye have received) from Allah, and refrain from evil and mischief on the earth" (*Al-Qur'an*, 7:74).

of *Shariah* firms are responsible for safeguarding the investments of the shareholders because of the trust principle derived from the concept of unity. The managers need to ensure that the firm engages only in lawful business activities and does not become involved in any activity prohibited by Allah. According to Zinkin and Williams (2006), the prohibition on certain types of business comes from the concern to protect human health and life. Thus, any product and service such as alcohol, tobacco and gambling that puts human life and health at risk are prohibited. The justification for the prohibition is explained in Al-Qur'an:

> "They ask thee concerning wine and gambling. Say: In them is great sin, and some profit for men; but the sin is greater than the profit."
>
> (Al-Qur'an, 2:219)

Further, Islamic ethics also stress transparency in business dealings. Ali and Al-Owaihan (2008) assert that transparency is prescribed as a moral responsibility in Islam. Basically, transparency means that financial transactions must be conducted in such a manner that all parties are clear about the important facts of the transactions (Securities Commission, 2009e). It is important to avoid all causes of disputes, clashes or damages to any party. Based on this guideline, the ICM should be more transparent where information must be reliable and relevant and flow in a timely manner to all market participants in order to encourage an environment of trust and openness in financial transactions (Wan-Azmi, 2007). Meanwhile at the business level, managers, as trustees of shareholders' properties, must provide complete and relevant information regarding the management of properties and should not misuse the trust.

The Islamic ethical code also highlights employee responsibilities to the firm. For instance, an employee of the firm must fulfil the trust that the employer has bestowed on him. The employee must be honest, truthful and guard against any matter that is harmful to his employer and look after the property of the firm (Graafland et al., 2006). He must neither use, nor allow anyone else to use, anything that belongs to his employer without the employer's permission. It is stated in Al-Qur'an:

> "Do not betray nor misappropriate knowingly things entrusted to you."
>
> (Al-Qur'an, 8:27)

In addition, Islamic ethics also provide several guidelines for relationships between firms and other stakeholders such as debtors. In Islam, a debt is a trust which must be returned to its owner. However, derived from the concept of brotherhood discussed above, Islam encourages leniency in business dealings. For example, a firm is expected to be lenient towards debtors who are not able to meet their payments by providing them with additional time or even by remitting their debt. It is in Al-Qur'an:

> "If the debtor is in difficulty, grant him time till it is easy for him to repay.
> But if you remit it by way of charity, that is best for you if you only knew."
>
> (Al-Qur'an, 2:280)

Once the firm extends credit to a debtor, and the terms of the credit agreement are mutually approved, it becomes the obligation of the debtor to fulfil these terms.

Graafland et al. (2006) argue that the Islamic ethical code, derived from the concept of brotherhood, leads to teamwork in the workplace, favourable working conditions and an increase in the efficiency and productivity of the firm. Due to the institution of

brotherhood, Islam unites all individuals in the bond of universal brotherhood whereby all individuals are regarded as members of a single family which entitle them to equal social status. Wan-Azmi (2007) highlights two main implications of brotherhood for the Islamic financial system: cooperation and mutual help. According to her, Islam views financiers (i.e. shareholders, public or financial institutions) and clients (*Shariah* firms) as members of one brotherhood. Thus the financier acts from a position of power and strength, and the client acts from the position of social weakness. This motivation affects the forces of demand and supply in the ICM in a complementary manner whereby both parties understand each other's interests, and through fair dealing focus on favourable synergies which facilitate a greater use of risk-sharing modes of financing.

Islamic ethics also stress the relationship between man and the natural environment (Graafland et al., 2006; Maali et al., 2006; Zinkin and Williams, 2006). As a vicegerent of Allah, Muslims are encouraged to utilise the natural resources made available to them in the best possible manner. Businesses engaged in the production of goods and services should not cause undue and excessive harm to God-given resources and bounties created for the benefit of all mankind. Thus, *Shariah* firms are not allowed to destroy or cause damage to the environment in the process of conducting their business.

In order to ensure that justice prevails in economic and business transactions, Islamic codes of ethics provide a "moral filter" to remove all impediments to its establishment. For example, in the ICM, all the unjust practices such as interest-based transactions and gambling are removed from the market. It is important in order to protect the interests and benefits of all parties involved in market transactions and to protect social harmony.

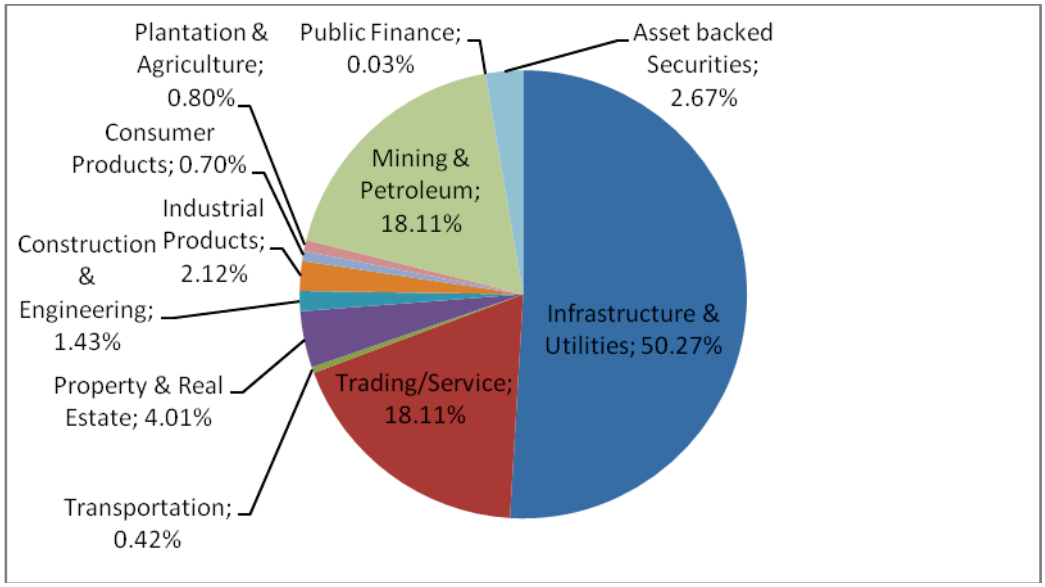
The concept of justice also includes the equitable distribution of wealth (Graafland et al., 2006). According to the Securities Commission (2009a), justice means the need to establish equilibrium by way of fulfilling rights and obligations and by eliminating excess and disparity in all spheres of life. Although inequality in terms of wealth is justified in Islam, each member of society must be guaranteed equal rights and opportunities for their basic needs of food, housing, education, health, transport and employment. The intense commitment of Islam to justice and brotherhood demands Islamic society take care of the basic needs of the poor and those who are less privileged in society. The most important institution for the equitable distribution of wealth is the religious tax (*zakat*). *Zakat* is one of the pillars of Islam that requires each Muslim to pay a fixed minimum percentage of his wealth, property as well as earnings, to the poor and the needy.

Further, with regards to the allocation of resources, Islam emphasises both efficiency and equitable distribution. According to Siddiqi (1981), resources cannot be diverted to the production of luxuries until the production of necessities has been ensured in sufficient quantities. It is important to ensure the basic needs of a society are fulfilled before the resources are used for the production of luxury products. In order to achieve efficiency and equitable distribution of resources, Chapra (1992) suggests the application of an "Islamic moral filter" in the capital market as a complementary mechanism to the price mechanism to ensure resources are allocated efficiently and equitably. This concept is important in the operation of the ICM, particularly in the *sukuk* market. In Malaysia, *Shariah* firms need to pass their potential claims of resources through two stages of screening: Islamic values screening and market screening. With Islamic values screening, the SAC ensures that the proceeds from *sukuk*

issues are only for *Shariah*-compliant purposes and cannot be used in activities or businesses that are not approved by *Shariah*. Further, the proceeds of *sukuk* should be used for activities or businesses that benefit the society at large in order to ensure the production of necessities.

According to Albrar (2007), most Malaysian *sukuk* are issued by the infrastructure/utilities and property/real estate sectors to finance infrastructure projects such as water projects, education, healthcare, roads and other projects that contribute to society as a whole (see Figure 3.2). This is consistent with the objective of the ICM, i.e. the equitable allocation of capital to sectors which would yield the best returns to the owners of capital and the whole community.

Figure 3.2: *Sukuk* Portfolio by Economic Sector-September 2009



Source: http://www.ibfim.com/v2/images/RAM/ram_bulletin_0309.pdf

In addition, the Islamic code of ethics prohibits hoarding and monopolies. Hoarding is prohibited because it leads to the accumulation of wealth in the hands of a few people

without circulating it into the economy (Securities Commission, 2009a). In Islam, monopoly is prohibited if it is designed to create an artificially higher price or to create artificial shortages (Beekun & Badawi, 2005) which lead to exploitation, and encourage price manipulation. However, Beekun and Badawi (2005) argue that state monopoly is allowed in Islam if it will increase efficiency and benefit society at large. However, proper controls and regulations are required to prevent abuse of public resources.

In Islam, the requirement to deal justly encompasses all dealings with employees, customers, and members of the society in which the businesses operate. For example, Islamic codes of ethics stress that an employee should be paid a fair wage, which allows him the basic necessities of life (Graafland et al., 2006). Further, the employee should not be given work beyond their capability and capacity.

Islamic ethics also emphasise the provision of complete information in business dealings with customers (Maali et al., 2006). Muslim entrepreneurs should be honest, sincere and truthful in their business dealings and ensure accuracy in terms of product specifications such as weights, measures and other attributes, including its possible defects. *Shariah* firms must ensure their customers receive lawful (*halal*), good quality and fairly priced products and/or services. *Shariah* firms should not misrepresent the firm's products and any deficiencies should be notified prior to the business transactions. The main objective of the openness and transparency in business dealings is to give the customer a fair deal and protection from exploitation (Ibrahim, 2002).

3.4 THE IMPLICATIONS OF ISLAMIC ETHICS FOR ACCOUNTING

Rahman (2003) argues that the accounting function is to discharge the accountability of a firm as a result of the separation of ownership and management. In Islam, the concept of accountability is ingrained in the basic creation of man as a vicegerent or trustee of Allah on the earth. As a trustee, man must be responsible for each possession that he is managing for Allah and ultimately be fully accountable to Allah for his actions (Rahman, 1998). Accountability to Allah implies the accountability to other creations especially society. Baydoun and Willett (2000) argue that the concept of the unity of God gives rise to a broader concept of accountability than that implied by Western models. Indeed, Ibrahim (2000) argues that accountability in Islam comprises two types of accountability: the vertical accountability to Allah and the horizontal accountability to other individuals, particularly society. Thus, the concept of accountability in Islam is much broader than what is generally understood in the West.

In Islam, the role of the corporate reporting system is not limited only to the production and distribution of financial information to various stakeholders, but also carries a moral purpose in order to maintain social relationships between a firm and its stakeholders including Allah and society (Ibrahim, 2000). According to Rahman (2003), accounting should function not only as a service activity providing financial information to the users and to the public at large but, more importantly, accountants should discharge their accountability by providing information to enable society to follow God's commandments. In view of that, Ibrahim (2000) contends that the main objective of corporate financial reporting of an Islamic firm is to discharge accountability to Allah and society (i.e. Islamic accountability).

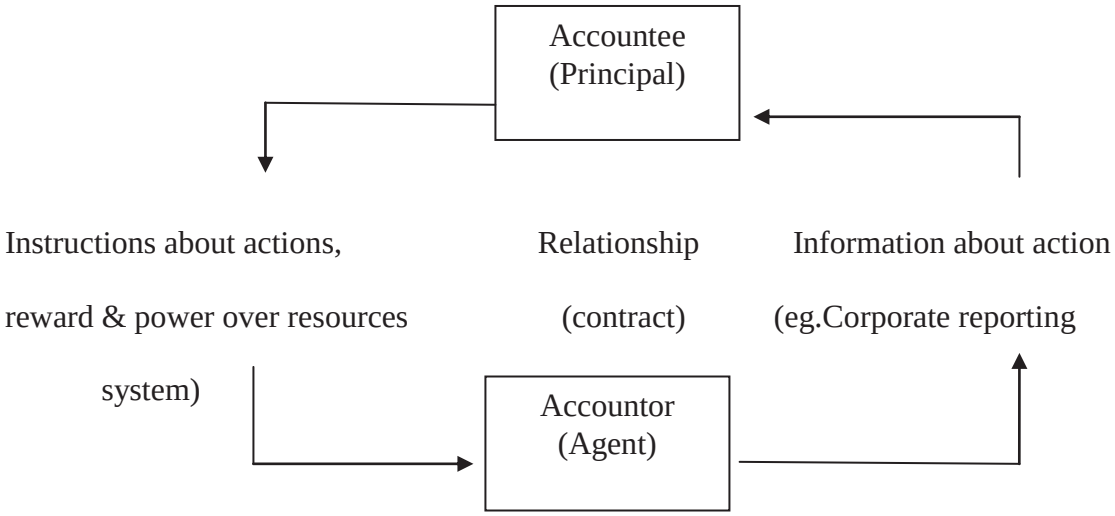
3.4.1 Islamic Accountability

Gray et al. (1996) defines accountability as

> "the duty to provide an account (by no means necessary a financial account) or reckoning of those actions for which one is held responsible." (p.38)

They further elaborate that accountability involves two responsibilities or duties. The first concerns the responsibility to undertake certain actions (or forbear from taking actions) and the second is the responsibility to provide an account of those actions. By using a principal-agent contract, they developed an accountability model. The model delineates the contractual relationship between two parties: accountee (principal) and accountor (agent). It assumes that the contract exists when the accountee gives power over the resources, along with instructions about actions and rewards, to the accountor. The accountor is supposed to take certain actions and refrain from others, in managing the resources given to him in order to meet certain objectives. The accountor is also expected to be accountable to his principal by supplying information about his actions to the principal. Figure 3.3 illustrates the accountability model introduced by Gray et al. (1996).

Figure 3.3: The Accountability Model



Source: Gray et al. (1996)

Gray et al. (1996) recognised that there are two categories of rights and responsibilities, legal and non-legal, in this accountability model. The latter emerge from moral or natural rights and responsibilities. They argue that law lays down the minimum level of responsibilities and rights and consequently requires a minimum level of accountability. They highlight, however, that while law establishes responsibility for certain actions, it does not provide an equivalent responsibility to account in all cases. Thus, the legal responsibility for action and the legal responsibility to account are not equal. The disparities in these two responsibilities bring into play a moral responsibility to account. Nevertheless, they argue that the nature of moral rights are constantly changing and developing over time. Therefore, the level of accountability needed will also be constantly changing.

On the other hand, in an Islamic society, responsibility and accountability are specified in Al-Qur'an and derived from unchanging revelatory principles. Accountability is derived from inbuilt responsibilities to act in a certain way according to *Shariah*. In Islam, accountability means the actual performance of the required actions or the avoidance of certain actions, and reporting of the actual performance (Ibrahim, 2000). However, as the society, including shareholders, cannot observe the action directly, annual reports become the important media through which accountability is observed by the accountee. Hence, accounting information can play a crucial role in the maintenance of the harmonious social relationship between accountee and accountor.

In discharging their accountability to Allah and society, the management of *Shariah* firms needs to provide corporate reports according to the full disclosure concept. The concept requires management to disclose all necessary information about their activities, even where such information could be unfavourable for the firm (Maali et al. 2006). Haniffa and Hudaib (2002) highlighted that the full disclosure of relevant and reliable information is crucial in Islam because it assists users, especially those from outside the firm, in making both economic and religious decisions. The disclosure also enables Muslim investors to recognise *Shariah*-compliant investment, and at the same time would increase the level of their confidence when making investment decisions (Securities Commission, 2002). Additionally, in order to attract both local and foreign investors to invest in ICM, particularly in *Shariah* firms, these firms would be expected to communicate more information to their users via corporate annual reports to convince investors that they are a good investment.

As annual reports of companies become one of the main sources for the SAC to classify the *Shariah* status of listed firms of Bursa Malaysia, firms willing to be *Shariah*-approved, would disclose more information to show that their primary activities do not conflict with Islamic law. Those *Shariah* firms which are involved in prohibited activities, as discussed earlier, will disclose more information regarding these non-permissible elements e.g. the way they dispose of the amounts generated by such activities and their efforts to reduce the incidence of such activities in the future (Anam, 2005). The firms will also provide disclosure pertaining to such activities to assist the SAC to ensure the contribution of these non-permissible elements is within the benchmarks. Therefore, if such accountability and full disclosure concepts are demanded in Islam, then the focus of Islamic corporate reporting practices would be far wider and more reliable than conventional reporting practices.

Further, *Shariah* firms are required to provide information on (i) the proper assessment and distribution of *Zakat*, (ii) the equitable and fair distribution of wealth generated by business organization, (iii) the *Shariah*-compliance and prohibited activities, and (iv) the social and environmental impact on the business activities in order to help shareholders and other stakeholders adhere to Allah's commandments as well as to evaluate the firms' ability to carry out social and ethical responsibilities as specified by *Shariah* (Ibrahim, 2000; Maali et al., 2006).

3.4.2 Information on the Assessment and Distribution of *Zakat*

Zakat is one of the five pillars of Islam which can be defined as a religious levy by which Muslims make over part of their wealth for the benefit of others (Clarke et al., 1996). It is neither a tax nor a charitable donation. A tax may be expended for any

purpose while *zakat* can only be paid to eight categories of beneficiaries as specified in the Al-Quran (Ibrahim, 2000) such as *faqir* (poor), *miskin* (needy), *amil* (zakat collectors), *al-mua'lafah gulubahum* (those who reconciled to Islam), *riqab* (captives and slaves) and *ibn-alsabil* (travellers) (Haniffa & Hudaib, 2002). Further, *zakat* cannot be regarded as a charitable donation because it is compulsory. *Zakat* is levied on animals, trading profit, salaries and wages, agricultural produce, and gold and silver.

In the case of a company, *zakat* should be assessed based on the net current assets of the firm (Securities Commission, 2009e). The amount of *zakat* would then be divided between the owners or shareholders to assist them in satisfying their religious obligation by themselves. For *Shariah* firms, although there is no mandatory requirement for firms to pay *zakat* on behalf of their shareholders, the firms are expected to disclose such information to shareholders to enable them to determine their *zakat* obligations (Anam, 2005). In other words, the *Shariah* firms are expected to disclose information showing the sources and the uses of the *zakat.*

Nevertheless, the valuation of *zakat* leads to an important issue for accounting practice as it deals specifically with the measurement of assets. In order to calculate the amount of *zakat*, assets need to be measured in contemporary terms, not historical cost (Hamid, Craig & Clarke 1993; Mirza & Baydoun, 1999; Sulaiman, 2003). This is due to the fact that *zakat* based on a historical cost valuation would yield lower receipts and consequently leads to lower transfer of payments to the beneficiaries in times of inflation and rising cost (Ibrahim, 2000). Therefore, *Shariah* firms are expected to produce both historical cost and current value balance sheets. The former is considered important in order for firms to demonstrate the fiduciary responsibility of their

managers and their stewardship. The latter is important as a basis for computing *zakat* in order to discharge their social obligations (Mirza & Baydoun, 2002).

3.4.3 Information on the Equitable Distribution of Wealth among Stakeholders

Baydoun and Willet (2000) assert that Islamic business organisations should produce a Value Added Statement (VAS), in addition to an income statement since VAS is more consistent with the *Shariah* principles of fair and social justice. The VAS rearranges the information in the income statement and shows how the value added by the company is shared between different groups in society (e.g. employees, government, society) other than the owner. In other words, it focuses on the benefits the companies bring through their commercial activities to the society as a whole. Thus, *Shariah* firms are expected to prepare a VAS in addition to an income statement in order to legitimise their existence in line with Islamic value.

3.4.4 Information on the *Shariah*-Compliance of the Business Organisation

As annual reports of companies are one of the main modes of information dissemination for firms to classify themselves as *Shariah* firms on Bursa Malaysia, they are likely to disclose more information regarding their primary activities. They would tend to disclose information to show that their activities do not conflict with Islamic principles.

Shariah firms which are involved in certain prohibited activities, such as interest-bearing loans, the firms should disclose information regarding these non-permissible elements to the society to enable the users to assess the extent and materiality of such violations (Anam, 2005; Maali et al., 2006). Basically, the firms are expected to disclose information on (i) the nature of these transactions, (ii) the reasons for undertaking such

transactions (iii) the amount of revenue (expenses) earned (paid) in such transactions and (iv) the disposal, or intention to dispose, of such revenues and (v) the efforts undertaken, or intended to undertake, to reduce the involvement in such activities in the future (Maali et al., 2006). This may convince the investors and regulators that they are generally *Shariah*-compliant. The *Shariah* firms will also provide disclosure pertaining to such activities to assist the SAC to assure itself that the contributions of these non-permissible elements are within the benchmarks.

3.4.5 Information on Social and Environmental Issues

In the context of corporate social reporting (CSR), *Shariah* firms are expected to show their commitment towards employees, consumers and the whole of society including the environment. Sulaiman (2003) asserts that Islamic business organisations should disclose more information regarding social and environmental issues as this type of organisation seeks social justice for the whole society. Thus, she adds, that although the Global Reporting Initiative (GRI) has introduced minimum guidelines for business entities to disclose information regarding economic, environmental and social issues which appear comprehensive for conventional firms, from the Islamic perspective it still seems lacking in certain aspects. Haniffa and Hudaib (2002) argues that the GRI only addresses the material and moral aspects, but pays little attention to the spiritual considerations on the accounting disclosure practice. Thus, this may impair the judgement of Muslim decision-makers which in turn could have adverse effects on their spiritual well-being. Typically, there are four types of information that might be disclosed by the *Shariah* firms with regards to their corporate social responsibilities.

3.4.5.1 Employee information

Islam has stressed that employees should be treated and dealt with justly (Maali et al., 2006). Accordingly, *Shariah* firms are expected to disclose information about their employees in order to demonstrate the firms' responsibilities towards their employees (Anam, 2005). Information such as corporate policy on wages, allowances, equal opportunities, safety and working environment is expected to be disclosed. In addition, qualitative and quantitative information on employees' education, training and benevolent loans (*Qard Hasan*-non-interest loans) that are given to the employees is also expected to be disclosed (Maali et al., 2006). There are also certain spiritual issues which are not considered relevant in conventional accounting but which are important for *Shariah* firms, such as whether Muslim employees are allowed to perform their obligatory prayers during specific times of their working day and whether there is a proper place of worship for the employees.

3.4.5.2 Environmental information

Islam has prohibited any damage or destruction to the environment if it is considered harmful to human beings or the community (Alam, 1998). As vicegerents of Allah, Muslims are encouraged to utilise the natural resources made available to them in a socially responsible manner. They are not allowed to destroy or cause damage to the environment in the process of conducting their business. Accordingly, qualitative and quantitative information about environmental protection programmes or activities is expected to be disclosed by *Shariah* firms to show their responsibility in taking care of the environment.

3.4.5.3 Information on products and services

Shariah firms should not offer any products or services which are prohibited by *Shariah*. All products and services offered should be good quality and in good condition (Anam, 2005). In addition, the firms also are expected to demonstrate clearly whether the product is allowed (*halal*) or forbidden (*haram*) according to Islamic law. For example, if firms sell food that contains gelatin from animals such as pork or an animal not slaughtered in accordance with *Shariah*, they are liable to disclose the information not only in their annual report but also provided on the product itself in order to demonstrate their accountability and transparency to the society (Sulaiman, 2003).

3.4.5.4 Social and other information

Shariah firms, as corporate citizens, are encouraged to engage in charitable activities (Anam, 2005). According to Maali et al., (2006), society and the stakeholders have the right to know about such activities. Hence, it is expected that *Shariah* firms will disclose qualitative and quantitative information about their charitable contributions and activities that enhance the well-being of the society in which the firms are allowed to operate and make profit.

3.5 SUMMARY

This chapter discusses the theoretical framework of the thesis. It begins by providing a discussion on the concept of Islamic ethics which is grounded in the concepts of unity and justice. This chapter also elaborates the impact of Islamic ethics on the ICM and *Shariah* firms. For example, the Islamic ethical code specifies rules and guidelines concerning the distribution of resources, treatment of employees, management of debtors and customers, and the appropriate characteristics and behaviour of a Muslim who engages in business.

Further, this chapter discusses the implication of Islamic ethics for accounting. Islam emphasises the quality of financial reporting as it is a means of discharging accountability to Allah, shareholders and all stakeholders, including society. Islam requires management to prepare financial reports based on the full disclosure concept to assist users in making both economic and religious decisions. Islam stresses transparency in business dealings and financial reporting systems by requiring management to disclose all necessary information about their activities, even where such information might prove unfavourable for the firms.

Given those requirements, Islamic ethics seem to encourage managers to provide better information, especially accounting information. Based on this theoretical framework, the next chapter will examine whether *Shariah* firms report better quality accounting information than non-*Shariah* firms.

CHAPTER 4

THE INFLUENCE OF *SHARIAH* ON REAL AND ACCRUAL-BASED EARNINGS MANAGEMENT

4.1 INTRODUCTION

This chapter presents the first empirical study of the thesis. It focuses on the impact of *Shariah* on earnings management. Earnings management is often seen as an improper corporate behaviour derived from managerial opportunism. According to Healy and Wahlen (1999), "earnings management occurs when managers use judgement in financial reporting in structuring transactions to alter financial reports, to either mislead some stakeholders about the underlying economic performance of the economy, or to influence contractual outcomes that depend on reported accounting number" (p.65). Lo (2008) argues that earnings management is one of the factors that contributes to the lower quality of earnings and accounting numbers.[14]

Prior studies have highlighted the role of religion in limiting unethical behaviour in business organisations (Conroy & Emerson, 2004; Kennedy & Lawton, 1998; Longenecker et al., 2004; Weaver & Agle, 2002). Schelling (1968) and Durant (1950) stress that religion is the basis of civilized behaviour in modern societies because religion provides the basic premises for morality and accountability. Indeed, Lewis (2001) argues that religion has a role in shaping and enforcing ethical behaviour such as truthfulness, honesty and justice in business settings. Thus, religious ethical values are recognised as one of the monitoring mechanisms in reducing opportunistic behaviour

[14]There is also an efficient contracting view of earnings management. For example, in the event of a reversible default of debt covenants by the borrower, the lender may allow the borrower to manage earnings upward to avoid costly renegotiation costs. However, this explanation is not likely to apply to *Shariah* firms because they are likely to have very low levels of interest bearing debt.

among managers, and consequently reducing managerial incentives to manage earnings either through discretionary accounting accruals or real economic decisions. This, in turn enhances the reliability of financial information and the integrity of the financial reporting process (Watts & Zimmerman, 1990).

Prior research seems to support these assertions (Dyreng et al., 2010; Grullon et al., 2010; McGuire et al., 2010). Grullon et al. (2010) found that religious ethical codes mitigate unethical corporate behaviour. In particular, they documented that religion-influenced firms are less likely to backdate options, practice aggressive earnings management, grant large compensation packages to their managers, and to be the target of class action securities lawsuits. Their results suggest that religious moral codes play a significant role in deterring unethical corporate behaviour.

This research extends the study of Grullon et al. (2010) by examining the effect of Islamic ethical values on unethical corporate behaviours, particularly opportunistic earnings management. Contrary to prior research (Grullon et al, 2010; McGuire et al, 2010; Omer et al. 2010) that assumed that certain kinds of firms will be more or less religious in nature by defining religion-influenced firms as firms with headquarters in regions where there are a large number of religious adherents, this study examines the effect of Islamic ethical values, *Shariah,* on financial reporting in a setting where the firms driven by religious ethics are distinctly classified through well-defined institutional arrangements. Through institutionalised religious ethics in a capital market setting, such arrangements create a strong ethical environment that promotes greater levels of ethical decision-making in *Shariah* firms than non-*Shariah* firms. Specifically, this study attempts to acquire an understanding of whether the Islamic ethical

framework, *Shariah*, is an effective controlling and monitoring mechanism in reducing opportunistic earnings management in a well-defined institutional setting where there are clear guidelines to make a selection between a religious mode of business and a non-religious mode of business.

This chapter has six main sections. Section 4.2 provides a review of the literature on the existence of opportunistic earnings management and its determinants. Section 4.3 develops the research hypotheses. Section 4.4 elaborates the research design employed in the study. The next section, Section 4.5, presents the descriptive statistics and empirical results of the study. The final section, 4.6, provides a summary and concludes this chapter.

4.2 ETHICS AND EARNINGS MANAGEMENT

This literature review is carried out to provide an understanding of earnings management and its determinants, in order to develop a foundation for this study of *Shariah* influence on earnings management.

Earnings management is widely known as a misleading activity that occurs when management masks the true financial position of business organisations and hides relevant information from investors and outsiders. Roychowdhury (2006) has noted that managers can influence reported accounting information by managing earnings either via accruals (hereafter referred to as accrual-based earnings management or AEM) or real activities (hereafter referred to as real earnings management or REM). AEM refers to the manipulation of earnings that have no direct cash flow implications. For example, decisions to write down assets, to recognize or defer revenues, to capitalise or expense certain costs—such as repair expenditures—and to time the adoption of new standards. REM occurs when managers use real economic actions that affect cash flows to produce desired earnings numbers (Dechow & Schrand, 2004; Fields, Lys, & Vincent, 2001). Examples of REM include reductions in discretionary spending such as research and development (R&D), reductions in advertising and maintenance expenditures, aggressive price discounts to increase sales volumes, overproduction in order to report a lower cost of goods sold (COGS), and the purchase and retirement of common shares.

A review of earnings management literature provides evidence that managers do manage earnings for a variety of reasons in different settings. For example, prior studies have indicated that managers manipulate accounting earnings to increase their compensation (Bergstresser & Philippon, 2006; Cheng & Warfield, 2005; Cornett,

Marcus, & Tehranian, 2008; Healy, 1985; Holthausen, Larcker, & Sloan, 1995). Healy (1985) examined the effect of bonus schemes on earnings management practices. He postulates that managers remunerated by using a bonus plan based on accounting earnings, select accounting procedures that increase their compensation. He found that when earnings are expected to fall between the upper and lower bound, managers select income-increasing accrual choices to maximize their short-term bonuses. He also found that when earnings are expected to be either above the upper bound or below the lower bound, managers select income-decreasing accrual to shift income to future periods in order to maximize multi-period compensation.[15] Dechow and Sloan (1991) investigated the effect of discretionary-investment decisions on CEOs' earnings-based compensation. They hypothesised that CEOs manage investment expenditures to increase short-term earnings performance during their final years in office. The results show that CEOs use real earnings management to reduce R&D expenditure and improve reported earnings. They concluded that compensation plans provide CEOs with incentives to reduce R&D expenditures prior to their departures.

Additionally, previous studies have attempted to investigate the impact of accounting restrictions in debt contracts on earnings management practices. For example, Daley and Vigeland (1983) investigated the impact of accounting choice for R&D expenditures in the presence of debt covenant restrictions. The results suggest that highly leveraged firms which were closer to dividend restrictions are more likely to capitalise rather than expense their R&D costs in order to avoid debt violation. Several other studies (Beneish & Press, 1993; DeFond & Jiambalvo, 1994; Sweeney, 1994) hypothesised that firms with debt covenants based on accounting numbers are more

[15]Healy (1985) has been the subject of some criticism as the study used total accruals as a proxy for discretionary accruals. The proxy introduces bias that supports his bonus plan hypothesis (see Gaver et al., 1995; Holthausen et al., 1995; McNichols & Wilson, 1988).

likely to use income-increasing accounting choices to reduce the probability of covenant default. For instance, Sweeney (1994) documented that managers of firms approaching such constraints are more likely to make income-increasing changes in periods before the violation. She also found that managers continue to make income-increasing changes in years following the first year of default. Sweeney suggests that her evidence on the defaulting firms' accounting-policy choices is consistent with the debt hypothesis.

Prior studies also reveal that regulators and and/or political scrutiny, either separately or in combination provide firms with incentives to manage earnings (Byard, Hossain, & Mitra, 2007; Cahan, 1992; Han & Wang, 1998; Jones, 1991). For example, Byard et al. (2007) examined U.S. oil companies' earnings management in response to hurricanes Katrina and Rita. Hurricanes Katrina and Rita heightened political scrutiny of the US-based oil industry due to unusual product price increases. The increased scrutiny, in turn, might have imposed additional costs on these firms and adversely affected their future profitability. The study found that large US-based petroleum refining companies engaged in income-decreasing earnings management in the immediate aftermath of hurricanes Katrina and Rita to avoid future political costs.

In the capital market setting, earnings management can be exercised to influence stock price. For example, Kasznik (1999), Magnan and Cormier (1997), and Gramlich and Sorensen (2004) found that managers use accounting accruals to inflate reported earnings to meet earnings forecasts and avoid the negative stock price reaction that may accompany a missed forecast. Other studies such as Bushee (1998), Herrmann, Inoue, and Thomas (2003), and Roychowdhury (2006) examined whether managers take REM

to manage earnings in meeting earnings benchmarks. Herrmann et al. (2003) investigated whether Japanese managers use income from the sale of fixed assets and marketable securities to manage earnings. They found that when current reported operating income is below (above) management forecasts of operating income, firms increase (decrease) earnings through the sale of fixed assets and marketable securities. Roychowdhury (2006) also provided evidence that suggests managers manipulate real activities to avoid reporting annual losses. In particular, he found that managers use price discounts to temporarily increase sales, overproduce to report lower COGS, and reduce discretionary expenditures to improve reported margins, thus meeting earnings targets.

The following studies examined discretionary accounting accruals: prior to management buyouts (DeAngelo, 1986; Perry & Williams, 1994), prior to initial public offerings (IPO) (Teoh, Wong, & Rao, 1998a), and prior to seasoned equity offerings (SEO) (Rangan, 1998; Teoh, Welch, & Wong, 1998b). Perry and Williams (1994) investigate discretionary accruals of a sample of 175 management buyouts during the period 1981 to 1988. They report that managers understate reported earnings in the year preceding the public announcement of their bid for control of the company. Their results indicate that managers select income-decreasing accruals to lower the buyout price.

Teoh et al. (1998a) examined whether issuers of IPOs select income-increasing accruals to increase reported earnings prior to IPOs. They also examined whether discretionary accruals predict the cross-sectional variation in post-IPO long-run stock return performance. They found evidence that issuers with unusually high accruals in the IPO year experience poor stock return performance in the three years thereafter, which

supports the opportunistic earnings management hypothesis. Moreover, they argue that investors may be misled by high earnings numbers reported at the time of the IPO and then put too high a price on the new issues, leading to post-offering stock underperformance. Like Teoh et al. (1998b), and Rangan (1998) reports that firms conducting SEOs experience poor stock price and earnings performance in the post-offering period. These results suggest that the issuing companies are temporarily overvalued by the stock market, which is then disappointed by predictable declines in earnings caused by earnings management.

Regardless of the methods of earnings management and their determinants, this review of the above prior research indicates that managers opportunistically report accounting earnings which reduces the quality of accounting information. Dechow and Schrand (2004) argue that accounting earnings are more reliable and more informative when managers' opportunistic behaviour is controlled through a variety of monitoring systems. Noreen (1988), Brickley, Smith, and Zimmerman (1994), Elias (2004), and Grullon et al. (2010) suggest that ethical standards mitigate opportunistic behaviour among managers, consequently reducing managerial incentives to manage earnings either through discretionary accounting accruals or real economic decisions.[16] This, in turn, enhances the reliability of financial information and the integrity of the financial reporting process (Watts & Zimmerman, 1978).

In recognising the importance of an ethical code in the financial reporting process, the U.S. government introduced the Sarbanes Oxley Act (SOX) in 2002. The Act focuses

[16] Brickley et al. (1994, p. 25) note that "higher ethical standards among agents, whether corporate employees or participants in market exchanges, would lead to a reduction in the level of expected opportunistic behaviour and hence a reduction in agency costs. As a result, there would be more transactions (including more job created) and higher prices paid to agents by principals (including higher corporate wages)."

primarily on regulating corporate conduct in an attempt to promote ethical behaviour amongst boards of directors, audit committees, CEOs and all other management personnel that influence the accuracy and adequacy of external financial reports. The Act takes a strong punitive approach by prescribing expected behaviour, ethical responsibilities and certifications along with heavy penalties for violations. Prior studies examined whether the ethical code driven by SOX affects earnings management activities through accrual and real accounting choice decisions. Lobo and Zhou (2006) investigated the relation between SOX and discretionary accrual choices. They found that firms report lower discretionary accruals after SOX than in the period preceding SOX. The results suggest that SOX alters the behaviour of managers with respect to their discretionary accounting choices.

Bartov and Cohen (2007), and Cohen, Dey, and Lys (2008) found evidence of a similar pattern to Lobo and Zhou's study that accrual management decreases significantly following SOX. However, both studies found that the level of earnings management via real accounting choice increased significantly after SOX. Their results indicate that firms shifted from using accruals to REM to manage earnings. This was because accrual manipulations were more likely to draw auditors' or regulators' scrutiny after the passage of SOX (Cohen et al., 2008; Graham, Harvey, & Rajgopal, 2005). These findings suggest that although SOX is expected to deter opportunistic behaviour among managers and to improve the accuracy and reliability of accounting information, the consequences of its ethical code are still unclear. Despite significant reduction in accruals management, previous studies report that the managers still continue to manage earnings via other alternatives such as real economic transactions. This implies that the SOX ethical code is unable to fully curb managerial opportunistic behaviour. This is

consistent with the views of several scholars who argue that SOX is simply a political response to high profile cases of fraudulent financial reporting with no significant impact on the general population of firms since, as a piece of legislation, it contains more rhetoric than corporate reform (Cunningham 2003; Li, Pincus, & Rego, 2008).

4.2.1 Religion and Earnings Management

Other scholars highlight the role of religion in promoting ethical behaviour in business organisations (Conroy & Emerson, 2004; Kennedy & Lawton, 1998; Longenecker et al., 2004; Weaver & Agle, 2002). Indeed, the use of ethical precepts grounded on religious teachings, is certainly not new to business. Noreen (1988) explored the use of ethical and other frameworks in business and accounting. He examined the boundaries of human behaviour in agency settings and argues that agency contracts alone cannot restrain opportunistic behaviour. He identifies religion as one of the enforcement mechanisms for better ethical behaviour.

Researchers in sociology and business ethics have indicated that religion has a profound impact on managers' values, behaviours and business ethics, either directly or by implication. In attempting to explain why religion may affect moral attitudes, Weaver and Agle (2002) discuss a theoretical framework for understanding the influence of religion on business ethics. They argue that religion offer role expectations which, when internalised through repeated social interaction, contribute to a person's self-identity as an adherent of a specific religion. When religion is a central part of a person's self-identity, departures from religious role-expectations might generate higher levels of cognitive and emotional discomfort, which motivates adherents to keep their behaviour in line with religious role-expectations. Thus,

Weaver and Angle (2002) assert that the more salient a person's religious identity, the more likely an individual is to act in accordance with the role expectations of his or her religion.

Further, Hirschi and Stark (1969) assert that religion inhibits unethical behaviour through its sanctioning system that legitimises and reinforces social values. Conroy and Emerson (2004) also argue that believers in God are less likely to act unethically because of the fear of being "caught" by an omniscient God and being punished. Religion contributes to the formation of perceptions of the certainty and severity of punishment for deviance or unethical behaviour. Moreover, highly religious people are likely to experience psychological shame from unethical behaviour, and those involved in religious networks are more likely than others to experience embarrassment, when involved in unethical acts. These two negative psychological consequences are linked to a lower rate of unethical behaviour among religion adherents (Kennedy & Lawton, 1998).

Stack and Kposowa (2006) discuss the impact of religious moral codes on unethical conduct from the perspective of the theory of moral communities. They suggest that communities with strong moral values might reduce the deviant or unethical attitudes of individuals within them, regardless of any individual's own level of religiosity. People with relatively low levels of personal religiosity may be influenced by the attitudes and behaviour of people with high levels of religiosity in the greater community. Hence, moral communities may strengthen religious attitudes and beliefs for everyone in them, even those who are irreligious.

Empirical research has linked religion and ethical values in managerial attitudes and decision making (Conroy & Emerson, 2004; Kennedy & Lawton, 1998; Longenecker et al., 2004; Parboteeah, Hoegl, & Cullen, 2008; Rashid & Ibrahim, 2008), and in business practices, including accounting (Dyreng et al., 2010; Grullon et al., 2010; Hillary & Hui, 2009; Omer et al., 2010). Longenecker et al. (2004) examined differences in ethical judgements among various religious groups: Catholic, Protestant, Jewish, other religions and no religion. They surveyed 1,234 business managers and professionals in the United States regarding the ethical acceptability of 16 business decisions. They found that respondents who have strong religious convictions tend to demonstrate a higher level of ethical judgement. In a similar vein, Conroy and Emerson (2004) examined whether the ethical attitudes of students were affected by religiosity, and/or courses in ethics, religion, or theology. Using 25 vignettes, their results show that religiosity is, statistically, a significant predictor of responses in a number of ethical business scenarios. However, they found that completing religion or ethics courses explained little variation in ethical attitudes.

Parboteeah et al. (2008) examined the relations between religiosity and the justification of ethically-suspect behaviours. The justification of ethically-suspect behaviour refers to the degree that respondents would be willing to justify behaviours that are generally considered unethical (e.g., bribing and cheating). They hypothesised that religious beliefs are negatively related to justifications of unethical behaviour. Using a sample of 63,087 individuals from 44 countries, they found that religion is negatively related to an individual's willingness to justify ethically-suspect behaviours. This empirical evidence implies that religion is an important mechanism in shaping societal ethical values and norms.

Prior studies also indicate that religion affects business and accounting practices. Grullon et al. (2010) attempted to investigate the effect of religion on unethical corporate behaviour. They examined federal class action lawsuits against corporate executives and corporations. Option back-dating, excessive executive compensation and earnings manipulation through accrual choices were selected as proxies for unethical corporate behaviour. They hypothesised that firms headquartered in more religious counties are less likely to be involved in unethical behaviours because such firms adopt the ethical values of their local communities as an important part of their own corporate culture. Consistent with their prediction, the results show that firms headquartered in more religious counties are less likely to be the target of class action securities lawsuits, to manipulate earnings through accrual accounting choices, to backdate options or to grant large compensation packages to their managers. The results suggest that managers bring their communities' religious values to their workplace, mitigating unethical managerial behaviours.

Dyreng et al. (2010) examined whether religious social norms are associated with aggressive financial reporting.[17] They contend that religious social norms might influence managerial reporting behaviour in two ways. First, religious individuals are generally characterised as risk averse (Hillary & Hui, 2009). Thus, if a firm is located in regions where religious social norms are more prevalent, managers of such firm become more risk averse and more sensitive to litigation risk when making a financial reporting decision. Second, religious social norms may invoke reminders of personal norms such

[17] Dyreng et al. (2010) defined aggressive financial reporting as accounting that is manipulated either within or outside the confines of GAAP to reflect something other than the economic reality for the benefit of management.

as honesty and morality. These personal norms could drive ethical behaviour in business conduct because deviation from personal norms could damage an individual's self-concept. Both aversion to litigation risk and costs of deviating from personal norms are increased when managers report aggressively. Thus, they hypothesised that firms located in areas with more religious adherence are less likely to engage in aggressive financial reporting than firms located in areas with less religious adherence. Consistent with their hypothesis, they found that firms operating in countries with higher levels of religious adherence exhibit low analyst-based, forecast-error distributions, have higher accrual quality, have a lower risk of fraudulent accounting and are less likely to restate their financial statements.

Similar to Dyreng et al. (2010) and Grullon et al. (2010), McGuire et al. (2010) found that firms headquartered in areas with strong religious social norms exhibit less aggressive financial reporting. In particular, they documented that a religious ethical code is negatively associated with accounting risk, unexplained audit fees, and likelihood of accounting-related shareholder lawsuits. This empirical evidence suggests that religious moral codes play a significant role in deterring unethical corporate behaviour.

Prior studies however, examined the affect of religious ethics on unethical corporate practices in a setting where there are no clear guidelines to make a selection between a religious mode of business and a non-religious mode of business. This study extends prior research by examining the effect of Islamic ethical values on unethical corporate behaviours, particularly earnings management practices in a setting where the firms

driven by religious ethics are distinctly classified through well-defined institutional arrangements.

The expectation of the association is stated in the research hypotheses that are developed and discussed in the next section.

4.3 HYPOTHESES DEVELOPMENT

4.3.1 *Shariah* and Accrual-based Earnings Management

Schelling (1968), and Durant (1950) argue that religion is the basis of civilised behaviour in modern societies because religion provides the basic premises for morality and accountability. Indeed, Lewis (2001) argues that religion had a role in shaping and enforcing ethical behaviour such as truthfulness, honesty and justice. *Shariah*, in this sense, establishes the moral codes for appropriate behaviour and accountability in Islamic societies. In the case of *Shariah* firms, since entry into the ICM is by means of attaining certain standards of good conduct, the firms are likely to adopt and maintain higher standards of business ethics in the running of their business and their accountability to the stakeholders. The firms are guided by these moral codes in their strategic choices of which products and services to deal in, how to deliver these products and services, how to finance their businesses, how to conduct their day-to-day business practices and in what manner they should be accountable to their stakeholders.

As the choice to obtain *Shariah* status lies with the senior management, they are likely to have higher moral standards in the first place and are less likely to have the need to conceal inferior business practices. In other words, managers with higher moral standards are likely to choose *Shariah* status for their firm. On the other hand, when a

firm becomes *Shariah*-listed, irrespective of the moral standards of the managers, the firm is expected to follow higher ethical norms. Therefore, with better business practices and higher standards of morality, *Shariah* firms will have less need to manipulate their accounts. These firms are expected to be free from unethical, immoral transactions and the manipulation of earnings and to avoid insider trading and other activities which might have an adverse effect on investment activities. The ICM ensures that no one suffers from any form of injustice or loss. This is not a strong feature of conventional capital markets, which allows social inequity through unequal distribution of wealth, such as liberal, profit-based compensation packages to senior executives (Naughton & Naughton, 2000). The ICM also exposes executives to the importance of disclosing truthful and reliable information in the *Shariah* firms' annual reports.

Jo and Kim (2008) argue that firms with extensive disclosure are less likely to face information problems, and more likely to lead to active shareholder monitoring, and therefore, engage in fewer, unethical activities, such as earnings management. Healy and Palepu (2001) highlight that disclosure generally improves transparency and thus reduces incentives to manage earnings since increased transparency helps investors detect earnings management. Indeed, Schipper (1989) argues that the absence of full communication (or the existence of blocked communication), together with asymmetric information, makes it possible for managers to manage earnings. This implies that earnings management is less likely for firms that consistently disclose more information because the increased transparency lowers information asymmetry and helps investors recognise earnings management (Jo & Kim, 2008).

Jo, Kim, and Park (2007) examined the association between a firm's disclosure frequency and earnings management, and the impact of this association on post-issue Seasoned Equity Offering (SEO) performance. They argue that greater disclosure frequency around the SEO period helps reduce information asymmetry between managers and investors. This reduction of information asymmetry limits any temporary overvaluation of the SEO, reducing post-issue SEO underperformance. Consistent with their predictions, the results show that disclosure frequency is inversely associated with the earnings management proxy and performance-adjusted discretionary total accruals. They also find that post-issue SEO performance is positively associated with disclosure frequency, implying that disclosure reduces post-SEO underperformance.

Islamic ethics also stress transparency in business dealings. Ali and Al-Owaihan (2008) assert that transparency is prescribed as a moral responsibility in Islam. Basically, transparency means that financial transactions must be conducted in such a manner that all parties are clear about the important facts of the transactions (Securities Commission, 2009e). It is important to avoid all causes of disputes, clashes or damages to any party. In Islam, managers of *Shariah* firms are trustees of Allah on the earth. As the trustees, managers must be responsible for each possession that they are managing for Allah and ultimately be fully accountable to Allah for their actions. In discharging their accountability to Allah and society, the managers of *Shariah* firms need to provide corporate reports according to the full disclosure concept. The concept requires management to disclose all the necessary information about their activities, even when the possibility of such information may be unfavourable for the firms (Maali et al., 2006). Haniffa and Hudaib (2002) highlight that the full disclosure of relevant and reliable information is crucial in Islam because it assists users, especially those from

outside the firm, in making both economic and religious decisions. The disclosure also enables Muslim investors to recognise *Shariah*-compliant investment increasing their level of confidence when making investment decisions (Securities Commission, 2009e).

Lewis (2001) also notes that full disclosure is necessary for predicting future obligations and returns, and assessing investment risk in Islamic financing arrangements. The prohibition of interest in Islam leads to the creation of alternative schemes for the remuneration of capital. In Islamic economics, the prevalent method of compensation is by means of a profit-and-loss sharing contract where the return to the lenders of capital is in accordance with an agreed ratio in the profit or loss outcome of the project in which they have invested (Presley & Sessions, 1994). Under this arrangement, the disclosure of the potential returns and risks associated with the securities investment, as well as the contractual relationships between the parties involved, are important. Thus, *Shariah* firms have to maintain transparency in disclosing financial information relevant to the securities investment.

Shariah firms also are required to disclose more information to show that their primary activities do not conflict with Islamic law. As annual reports of firms become one of the main sources for the SAC to classify the *Shariah* status among listed firms of Bursa Malaysia, *Shariah* firms tend to disclose more information, to show that their activities do not conflict with Islamic principles. *Shariah* firms which are involved in prohibited activities, such as interest-based transactions and production of tobacco, will disclose more information regarding these non-permissible elements (e.g., the way they dispose of the amounts generated from the activities and their efforts to reduce their involvement in such activities in the future) in order to convince investors and

regulators (Anam, 2005). The firms also provide disclosure pertaining to such activities to assist the SAC to ensure the contribution of these non-permissible elements is within the benchmarks. Therefore, if such accountability and full disclosure concepts are demanded in Islam, then the focus of Islamic corporate reporting practices will be far wider and more reliable than conventional reporting practices. Therefore, it is hypothesised that:

Hypothesis 1: *Shariah* firms have lower levels of accrual-based earnings management than non-*Shariah* firms.

4.3.2 *Shariah* and Real Earnings Management

A more recent study, Graham et al. (2005) found that managers prefer to manage earnings via real economic decisions rather than accounting accruals. They reported that 80 per cent of survey participants in their study took economic actions such as reducing discretionary expenses on R&D, advertising and maintenance in order to meet an earnings target. According to Roychowdhury (2006), although real earnings management might reduce a firm's value, managers were more willing to manage earnings through real activities as such practices are less likely to draw auditor or regulatory scrutiny.

In the Malaysian context, Salleh (2009) provides similar findings. He found that a majority of survey participants who had experienced missing an earnings target preferred to make economic sacrifices rather than manipulate accounting figures. One of the participants in Salleh's study said:

> "We sit down in our third quarter meeting, look into the figures then try

> to reduce expenses like advertising, travelling and R&D. These actions are within our control" (p.166).

The findings imply that Malaysian firms prefer to manage earnings via real economic decisions rather than accruals manipulation.

A review of literature on earnings management highlights that ethics cannot limit real earnings management (Cohen et al., 2008; Cohen & Zarowin, 2010; McGuire et al., 2010). For example, Cohen et al. (2008) found that although ethical codes derived from SOX reduce accrual-based earnings management, managers still continue to manage earnings via real economic transactions. They found that the SOX ethical code is unable to limit real earnings management. McGuire et al. (2010) also found that religion-influenced firms engage in real earnings management to manage earnings numbers. They argue that although religion-influenced firms have better earnings quality and are less likely to engage in activities that result in financial statement irregularities, they still face capital market pressures to meet earnings targets. In either meeting or beating earnings targets, managers of religion-influenced firms may prefer real earnings management than accruals manipulation because such practices are considered less unethical as they are not a violation of GAAP.

Regardless of the methods of real earnings management and their determinants, *Shariah* prohibits such practices. Real earnings management practices seem to violate the concept of justice in Islam. *Shariah* prohibits business dealings carried out by unlawful ways. In Islam, unlawful ways include all unjust acts, such as cheating, fraud,

misrepresentation and the exploitation of contracting parties to gratify personal interests (Mahmood, 2008). Based on this notion, this study hypothesises that:

Hypothesis 2: *Shariah* firms have lower levels of real earnings management than non-*Shariah* firms.

The next section describes the research design employed in the earnings management part of the study.

4.4 RESEARCH DESIGN AND METHODOLOGY

4.4.1 Sample Selection and Data Collection

The sample for this study covers *Shariah* firms and non-*Shariah* firms listed on Bursa Malaysia from 2000 to 2007. The study limits the sample from year 2000 to 2007 as earlier annual reports are not available on Bursa Malaysia's website. The initial sample consists of 9,981 firm-year observations. The classification of *Shariah* and non-*Shariah* firms is based on the *Shariah* index issued by the SAC. The data required for computing accrual-based and real earnings management were collected from Global Vantage, while the data for boards of directors and types of ownership were collected from published annual reports available at the Bursa Malaysia announcements website. The accrual-based and real earnings management data from Global Vantage were then matched with the firms' boards of directors and types of ownership data.

This study excludes firms in the banking and finance sector as they have their own guidelines and governance systems. This study also excludes firms with negative equity as these firms could be under serious stress and would not be operating in the normal

manner of a going concern. Consistent with Roychowdhury (2006), this study excludes the hotel and infrastructure sector as both of them have less than 15 firm-year observations. Further, to control for potential outliers, this study removed the top and bottom 0.5 per cent of each proxy of earnings management used in the study. This procedure yielded 1,883 firms with complete data.

Table 4.1 Sample Selection Process

Sample selection criteria	Firm-year observations
Total firm-year observations from Global Vantage, 2000-2007	9,981
Excluding financial institution.	120
Excluding firm-year observations with missing AEM and REM data	6,249
Excluding firm-year observations with missing market value, market to book and total debt/total asset data	1,033
Excluding firm-year observations with missing annual reports.	541
Excluding firm-year observations from hotel and infrastructure sectors	26
Excluding potential outliers and firms with negative equity values	134
Full sample	1878

4.4.2 Operationalisation of the Dependent, Independent and Control Variables

4.4.2.1 Dependent variables: Earnings management

Since the mid-1980s, studies of reported earnings manipulation have focused primarily on accruals management. Young (1999) argues that accrual choices are widely

employed because they are a relatively low cost mechanism by which managers can affect reported numbers, and are by nature relatively opaque. However, the study by Graham et al. (2005) reported that managers prefer to manage earnings through real transactions rather than discretionary accruals, as accruals management is more likely to be scrutinised by auditors and regulators after the passage of SOX. Consistent with those conjectures, Cohen et al. (2008), and Cohen and Zarowin (2010) found that managers have shifted away from accrual to real accounting choices to manage financial reporting outcomes in the post-SOX period.

The current study examines both accrual-based and real earnings management to capture earnings manipulation activities amongst public firms in Malaysia. The analysis of AEM and REM is predicated on the inadequancy of analysing only discretionary accruals as a proxy for earnings management when earnings can also be managed by using real economic transactions.

4.4.2.1.1 Accrual-based earnings management (AEM)

Studies such as Klein (2002) and Gul, Chen, and Tsui (2003), among others, used discretionary accruals to study earnings management activities and show earnings to be of higher quality if accruals quality is high (Boonlert-U-Thai, Meek, & Nabar, 2006). Several alternative models have been employed in previous studies to detect discretionary accruals. The first, known as the Healy (1985) model, uses the level of total accruals to measure discretionary accruals as a proxy for earnings management and requires the assumption that nondiscretionary accruals are stable over time. By contrast, the DeAngelo (1986) model focuses on the changes in total accruals. In this model, the nondiscretionary component of accrual is assumed to follow a random walk, so the

change in total accruals between the benchmark and test periods is assumed to be discretionary. More recent researchers have employed a regression-based model, such as the Jones (1991) model or the modified Jones model (Dechow, Sloan, & Sweeney, 1995) to derive discretionary accruals. Perry and Williams (1994) argue that these models incorporate the economic activities of the companies during the test period, which may provide improved benchmarks over the earlier random walk model.

Further, Dechow et al. (1995), and Guay, Kothari, and Watts (1996) found that the modified Jones model is a robust model for detecting earnings manipulation in the event of managers exercising their discretion over revenue recognition. For example, managers could determine the appropriate timing to recognise credit sales, which would either increase or decrease the reported earnings over a period. Consistent with prior studies (Chin et al., 2006; Koh, 2007; Yeo et al., 2002), this study uses the modified Jones model to calculate discretionary accruals to capture accrual earnings manipulation activities.

In employing the modified Jones (1991) model, total accruals are decomposed into non-discretionary and discretionary accruals. The nondiscretionary accruals or normal accruals are estimates by managers that represent changes in the underlying economic performance of the company. For example, as the level of sales and purchases during the growth period increases, the magnitude of accounts payable and accounts receivable would increase accordingly. On the other hand, discretionary accruals are open to managers' discretion and, hence, are operationalised as a proxy for accrual accounting manipulation in the study. Similarly to Osma and Noguer (2007), Rahman and Ali (2006), and Klein (2002), this study incorporates absolute values of discretionary

accruals as the dependent variable. Haw et al. (2004) argue that absolute discretionary accruals using the Jones (1991) Model captures the insiders' tendency to both overstate reported income, to conceal resource diversion and to understate income in good performance years to create reserves for poor performance periods in the future. They argue this measure also avoids conceptual ambiguity associated with benchmark measures. Benchmark measures, they believe, do not consider whether the observed results are achieved through income management, expectations management, or improvement in operations. Haw et al. (2004) further argue that the unsigned abnormal accrual captures the net effect of all accounting choices, including a portfolio of both income-increasing and income-decreasing accrual estimations and the method chosen by insiders to disguise firm performance. Likewise, this study uses absolute discretionary accruals as a proxy for capturing accrual choices manipulation activities.

Following Dechow et al. (1995), discretionary accruals are estimated as the residual from the following model.

$$TA_{it}/A_{it-1} = \alpha_0[1/A_{it-1}] + \beta_1[(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \beta_2[PPE_{it} / A_{it-1}] + \varepsilon_{it}$$

Where,

TA_{it}	Total accruals of firm i in year t [Income before extraordinary items less cash flow from operation];
A_{it-1}	Total assets of firm i in year t-1;
ΔREV_{it}	Revenues of firm i in year t less revenues of firm i in year t-1;
ΔREC_{it}	Receivables of firm i in year t less receivables of firm i in year t-1;
PPE_{it}	Gross property, plant and equipment of firm i in year t;

ε_{it} A residual term that captures the level of abnormal accruals of firm i in year t.

4.4.2.1.2 Real earnings management

Following Roychowdhury (2006), and Cohen and Zarowin (2010), this study refers to real earnings management as actions managers take that deviate from normal business practices. Consistent with prior research (Cohen & Zarowin, 2010; Roychowdhury, 2006), this study employs three metrics to examine real earnings management, namely abnormal cash flow from operations (RCFO), abnormal production costs (RPC) and abnormal discretionary expenses (RDE).

Consistent with Roychowdhury (2006), the study estimates RCFO, RPC and RDE as the residual from the following models, respectively.

$$CFO_{it}/A_{it-1} = \beta_1 [1/A_{it-1}] + \beta_2[Sales_{it} / A_{it-1}] + \beta_3[\Delta Sales_{it} / A_{it-1}] + \varepsilon_{it}$$

Where,

CFO_{it} Cash flow from operation in period t

A_{it-1} Total assets of firm i in year t-1;

$Sales_{it}$ Sales of firm i in year t

$\Delta Sales_{it}$ Sales of firm i in year t less revenues of firm i in year t-1;

ε_{it} A residual term that captures the level of abnormal cash flow of firm i in year t.

$$PROD_{it}/A_{it-1} = \beta_1 [1/A_{it-1}] + \beta_2[Sales_{it} / A_{it-1}] + \beta_3[\Delta Sales_{it} / A_{it-1}] + \beta_4[\Delta Sales_{it-1} / A_{it-1}] + \varepsilon_{it}$$

Where,

$PROD_{it}$ The sum of cost of goods sold and change in inventory of firm i in year t;

A_{it-1} Total assets of firm i in year t-1;

$Sales_{it}$ Sales of firm i in year t

$\Delta Sales_{it}$ Sales of firm i in year t less revenues of firm i in year t-1;

$\Delta Sales_{it-1}$ Sales of firm i in year t-1 less revenues of firm i in year t-2;

ε_{it} A residual term that captures the level of abnormal production cost of firm i in year t.

$$DISCEXP_{it}/A_{it-1} = \beta_1 [1/A_{it-1}] + \beta_2 [Sales_{it-1} / A_{it-1}] + \varepsilon_{it}$$

Where,

$DISCEXP_{it}$ The sum of R&D expenses and SG&A of firm i in year t[18];

ε_{it} A residual term that captures the level of abnormal discretionary expenses of firm i in year t.

According to Roychowdhury (2006), and Cohen and Zarowin (2010), firms that manage earnings upwards are likely to have one or all of these accounting effects: (i) unusually low cash flow from operations due to the increasing of price discounts or lenient credit terms in order to accelerate sales for the current period, (ii) unusually low discretionary expenses due to the aggressive reduction in R&D, advertising and SG&A expenses in

[18] Roychowdhury (2006) computes discretionary expenses as a sum of R&D expenses, advertising expenses and SG&A. However, this study excludes advertising expenses because such expenses are not available separately in the Global Vantage for Malaysian firms.

order to improve earnings for the current period, and (iii) unusually high production costs in order to reduce COGS, which in turn increase the operating margin for the current period.

Consistent with Zang (2006), and Cohen and Zarowin (2010), this study multiplies abnormal cash flow from operations and abnormal discretionary expenses by negative one, so the higher the amount of RCFO and RDE, the more likely it will be that the firms engage in sales manipulations through price discounts and cutting discretionary expenses. This study does not multiply RPC by negative one since higher production costs are indicative of manipulation through overproduction in order to reduce COGS.

4.4.2.2 Independent variable: *Shariah*

The key independent variable of this study is religious ethical values, *Shariah*. The measure of *Shariah* is a dummy variable indicating whether the firm holds *Shariah* status or not. The study uses the list of Shariah firms issued by the SAC to identify *Shariah* status.

This study also uses another alternative proxy for *Shariah*. The alternative proxy is the total revenue of the firm derived from activities in accordance with *Shariah* (SHARIAHREV). To compute SHARIAHREV, any revenue from prohibited activities—such as the production and selling of alcohol, tobacco and non-*halal*-related products, gambling, interest-based transactions, hotel and entertainment activities—is deducted from the total revenue of the firm. The study uses the annual reports of the firms to compute *Shariah* revenue and non-*Shariah* revenue.

4.4.2.3 Control variables

To test the hypotheses, this study controls for other variables identified in the literature that can also influence earnings management practices.

i. Firm specific characteristics

First, the study controls for firm size. Large firms often receive more media attention, have a higher analyst following and face regular political scrutiny. Therefore, they would tend not to manage their earnings upwards. Second, the study controls for debt. Firms with higher levels of debt would have their earnings scrutinised by debt providers or their agents e.g., trustees, such that they do not inflate earnings to benefit the shareholders or managers at the expense of the debt providers through dividends and earnings-based compensation. However, prior studies also report that highly leveraged firms have greater incentives to use aggressive accounting techniques in order to avoid debt covenant violations. For example, Sweeney (1994) documented that managers of firms approaching debt covenant default are more likely to make income-increasing changes in periods before the violation. Third, the study controls for growth. Growth firms are likely to have higher accruals because of increased revenue-generating activities, such as credit sales. Lobo et al. (2008) argue that high-growth firms have more pronounced incentives to follow aggressive reporting policies to meet or better the expectations of analysts and the market because failure to do so can evoke a significantly negative market response. Thus, they assert that such firms are more likely to practice aggressive reporting behaviour such as aggressive earnings management. Fourth, the study controls for audit quality since higher quality auditors are more likely to ensure greater transparency and eliminate mistakes in financial statements because they have a greater reputation to uphold (Wahab, How, & Verhoeven, 2007). Thus,

clients of higher quality auditors are less likely to manage earnings as they have better corporate governance. The study also controls for ROA. Rahman and Ali (2006) noted that firms with low ROA have more incentive to engage in earnings management. An industry dummy is also included in the study to control for industry effects.

ii. Board of director characteristics

Further, the study controls for boards of directors as this variable has been recognised in previous literature to have an effect on earnings management. The study uses six boards of directors' proxies; independent directors, board size, CEO duality, independent audit committee members, Muslim Chairman and Muslim board members. Under this category, the study controls firstly for independent directors. Fama and Jensen (1983) theorised that the board of directors is the highest internal control mechanism responsible for monitoring the actions of top management. However, they argue that the ability of the board to act as an effective monitoring mechanism depends on its independence from management. Independent directors are believed to be able to monitor managers as they have incentives to develop their reputations as experts in decision control (Agrawal & Chadha, 2005). Thus, the presence of independent directors on the board is seen as a check and balance mechanism in enhancing a board's effectiveness and constraining opportunistic behaviour among managers (Haniffa & Cooke, 2002).

In Malaysia, the MCCG acknowledges that to have an effective board, there must be a right balance in board composition—*viz*., independent non-executive, non-executive and executive directors—to ensure that no individual or small group of individuals can dominate the board's decision-making. Further, the Bursa Malaysia listing rules

stipulate that at least two directors or one third of the board, whichever is higher, must be independent non-executive directors.

Consistent with these views, prior studies found evidence that supports the effective monitoring role played by independent directors in deterring accounting fraud (Beasley, 1996) and earnings management via discretionary accruals (Davidson et al., 2005; Klein, 2002; Peasnell, Pope, & Young, 2005; Su, 2001). For example, Beasley (1996) revealed that dominant non-executive directors on the board are less likely to be related to the fraudulent practices of U.S. firms. Further, in a study involving family-controlled firms in Taiwan, Su (2001) showed that family-controlled firms without independent directors on the board are likely to have more abnormal accruals. In a similar vein, Peasnell et al. (2005), Davidson et al. (2005) and Klein (2002) also found that the probability of abnormal discretionary accruals decreases as the proportion of outside (independent) directors increases for a sample of U.K., Australian and U.S. boards, respectively. On the other hand, some authors such as Chtourou, Bedard, and Courteau (2001), Siregar and Utama (2008), and Rahman and Ali (2006) found that independent boards for public firms in the US, Indonesia, and Malaysia have no significant influence on abnormal discretionary accruals. Despite these conflicting results, this study predicts a negative association between board independence and earnings management practices as the theory suggests.

Secondly, the study controls for board size. Jensen (1993), and Sánchez-Ballesta, and García-Meca (2009) suggest that the number of directors is one of the important factors in the effectiveness of the board. There are two views regarding this issue. Proponents of agency theory believe that a larger board has more opportunity to control and monitor

the actions of management as it has a greater number of people with more expertise (Dalton, Johnson, & Ellstrand, 1999), and valuable experience (Xie, Wallace, & Dadalt, 2003) to prevent or limit managerial opportunistic behaviour. Further, Finkelstein and D'Aveni (1994) noted that a larger board has more problem-solving capabilities as the burden of the directors is equally shared among them.

However, a larger board, as proposed by agency theory, also has drawbacks. For example, Lipton and Lorsch (1992), and Jensen (1993) argue that a larger board size beyond seven or eight people is less likely to function effectively. That is because the ability to process problems competently reduces as board size becomes larger (Jensen, 1993). Hermalin and Weisbach (1991) also assert that a larger board size might create difficulties for the members to use their knowledge and skills effectively due to the problems of coordinating their contributions. In addition, prior studies also highlight that small boards are more effective in monitoring a CEO's action (Jensen, 1993), as well as increase the board's ability to advise and engage in long term strategic planning as they are able to make timely strategic decisions (Goodstein, Gautam, & Boeker, 1994).

Empirical evidence generally shows a link between board size and discretionary accruals (Bradbury, Mak, & Tan, 2006; Chin et al., 2006; Rahman & Ali, 2006; Xie et al., 2003). Nevertheless, results regarding the effect of board size on discretionary accruals are conflicting. While Chin et al. (2006) and Rahman and Ali (2006) found a positive association between board size and abnormal accruals in Hong Kong and Malaysia, respectively, other authors report a negative association between both variables (Bugshan, 2005 in Australia; Bradbury et al., 2006 in Malaysia and Singapore;

Xie et al., 2003 in the US). Due to the conflicting results, this study does not predict any direction on the association between board size and earnings management.

Thirdly, the study controls for audit-committee independence. Prior studies suggest that the effectiveness of an audit committee is due, in part, to the extent to which the committee is independent. Indeed, a study by Peasnell et al. (2005) failed to find evidence that the existence of an audit committee reduces the level of earnings management. This result suggests that the presence of an audit committee alone, without independent members, is less likely to be an effective monitor for managerial opportunism. Independence is considered an essential quality for an audit committee in fulfilling its oversight role as it allows both the internal and external auditors to remain free of undue influences and interference from management (Vicknair & Hickman, 1993).

Because of the importance of an audit committee with its independent members as a monitoring mechanism, Malaysian public listed companies have, since 1994, been required by Bursa Malaysia to establish an audit committee. In addition, the code specifies that an audit committee should comprise at least three directors, the majority of whom are independent, while its chairman should be an independent non-executive director.

Several studies present evidence suggesting that an audit committee with highly independent members constrains earnings management. For example, Chtourou et al. (2002), Klein (2002), Xie et al. (2003), Davidson et al. (2005), Peasnell et al. (2005), and Bradbury et al. (2006) found that the independence of the audit committee is

negatively associated with discretionary accruals. Therefore, this study predicts that the proportion of independent directors on the audit committee is negatively associated with earnings management.

Fourthly, the study controls for CEO duality. CEO duality or the 'dominant personality' phenomenon occurs when the same person holds the two most dominant posts in the firm, namely those of CEO and chairman of the board. Advocates of agency theory argue that CEO duality—which implies CEO dominance over the board—promotes CEO entrenchment and can lead to opportunistic and inefficient behaviour that reduces shareholder wealth (Jensen & Meckling, 1976).

Hamid (2008) contends that the CEO is responsible for the day-to-day running of the firm and the chairman monitors and evaluates the performance of the executive directors, including the CEO. Thus, without an independent chair, the monitoring and evaluative role is likely to be biased. Further, CEO duality also represents a conflict of interest in which a CEO who is responsible for the overall strategic management of a firm is also in a position to evaluate the effectiveness of that strategy (Finkelstein & D'Aveni, 1994). In such a situation there is an increased likelihood that the CEO will undertake strategies that deviate from the interests of shareholders (Fama & Jensen, 1983). Agency theory, therefore, supports the separation of the two roles in order to provide an essential check and balance over managerial performance (Haniffa & Cooke, 2002) and CEO ambition (Blackburn, 1994).

Nevertheless, empirical evidence on the association between CEO duality and earnings management seems not to support this theory as most authors find no significant

relation (Bradbury et al., 2006; Bugshan, 2005; Davidson et al., 2005; Rahman & Ali, 2006).

Despite these results, in Malaysia, the MCCG strongly recommends the separation of these roles in order to avoid any conflict of interest in managing companies and to promote better monitoring of management and reduce managerial opportunism. Based on this recommendation, the study predicts that the separation of CEO and chairman positions is negatively associated with earnings management.

Finally, the study controls for the Muslim chairman and Muslim board members. Bardai (2002) studied the influence of the Islamic ethical code on Muslim board members. He contends that as followers of Islam, Muslim directors believe that they are servants of Allah, who are required to serve Allah through good behaviour in all aspects of their daily life, even in their work and business dealings. They are expected to be honest, sincere, and truthful in their business dealings and transactions, and manage their business within the ethical framework devised by Allah.

Muslim directors also believe that they are vicegerents or stewards of Allah. As a steward of Allah, they recognise that all possessions, wealth, expertise, positions and power belong to Allah. They are responsible for utilising and managing the wealth and resources in accordance with Allah's will. Abdullah and Lim (2001), who examined the influence of religious beliefs on the ethnic groups in Malaysia, reveal that Malay managers (mostly Muslim) have a more positive attitude towards religion. They also found that Malay managers' work ethics are strongly anchored in their religious belief. Consistent with these findings, Ramasamy, Ling and Ting (2007) found that companies

with a Malay CEO voluntarily disclose much more information than companies with a Chinese CEO. These results suggest that a Malay CEO has a lower rating on individualism as Islam encourages collectivism rather than individualism, encouraging management to be more concerned about the public and other stakeholders. Therefore, if such responsibilities and accountabilities are built into the Muslim CEO and directors, they might promote good deeds and prevent wrongdoing. These personal values will then be reflected in the way they manage the business and will shape the board and organisational culture. Such culture is expected to mitigate opportunistic behaviour among top management and other staff members.

Rahman, Dowds and Cahan (2005) examined the differences between earnings-management practices of the Malaysian Muslim-managed firms and non-Muslim-managed firms. They hypothesised that firms with a majority of Muslim managers will resort to less earnings management than firms with a majority of non-Muslim managers. However, they failed to find any significant statistical evidence to support their hypothesis. Therefore, this study does not predict a direction on the association between Muslim chairman and board members and earnings management practices.

iii. Ownership structure

This study controls for the ownership structure of firms. The ownership proxies' used in this study include: managerial ownership, family ownership, government ownership, MSWG institutional ownership, foreign ownership, individual ownership, and corporate ownership. The first ownership structure proxy, managerial ownership, is measured by percentage of shares owned by a firm's directors. The measure includes both direct and indirect interests in the firm, consistent with prior studies such as Hashim and Devi

(2007). Jensen and Meckling (1976) argue that shareholdings by management would reduce agency costs as high insider-ownership implies a greater alignment of interests between management and shareholders. This would reduce the opportunistic behaviour of managers. According to the incentive-alignment argument, managerial ownership can be seen as a mechanism to constrain the opportunistic behaviour of managers as insiders will become more involved in the company when they own greater shares of the firm and, consequently the need for outside monitoring will be reduced. Nonetheless, excessive management shareholdings could lead to management entrenchment and appropriation of minority shareholder wealth. Fama and Jensen (1983) postulate that firms that are controlled by management are more likely to manage earnings.

Empirical results on the association between managerial ownership and earnings management are mixed. While Warfield, Wild and Wild (1995) find a negative association between managerial ownership and discretionary accruals in U.S. firms, Gabrielsen, Gramlich, and Plenborg (2002), Bradbury et al. (2006) and Rahman and Ali (2006) fail to find significant empirical evidence for Danish, Singaporean and Malaysian firms respectively. These studies however, mainly focus on the linear relation between the two variables. Morck, Shleifer, and Vishny (1988) argue that the size of insider ownership does matter and the effect can be both positive and negative. In particular, they argue that the entrenchment effect would be dominant for intermediate levels of managerial ownership, while the alignment effect would be dominant for low and high levels of managerial ownership. Consistent with this notion, other authors, Yeo et al. (2002), Sánchez-Ballesta and García-Meca (2007) and Teshima and Shuto (2008) examined the non-linear relation between both variables. For example, Yeo et al. (2002) examined the non-linear relation between managerial

ownership and income-increasing discretionary accruals in a sample of Singapore companies. The study found that when the level of managerial ownership is below 25 per cent, managerial ownership has a negative effect on discretionary accruals, suggesting dominance of the alignment effect at this level of ownership. However, above this level, the association reverses on both variables, consistent with the entrenchment effect being strong for this level of ownership.

Similarly, Sánchez-Ballesta and García-Meca (2007) also found a non-linear relation between managerial ownership and discretionary accrual for Spanish firms. Further, Teshima and Shuto (2008) presented a theoretical model that generates a prediction on the relation between managerial ownership and managers' incentives by demonstrating two conflicting effects, the incentive alignment effect and the management entrenchment effect. Consistent with their theoretical model, as well as the findings of prior studies (Lennox, 2005; Morck et al., 1988), they found a significant non-monotonic relation between managerial ownership and discretionary accrual. Specifically, the absolute value of discretionary accruals is negatively related to managerial ownership in both the lower (0 - 13.6 per cent) and higher (38.8 per cent) ownership range and is positively related in the intermediate (13.6 - 38.8 per cent) ownership range. The results suggest that the effect of managerial ownership on opportunistic discretionary accruals can be positive or negative depending on the size of ownership. Due to the conflicting results, this study does not predict a direction for the association between managerial ownership and earnings management.

The second proxy is family ownership. A family blockholder is one of several alternatives or ancillary internal control mechanisms in mitigating agency problems

between management and shareholders in widely held firms. Typically, "family controlled firms can be defined as companies in which one or more families linked by kinship, close affinity, or solid alliances hold a sufficiently large share of capital to enable them to make decisions regarding strategic management" (Prencipe, Markarian, & Pozza, 2008, p.76). However, the question of whether family ownership provides incentives to reduce agency costs through a better alignment of shareholder and managerial interests or create incentives by providing opportunities for family members to expropriate the wealth of outside shareholders remains an open empirical issue.

There are conflicting theoretical viewpoints regarding the association between family ownership and opportunistic earnings management. On the one hand, several researchers agree that concentrated shareholdings in the hands of family provide incentives to reduce agency costs through a better alignment of shareholder and managerial interests. For example, Prencipe et al. (2008) assert that an undiversified, long term blockholder-controlling family is less likely to focus on short term performance and the related oscillation of the stock market. This is because the main goal of the controlling family is to ensure the long term survival and prosperity of the company rather than to maximise short term shareholder wealth. Also, as the controlling owner, a family also has more incentive to reduce agency costs as a family firm represents an asset to be passed on to subsequent generations.

However, some authors draw attention to the possibility that concentrated ownership of a firm by a family can create incentives for insiders (controlling family and management) to expropriate a firm's assets at the expense of outside shareholders. For instance, Morck and Yeung (2003) contend that family firms might use their

concentrated blockholding to expropriate the wealth of outside shareholders through excessive compensation, related-party transactions and special dividends.

Prior studies on the association between family controlled business and earnings management seem more consistent with the entrenchment effect argument. For example, Su (2001) examined the relation between board composition and earnings management of listed family-controlled companies in the Taiwanese stock market, where an audit committee and outside directors are not compulsory. The study predicted that when the board composition of family-controlled companies was dominated by family members, the ability of such a board to mitigate earnings management may be weakened. Consistent with his expectations, the study found that family controlled companies are more likely to undertake earnings management than non-family controlled companies through related-party transactions, particularly the sales of properties, and inventories to the related-parties.

In the Malaysian business setting, Lim (1981) has documented that the ownership and control of Malaysian firms is primarily by families of Chinese and European descent. A more recent study, Claessens, Djankov, and Lang (2000), has also highlighted that approximately 67.2 per cent of the 238 Malaysian firms in their sample are owned by families. Further, they have shown that 80.7 per cent of firms in Malaysia are managed by the controlling family and have an owner-manager. These statistics show that family-owned companies are a common feature of the Malaysian business environment. Thus, consistent with the previous research findings, this study predicts a positive association between family ownership and earnings management.

The next proxy is government ownership. Government ownership is measured by the proportion of government shareholding through government-linked investment companies and other government agencies. Government ownership is another strong feature of the Malaysian corporate sector. Government-linked companies (GLCs) represent 40 per cent of the market capitalisation of the Malaysian stock market (Yen et al. 2007), and play an important role in the development of the Malaysian economy as their main objectives are not purely profit driven but are to achieve social objectives. In particular, GLCs have been set up to restructure and ensure a more equitable society by enhancing Bumiputera participation in the corporate sector and the Malaysian capital market. GLCs are controlled by the Malaysian government through Government-linked Investment Companies (GLICs). GLICs are the investment arms of the government allocating some or all their funds to GLC investments. Currently, there are seven GLICs including: the Employee Provident Fund, Khazanah Nasional Berhad, Kumpulan Wang Amanah Pencen, Lembaga Tabung Angkatan Tentera, Lembaga Tabung Haji, Menteri Kewangan Diperbadankan and Permodalan Nasional Berhad. Apart from having controlling ownership in the GLCs, the government also has the ability to appoint board members, senior management and make major decisions in such areas as contract awards, strategy, restructuring and financing, acquisitions and divestment for GLCs.

Previous research suggests that there are two competing views on the effects of government intervention on companies' earnings management practices. According to the incentive alignment argument, companies with government intervention are normally are better governed (Ang & Ding, 2006; Lau & Tong, 2008) and more politically sensitive (Ghazali, 2007). More specifically, the activities of these firms are not only under the watchful eyes of the public, i.e., the investors and shareholders, but

also the government. As a result, management of these firms is more conscious of the importance of maximising shareholders' value over self-interest, which might limit managerial opportunism (Lau & Tong, 2008).

On the other hand, Wang (2002) contends that government intervention is the main factor for the inefficiency of state shareholdings, resulting from poor governance practices and greater agency problems. Ding, Zhang, and Zhang (2007) argue that the agency problems in state-owned firms are more complex than in privately-owned firms because there is an extra agency relationship in such firms as the controlling owners are themselves agents of the true owners i.e., the state. In particular, there is one more type of agency cost in state-owned firms—the agency cost between the state and the controlling owner—in addition to the agency cost between the controlling owner and minority shareholders. Further, Yen et al. (2007) argue that unlike owner-managers who have to risk their own resources, GLCs managers are using public funds as their major resources. The nature of their compensation, which is directly tied to accounting number, creates more incentive for the top management to manage the reported earnings in order to maximise their compensation.

Prior studies on the association between government ownership and earnings management practices seem to support the management entrenchment effect hypothesis. For instance, Ding et al. (2007) was the first study to examine earnings management practices in Chinese state-owned listed firms. This study revealed that such firms are more likely to manage earnings via operating-related accrual mechanisms and non-operating transactions with related parties. Yen et al. (2007) also found similar results. Their study investigated the prevalence of earnings management between GLCs and

Chinese family-linked companies in Malaysia. The results show that GLCs are more likely to engage in earnings management practices than Chinese family-linked companies. Further, the study also reveals that GLCs are more likely to engage in income-increasing earnings management, while Chinese family-linked companies tend to manipulate earnings through income-decreasing methods. The findings suggest that the disparity in the direction of earnings management could be attributed to the motives of management. The motive of GLCs to manage reported earnings is related to managerial compensation plans as their managers' compensation is tied directly to accounting results. On the other hand, the motive of Chinese family-linked firms to engage in income-decreasing earnings management might be attributed to tax related issues as management attempt to minimise taxable income, and improve cash flows. Based on the previous research findings, this study predicts a positive association between government ownership and earnings management.

The fourth proxy controlled for by this study is MSWG institutional ownership. MSWG institutional ownership is measured by the proportion of shares owned by the five largest institutional investors with respect to the total number of shares issued (Hashim & Devi, 2007; Wahab et al., 2007). Prior studies provide evidence suggesting that institutional investors are playing an active role in monitoring and disciplining managerial discretion (Bushee, 1998; Koh, 2007; Velury & Jenkins, 2006). Gillan and Starks (2000) highlighted that the emergence of institutional investors as equity owners has the potential to influence a management's activities directly through their ownership, and indirectly by trading their shares. Extant literature however, posits two competing views on the effects of institutional ownership on earnings management. First, according to the incentive alignment argument, in widely-held firms institutional

investors with substantial shareholdings can act as a monitoring tool in reducing agency conflicts between managers and shareholders as they are able to force management to focus on economic performance and eschew opportunistic behaviour. This occurs because large institutional investors have more opportunity, resources and incentives to monitor and influence management decisions (Gillan & Starks, 2000). Further, Koh (2003) pointed out that as institutional shareholding grows, the exit option becomes more expensive—since large block sales generally entail large discounts—and therefore investors are more likely to focus on long term performance and to get involved in monitoring their portfolio firms. This long term orientation coupled with active participation in portfolio firms' corporate governance limits managers' discretion and reduces their incentive to manage earnings.

In addition, Velury and Jenkins (2006) highlighted that institutional investors, who are generally thought to be sophisticated investors, are more capable of detecting earnings management and monitoring the quality of financial reporting. This is because institutional investors are more able to analyse financial statements thoroughly and proficiently than individual investors.

The effectiveness of such a monitoring function however will be dependent on the nature of their investment horizons (Bushee, 1998; Koh, 2007), the constraints to which they are subjected, their objectives and their preferences for liquidity (Gillan & Starks, 2000). Proponents of the entrenchment hypothesis believe that institutional investors have an inherent short term orientation. They argue that such institutional investors—normally known as myopic (or transient) investors— focus excessively on current earnings rather than long term earnings in determining stock prices (Bushee, 1998). This

short investment horizon limits institutional investors from incurring monitoring costs, as the benefits of governing the portfolio firms are unlikely to accrue to investors in the short run. Thus, since such institutional investors are less likely to be involved in monitoring the opportunistic behaviour of management and tend to focus excessively on current earnings, it creates incentives for managers to manage earnings aggressively.

However, empirical evidence, suggests that institutional investors are not necessarily myopic. For example, Chung, Firth and Kim (2002) found that the presence of large institutional investors inhibit managers in managing earnings. This evidence is consistent with that of other studies such as Koh (2007), and Bushee (1996) which concluded that institutional investors reduce opportunistic earnings management through their monitoring activities and their focus on governance.

In Malaysia, institutional investors have emerged as a powerful constituent playing a very significant role in corporate governance. The MSWG, established in 2000, comprises the five largest institutional funds: two pension funds, an investment fund, a pilgrim fund, and an insurance fund. It represents about 70 per cent of the total institutional shareholdings in firms listed on the Bursa Malaysia's Main Board (Rahman, 2008). These institutional funds: the Employee Provident Fund, Lembaga Tabung Angkatan Tentera, Lembaga Tabung Haji, the Social Security Organization and Permodalan Nasional Berhad. The main role of MSWG is to enhance shareholder activism and to protect minority shareholders' interests. Thus, as MSWG plays a significant role in corporate governance in mitigating the problems associated with conflict between controlling owners and minority shareholders in Malaysia, this study

predicts a negative association between MSWG institutional ownership and earnings management.

The fifth proxy the study controls for is foreign ownership. Foreign ownership is measured by the percentage of shares owned by the foreign investors of a firm. Foreign investors are another important blockholder in the ownership structure of Malaysian firms. Since early 1990s, the liberalisation of capital inflows, including securities investment, has encouraged international investors to put their money into the Malaysian capital market. The existence of foreign ownership in Malaysian firms provides a good signal for the market, indicating the high profitability or high growth of such firms (Abbas & Christensen, 2009). In addition, Cheung, Kim and Lee (1999) contend that foreign investors are more sophisticated than individual (domestic) investors because they are primarily institutional investors such as mutual funds or pension funds. Foreign investors, by comparison, also have an advantage in in being able to process publicly available information into private, value-relevant information.

Further, Suto (2003) argues that long term foreign ownership reduces the agency cost of equity financing. This is because foreign investors play a monitoring role in disciplining corporate management by reducing information asymmetry between managers and shareholders as they are more concerned about corporate value and demand more information than local investors. Jiang and Kim (2004) provide evidence consistent with Suto's (2003) findings. In their study, they reported that information asymmetry is lower for firms with high foreign ownership than for firms with low foreign ownership. Besides, they also report that foreign investors are more attracted to equity shares of

firms with low information asymmetry between the firm (inside managers) and the market (outside investors).

Thus, as foreign investors promote transparency in business and alleviate information asymmetry, it is expected that foreign blockholding in Malaysian firms might mitigate opportunistic earnings management. Based on these arguments, this study predicts a negative association between foreign ownership and earnings management.

Finally, this study controls for individual and corporate ownership. Individual and corporate ownership are measured by the percentage of shares owned by the individual and corporate investors of the firm, respectively. The study makes no prediction about the association between these variables and earnings management.

All the shareholdings above (except for managerial shareholding) are based on the 30 largest shareholders disclosed by the firms in their annual reports. Similar to Ishak and Napier (2004), this current study identified types of block ownership by reviewing the list of the 30 largest shareholders disclosed by the firms in their annual reports.[19] All accounts that belong to the same individual or group are aggregated. The blockholders then are classified into several categories namely family, individual, government, MSWG institutional investors, financial institutions, corporation and foreign investors. Consistent with La Porta, Lopez-de-Silanes and Shleifer (1999), this study uses a 20 per cent cut-off to classify firms into widely-held and block-owned firms. Based on this 20 per cent cut-off point, the study classifies sample firms into the following categories: family-owned, individual-owned, corporate-owned, government-owned, MSWG

[19] In compliance with the Companies Act 1965, all Malaysian public firms are required to disclose their substantial shareholders including the 30 largest shareholders in the analysis of shareholding in the annual report.

institutional-owned and foreign-owned firms. At this point, financial institutions are excluded as a blockholder since the sample does not contain a firm with that type of blockholding.

4.4.3 Multivariate Regression Models

A multiple regression analysis was employed to test the research hypotheses. The following four models were estimated to investigate the impact of *Shariah* on each proxy of accrual-based and real earnings management. The regression equations are as follows:

$$AAC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi$$

(Model 1)

$$RCFO_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi$$

(Model 2)

$$RPC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi$$

(Model 3)

$$RDE_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi$$

(Model 4)

Where,

Dependent variable:

AAC_{ft}	Magnitude of discretionary accruals (natural log of absolute value of abnormal accruals) of firm *f* in year *t* computed on the basis of the Modified Jones Model.
$RCFO_{ft}$	Magnitude of abnormal cash flows (the residual value multiplied by negative one) of firm *f* in year *t* computed on the basis of the RCFO Model (Roychowdhury, 2006).
RPC_{ft}	Magnitude of abnormal production costs of firm *f* in year *t* computed on the basis of the RPC Model (Roychowdhury, 2006).

RDE_{ft}	Magnitude of abnormal discretionary expenses: R&D and SG&A expenses (the residual value multiplied by negative one) of firm *f* in year *t* computed on the basis of RDE Model (Roychowdhury, 2006).

Independent variable:

$SHARIAH_{ft}$	1 if *Shariah* firm and 0 otherwise,

Control variables:

$BDIND_{ft}$	The proportion of independent directors on the board,
$BDSIZE_{ft}$	The number of directors on the board,
$ACIND_{ft}$	The proportion of independent directors on the audit committee,
$CEO/CHAIR_{ft}$	1 if CEO is not board chair and 0 otherwise,
$MCHAIR_{ft}$	1 if a firm's Chairman is Muslim, 0 otherwise,
$MDIR_{ft}$	The proportion of board members who are Muslim,
$DIROWN_{ft}$	The proportion of managerial ownership,
$FMLYOWN_{ft}$	The proportion of family ownership,
$GOVOWN_{ft}$	The proportion of government ownership,
$FGNOWN_{ft}$	The proportion of foreign ownership,
$MSWGOWN_{ft}$	The proportion of MSWG institutional ownership,
$INDOWN_{ft}$	The proportion of individual ownership,
$CORPOWN_{ft}$	The proportion of corporate ownership,
$SIZE_{ft}$	Natural log of total assets,
$DEBT_{ft}$	The ratio of total liabilities to total assets,
$GROWTH_{ft}$	The ratio of market value to book value of equity,
$PROFIT_{ft}$	Earnings (EBIT) to total assets,
$AUD4_{ft}$	1 if a firm is audited by Big-4 audit firms and 0 otherwise,
$YEAR_{ft}$	Year,
IND_{ft}	Industry.

Model (1) examines the association between *Shariah* and accrual-based earnings management. Meanwhile, Models (2) - (4) are used to examine the influence of *Shariah* on real earnings management. The next section reports and discusses the findings of the study.

4.5 RESULTS AND FINDINGS

4.5.1 Descriptive Analysis

4.5.1.1 Sample characteristics

Table 4.2 provides the descriptive statistics of the sample across years and industry groups. A majority (87.00 per cent) of the sample (company-year observations of 1,878 firms, from 2000 – 2007) are *Shariah* firms. With regards to the classification of firms into respective industry groups[20], the largest proportion of the sample is from the industrial product sector, which accounts for 40.42 per cent of the sample. This is followed by consumer product (22.47 per cent), trading (18.64per cent), and firms in the construction sector (6.76 per cent). Firms from the plantation sector, and the technology sector, represent 6.39 per cent and 3.78 per cent of the sample, respectively. The property sector accounts for only 1.54 per cent of the sample.

[20] The classification of firms into respective industry groups was based on the Bursa Malaysia sector code.

ble 4.2: Descriptive Statistics of Sample (Firm-years N=1,878 (*Shariah* firms N=1,634; non-*Shariah* firms N=244)

Year																Total
2000		2001		2002		2003		2004		2005		2006		2007		
Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	
29	2	56	9	98	8	103	14	101	14	98	15	100	13	86	13	759 (40.42)
16	1	30	0	59	5	64	5	58	7	55	6	59	5	50	2	422 (22.47)
10	5	21	7	35	9	35	12	41	10	40	10	48	10	45	12	350 (18.64%)
4	2	9	1	17	0	14	1	18	1	19	0	20	1	16	4	127 (6.76%)
3	1	5	2	12	6	12	5	13	4	20	0	17	4	12	4	120 (6.39%)
3	0	4	1	6	2	9	1	9	0	11	0	14	0	10	1	71 (3.78%)
0	0	1	0	3	0	3	2	3	1	4	2	3	2	3	2	29 (1.54%)
65	**11**	**126**	**20**	**230**	**30**	**240**	**40**	**243**	**37**	**247**	**33**	**261**	**35**	**222**	**38**	**1,878 (100%)**

Table 4.3 reports the descriptive statistics of the sample firms' specific characteristics. As shown in the table, the mean natural log of total assets (SIZE) is 5.46 for *Shariah* firms and 6.38 for non-*Shariah* firms. Relative to non-*Shariah* firms, *Shariah* firms have a lower mean of profit (ROA), leverage ratio (DEBT) and growth rate (GROWTH).

In terms of corporate governance mechanisms, the numbers of directors on *Shariah* firms' boards are between 3 and 15, which is comparable to the board size of non-*Shariah* firms (between 3 and 17). The average board size for *Shariah* firms and non-*Shariah* firms is 7.43 and 7.68 respectively. Prior studies in the Malaysian market (for example, Yatim, 2006; Rahman & Ali, 2006; Hashim, 2009) also report a similar finding. For instance, Yatim (2006) documents that board size of Malaysian firms is between 3 and 16, with an average of 7.51. The average percentage of independent non-executive directors on *Shariah* firms' board is 40.0 per cent, being slightly lower than for non-*Shariah* firms (41.1 per cent).

With respect to the composition of independent non-executive directors on audit committees, on average, 70.0 per cent of audit committee members of *Shariah* firms have independent non-executive directors. Meanwhile, the average number of independent non-executive directors on audit committees of non-Shariah firms is 71.0 per cent. The result is consistent with the findings of Yatim (2006), who reported in her study that about 79 per cent of audit committee members of Malaysian listed firms are independent non-executive directors.

For the composition of Muslim directors on the firms' boards, the percentage ranges from 0 - 100 percent. Surprisingly, the mean percentage of Muslim directors on the board is higher in non-*Shariah* firms (41.4 per cent) than *Shariah* firms (37.00per cent).

In terms of the ownership structure of the sample firms, the means of the director ownership (60.21 per cent) and family ownership (23.47 per cent) of *Shariah* firms are higher than non-*Shariah* firms (48.61 per cent and 22.9 per cent, respectively). The percentage of government ownership for *Shariah* firms ranges from 0 – 86.28 per cent, with average shareholdings of about 7.18 per cent. For non-*Shariah* firms, the percentage of government ownership ranges from 0 - 89.89 percent, with average shareholdings of about 9.69 per cent. With regards to other blockholdings, *Shariah* firms have lower means than non-*Shariah* firms for foreign ownership, individual ownership, corporate ownership and MSWG institutional ownership.

Table 4.3: Descriptive Statistics of Firm-Specific Continuous Variables

	Shariah Firms (*N*= 1,634)							Non-Shariah Firms (*N*= 244)						
	Mean	Median	Std Dev.	Min	Max	P25	P75	Mean	Median	Std Dev.	Min	Max	P25	P75
SIZE	5.47	5.02	1.40	2.74	11.12	4.55	5.89	6.42	6.72	1.76	2.97	10.39	4.89	7.75
PROFIT	0.01	.03	0.14	-3.70	0.6	-.01	.06	.02	.02	.18	-1.17	1.42	-.01	.06
DEBT	24.49	20.80	24.15	.00	274.94	7.22	35.99	26.45	23.88	23.78	.00	137.14	4.72	39.65
GROWTH	1.14	.85	2.61	-72.35	22.55	.59	1.38	1.46	.83	2.84	-.92	23.13	.47	1.41
BSIZE	7.43	7	1.92	3	15	6	9	7.68	7	2.16	3	17	6	9
BIND	.40	.38	.11	.00	.83	.33	.44	.41	.40	.11	.17	.83	.33	.50
ACIND	.70	.67	.11	.00	1	.67	.75	.71	.67	.12	.33	1	.67	.75
MDIR	.37	.33	.26	.00	1	.20	0.50	.41	.36	.28	.00	1	.22	.60
DIROWN	60.21	41.28	64.01	.00	478.38	14.29	87.61	48.61	37.24	55.76	.00	296.86	.62	65.85
FMLYOWN	23.47	23.67	23.93	.00	89.19	.00	45.89	22.90	28.2	25.27	.00	88.61	.00	44.05
GOVOWN	7.18	.00	18.18	.00	86.28	.00	.00	9.69	.00	21.89	.00	89.89	.00	.00
FGNOWN	2.55	.00	11.46	.00	86.47	.00	.00	4.46	.00	14.86	.00	69.95	.00	.00
IDVOWN	4.71	.00	11.76	.00	58.19	.00	.00	5.14	.00	15.29	.00	59.56	.00	.00
CORPOWN	3.64	.00	11.10	.00	75.00	.00	.00	4.02	.00	12.52	.00	60.54	.00	.00
MSWGOWN	3.71	.00	12.06	.00	82.63	.00	.00	4.05	.00	12.60	.00	76.36	.00	.00

Table 4.4 reports a descriptive analysis of the sample firms' specific characteristics, board and ownership structure which are identified as dummy variables.

Table 4.4: Descriptive Statistics of Firm-Specific Dummy Variables

Variables	No. of Firms		Percentage	
	Shariah (N=1,634)	Non-Shariah (N=244)	Shariah	Non-Shariah
AUD 4	1075	183	65.80%	75.00%
CEO/CHAIR	1304	210	79.80%	86.07%
MCHAIR	848	139	51.90%	56.97%

Similar to prior studies, a majority of the firms in the sample (66.99 per cent) are audited by a Big Four audit firm. Table 4.5 also indicates that more non-*Shariah* firms hire Big Four audit firms (75 per cent) than *Shariah* firms (65.80 per cent). Prior studies also documented a higher percentage use of the Big Four auditing firms (the Big Five, the Big Six or the Big Eight) in their sample firms, for example, Yatim (2006) and Johl et al., (2007) in Malaysia, Carcello et al., (2002) in the United States and Chan et al., (1993) in the United Kingdom.

Further, a majority of the firms (80.62 per cent) in the sample separate the positions of the board chair and the CEO. In particular, 79.80 per cent and 86.07 per cent of *Shariah* firms and non-*Shariah* firms, respectively, separate the positions of the board chair and the CEO. This suggests that most Malaysian firms complied with the MCCG recommendation for the separation of the CEO and the chairman role. This finding is similar to the findings of Rahman and Ali (2006), Haniffa and Hudaib (2006), and Yatim (2006) for Malaysian listed companies.

Table 4.5 reports a descriptive analysis of the primary measurements of earnings quality in the present study: accrual-based earnings management and real earnings management. Panel A of the table provides the mean, standard deviation, range, minimum, and the maximum for the full sample. Panel B and C of the table present the same categories of descriptive for the *Shariah* firms (*N* = 1,634) and non-*Shariah* firms (*N* = 244).

Table 4.5: Descriptive Statistics of Accrual-based Earnings Management and Real Earnings Management Proxies

	Mean	Median	Std Dev	25%	75%	Min	Max
Panel A: Full Sample (*N*=1,878)							
Abnormal ACC-Residual	.001	.001	.148	-.056	.061	-3.696	2.080
Abnormal CFO-Residual	.001	-.000	.075	-.044	.044	-.231	.338
Abnormal PC-Residual	.005	.070	.255	-.059	.153	-1.281	.555
Abnormal RDE-Residual	.004	-.006	.087	-.043	.031	-.160	.592
Absolute Value of ACC	.081	.058	.124	.026	.105	.000	3.700
Natural log of AbsACC [AAC]	-3.043	-2.844	1.170	-3.647	-2.260	-9.410	1.310
Abnormal CFO-Residual*(-1) [RCFO]	-.002	.001	.076	-.044	.044	-.340	.230
Abnormal PC-Residual [RPC]	.005	.070	.255	-.059	.153	-1.281	.555
Abnormal RDE-Residual*(-1) [RDE]	-.004	.006	.087	-.031	.043	-.590	.160
Panel B: Shariah Firms (*N*=1,634)							
Abnormal ACC-Residual	.001	.003	.138	-.050	.061	-3.696	.522
Abnormal CFO-Residual	.002	.000	.075	-.043	.045	-.231	.339
Abnormal PC-Residual	.004	.071	.263	-.059	.156	-1.281	.555
Abnormal RDE-Residual	.005	-.005	.090	-.043	.033	-.161	.593
Absolute Value of ACC	.077	.055	.114	.025	.104	.000	3.700
Natural log of AbsACC [AAC]	-3.076	-2.893	1.154	-3.687	-2.262	-9.410	1.310
Abnormal CFO-Residual*(-1) [RCFO]	-.002	.000	.075	-.045	.043	-.340	.230
Abnormal PC-Residual [RPC]	.004	.071	.263	-.059	.156	-1.281	.555
Abnormal RDE-Residual*(-1) [RDE]	-.005	.006	.090	-.033	.043	-.590	.160

Table 4.5: Continues

Panel C: Non-Shariah Firms (*N*=244)							
Abnormal ACC-Residual	.001	-.019	.205	-.078	.057	-.693	2.080
Abnormal CFO-Residual	-.003	-.007	.075	-.049	.040	-.228	.254
Abnormal PC-Residual	.016	.061	.191	-0.056	.132	-.731	.437
Abnormal RDE-Residual	-.006	-.013	.063	-.040	.019	-.158	.188
Absolute Value of ACC	.108	.069	.174	.035	.107	.000	2.080
Natural log of AbsACC [AAC]	-2.838	-2.678	1.257	-3.352	-2.231	-9.050	.730
Abnormal CFO-Residual*(-1) [RCFO]	.003	.007	.075	-.040	.049	-.250	.230
Abnormal PC-Residual [RPC]	.016	.061	.191	-0.056	.132	-.731	.437
Abnormal RDE-Residual*(-1) [RDE]	.007	.013	.063	-.019	.040	-.190	.160

Abnormal ACC-Residual=The residuals from the regression of the Modified Jones (1991) Model; Abnormal CFO-Residual=The residuals from the regression of the abnormal cash flows from operations (RCFO) Model by Roychowdhury (2006); Abnormal PC-Residual=The residuals from the regression of the abnormal production costs (RPC) Model by Roychowdhury (2006); Abnormal RDE-Residual=The residuals from the regression of the abnormal discretionary expenses (RDE) Model by Roychowdhury (2006); Absolute Value of ACC=Absolute values of the residuals from the regression of the Modified Jones (1991) Model; Natural log of AbsACC [AAC]=Natural log of absolute values of the residuals from the regression of the Modified Jones (1991) Model; Abnormal CFO-Residual*(-1) [RCFO]=The residuals from the regression of the abnormal cash flows from operations (RCFO) Model by Roychowdhury (2006) multiplied by -1; Abnormal PC-Residual [RPC]=The residuals from the regression of the abnormal production costs (RPC) Model by Roychowdhury (2006); Abnormal RDE-Residual*(-1) [RDE]=The residuals from the regression of the abnormal discretionary expenses (RDE) Model by Roychowdhury (2006) multiplied by -1.

In general, the mean (median) of absolute value of discretionary accruals for the whole sample is 0.081 (0.058). Prior studies in the Malaysian market (for example, Rahman & Ali, 2006; Wan Ismail et al., 2010) also report a similar finding. For instance, Wan Ismail et al. (2010) documented that the median of the absolute value of discretionary accruals of their sample firms is 0.076. Table 4.5 also indicates that *Shariah* firms have lower absolute value of discretionary accruals than non-*Shariah* firms. The mean (median) absolute discretionary accruals are 0.077 (0.055) for *Shariah* firms and 0.108 (0.069) for non-*Shariah* firms.

With regards to real earnings management, *Shariah* firms have a lower mean of abnormal cash flow from operations (-0.002), abnormal production costs (0.004) and abnormal discretionary expenses (-0.005) compared to non-*Shariah* firms (0.003, 0.016 and 0.007, respectively).

4.5.2 Univariate and Bivariate Analysis

The univariate analysis carried out in the study involved an analysis of means and the bivariate analysis involved a correlation analysis. The results of the analyses are reported in the following subsections.

4.5.2.1 Comparison of mean values of *Shariah* and non-*Shariah* firms

Table 4.6 compares the mean values of earnings management measures and other continuous variables of *Shariah* and non-*Shariah* firms. As shown in Table 4.6, *Shariah* firms have a lower degree of discretionary accruals and abnormal discretionary expenses than non-*Shariah* firms. Further, *Shariah* firms are smaller and have a lower profit, growth rate, smaller board size and fewer Muslim directors on the board than

non-Shariah firms. Relative to non-Shariah firms, Shariah firms also have lower percentage of government ownership, corporate ownership and foreign ownership but have higher degree of managerial ownership.

Table 4.6: Comparison of Mean Values of *Shariah* and Non-*Shariah* Firms

	Shariah Firms (*N*=1634)	Non-Shariah Firms (*N*=244)	
	Mean	Mean	Differences (t-stats)
ACC	-3.072	-2.838	-2.901***
RCFO	-.002	.003	-1.184
RPC	.004	.016	-.860
RDE	-.005	.007	-1.963**
SIZE	5.47	6.372	-8.338***
PROFIT	.006	.012	3.152***
DEBT	24.49	26.290	-1.145
GROWTH	1.136	1.482	-1.632*
BSIZE	7.426	7.687	-1.980**
BIND	.407	.410	-.465
ACIND	.709	.708	.119
MDIR	.370	.409	-2.041**
DIROWN	60.219	48.592	2.574***
FMLYOWN	23.472	22.978	.338
GOVOWN	7.187	10.003	-1.984*
FGNOWN	2.546	4.461	-2.210**
IDVOWN	4.713	5.147	-.605
CORPOWN	3.641	4.847	-1.760*
MSWGOWN	3.71	4.048	-.423

***Significant at $p<0.01$ **Significant at $p<0.05$ *Significant at $p<0.10$

Table 4.7 compares the frequencies of dummy variables between *Shariah* and non-*Shariah* firms with substantial differences between the frequencies for *Shariah* and non-*Shariah* firms. Table 4.7 shows that more non-Shariah firms hire Big Four auditing firms (AUD4), practice dual leadership (CEO/CHAIR) and have Muslim chairman (MCHAIR) than *Shariah* firms. Therefore, *Shariah* firms do not seem to have better conventional arrangements than non-*Shariah* firms.

Table 4.7: Analysis of Dummy Variables between *Shariah* and Non-*Shariah* Firms

	Shariah Firms (*N*=1634)	Non-Shariah Firms (*N*=244)	Chi-Square Value
AUD4:			
Yes	1075 (65.80%)	183 (75%)	
No	559 (34.20%)	61 (25%)	6.598***
CEO/CHAIR:			
Yes	1304 (79.80%)	210 (86.07%)	
No	330 (20.20%)	34 (13.93%)	4.152**
MCHAIR:			
Yes	848 (51.90%)	139 (56.97%)	
No	786 (48.10%)	105 (43.03%)	1.865*
	***Significant at $p<0.01$	**Significant at $p<0.05$	*Significant at $p<0.10$

4.5.2.2 Correlation analysis

Table 4.8 shows the Pearson correlations and the Spearman correlations among all variables except the dummy variables of year and industry.

Table 4.8: Correlation Matrix of Dependent and Independent Variables (Pearson-lower triangle; Spearman-upper triangle)

	AAC	RCFO	RPC	RDE	SHARIAH	SIZE	PROFIT	GROWTH	DEBT	AUD4	BSIZE	BIND
AAC		.125**	-.057**	.033	-.068**	-.135**	-.130**	.025	.072**..	-.027	-.079**	.054*
RCFO	.065**		.220**	.018	-.025	-.113**	-.438-	-.166**	.228**	-.083**	-.078**	.093**
RPC	-.055**	.160**		-.205**	.026	.138**	-.136**	-.095**	.052*	-.095**	.075**	-.079**
RDE	.013	.059**	-.188**		-.033	.020	-.109**..	.020	-.013	-.112**	-.089**	.019
SHARIAH	-.066**	-.026	-.016	-.046*		-.163**	.006	.034	-.011	-.062**	-.016	-.025
SIZE	-.078**	-.092**	.096**	-.028	-.202**		.261**	.038	.140**.	.148**.	.284**	.018
PROFIT	-.168**	-.277**	-.090**	.020	-.005	.175**		.385**	-.480**	.127**	.212**	-.099**
GROWTH	.028	-.081**	-.030	-.077**	-.004	.053*	.127**		-.159**	.041*	.103**	-.028
DEBT	.092**	.203**	.061**	-.048*	-.023	.067**	-.432**	-.068**		-.159**	-.081**	.074**
AUD4	-.031	-.092**	-.114**	.069**	-.062**	.137**	.112**	.005	-.124**		.071**	-.042*
BSIZE	-.075**	-.049*	.029	-.038	-.029	.323**	.129**	.006	-.100**	.065**		-.303**
BIND	.046*	.093**	-.021	.031	-.013	.023	-.089**	-.001	.078**	-.041*	-.299**	
CEO/ CHAIR	.032	-.008	.076**	-.033	-.050*	.089**	.032	.031	-.022	.066**	.198**	-.040*
ACIND	-.009	.084**	.023	.002	.014	.147**	.012	-.027	.028	-.013	.098**	.398**
MCHAIR	.056**	.016	-.046*	-.030	-.022	.088	-.012	.014	.011	.007	.139	.055
MDIR	.091**	.031	-.078**	-.014	-.032	.311	-.015	.017	.052	.063	.078**	.154**
DIROWN	-.017	-.020	.040*	.013	.044*	-.211**	.073**	-.093**	-.066**	-.095**	.105	-.202
FMLYOWN	-.027	-.089**	.017	-.013	-.028	.031	.169**	.023	-.070**	-.012	.058	-.148
GOVOWN	-.019	-.033	-.053*	.010	-.055**	.249**	.105**	.085**	-.095**	.167**	.189	-.067
FGNOWN	-.028	-.080**	.009	-.071**	.026	.082**	.079**	.049*	-.078**	.078**	.139	-.027
INDOWN	.033	-.004	-.058**	.083**	-.005	-.089**	-.086**	-.065**	-.008	.035	-.136	.063
CORPOWN	-.032	.001	.004	-.050*	-.007	-.007	.035	.009	-.012	-.016	-.027	.068
MSWGOWN	-.002	-.049*	-.095**	.007	-.020	.132**	.103**	.072**	-.085**	.091**	.227	-.088

Table 4.8: Correlation Matrix (Continues)

	CEO/ CHAIR	ACIND	MCHAIR	MDIR	DIROWN	FMLYOWN	GOVOWN	FGNOWN	INDOWN	CORPOWN	MSWGOWN
AAC	.028	.001	.066**	.115**	.065	.049	.085	.218	.250	.172	.089
RCFO	-.003	.058**	.014	.010	-.022	-.084**	-.052*	-.084**	.013	-.016	-.068**
RPC	.089**	.038	-.040*	-.096**	.010	-.008	-.018	.051*	-.060**	-.003	-.027
RDE	-.074**	-.041*	-.023	-.025	.021	-.004	-.050*	.016	.074**	-.040*	-.033
SHARIAH	-.050*	.028	-.022	-.029	.044*	-.028	-.055**	.026	-.005	-.007	-.020
SIZE	.083**	.135**	.093**	.261**	-.211**	.031	.249**	.082**	-.089**	-.007	.132**
PROFIT	.071**	-.005	-.014	-.009	.073**	.169**	.105**	.079**	-.086**	.035	.103**
GROWTH	.040*	-.037	.038*	.085**	-.093**	.023	.085**	.049*	-.065**	.009	.072**
DEBT	-.020	.061**	.051*	.081**	-.066**	-.070**	-.095**	-.078**	-.008	-.012	-.085**
AUD4	.066**	-.019	.007	.066**	-.095**	-.012	.167**	.078**	.035	-.016	.091**
BSIZE	.200**	.139**	.141**	.095**	.014	.067**	.218**	.153**	-.147**	.001	.222**
BIND	-.062**	.329**	.054**	.136**	-.184**	-.130**	-.077**	-.030	.031	.039*	-.104**
CEO/ CHAIR		.055**	.361**	.153**	-.108**	-.084**	.115**	.086**	-.075**	.071**	.059**
ACIND	.060**		.061**	.112**	-.010	-.061**	.019	.011	-.016	.016	-.012
MCHAIR	.361**	.045*		.529**	-.266**	-.327**	.245**	.054*	.021	.200**	.110**
MDIR	.137**	.128**	.534**	-.407**	-.319**	.385**	.025	.019	.126**	.189**	-.407**
DIROWN	-.065**	-.013	-.205**	-.348**		.575**	-.372**	-.225**	-.001	-.037	-.186**
FMLYOWN	-.086**	-.061**	-.330**	-.336**	.548**		-.238**	-.209**	-.351**	-.281**	-.093**
GOVOWN	.123**	.045*	.275**	.504**	-.264**	-.282**		.037	-.104**	-.043*	.740**
FGNOWN	.075**	-.032	.052*	-.018	-.174**	-.206**	-.012		-.057**	-.050*	.086**
INDOWN	-.080**	.005	.006	.015	-.082**	-.341**	-.108**	-.062**		.033	-.067**
CORPOWN	.069**	.035	.178**	.110**	-.001	-.276**	-.077**	-.057**	-.012		-.021
MSWGOWN	.078**	.003	.145**	.270**	-.135**	-.138**	.624**	.040*	-.065**	-.047*	

**Significant at $p<0.01$(2-tailed), *Significant at $p<0.05$ (2-tailed)

As shown in Table 4.8, abnormal cash flows (RCFO) are positively correlated to the discretionary accruals (ACC) at the one per cent of significance level. However, ACC has a negative association with RPC at one per cent significance level. Of the independent and control variables used, ACC has a negative association with SHARIAH, SIZE, PROFIT and BSIZE and has a positive association with DEBT, BIND, MCHAIR and MDIR. This indicates that firms that have a lower degree of discretionary accruals are larger, profitable and have more directors on the board and hold *Shariah* status. RCFO has a negative association with SIZE, PROFIT and GROWTH, AUD4, BSIZE, FMLYOWN, FGNOWN and MSWGOWN and has a positive association with DEBT, BIND and ACIND. This indicates that the degree of abnormal cash flow from operations is lower if a firm is larger, profitable, has high growth ,more board members and concentrated family, foreign and MSWG institutional ownerships. For RPC, the positive correlation suggests that abnormal production cost is higher if a firm is larger, has high debt, and separate CEO and chairman positions. For RDE, the positive correlation suggests that the degree of abnormal discretionary expenses is larger in firms that hire Big Four auditors and is owned by individual blockholders.

The correlations in Table 4.8 also reveal that SHARIAH has a significant negative association with SIZE, AUD4, CEO/CHAIR and GOVWN. This indicates that *Shariah* firms are smaller, less likely to hire Big Four auditing firms and generally, practice dual leadership. Shariah firms also have a lower number of Muslim directors on board, are less likely to have Muslim chairman and have a lower degree of ownership by government.

4.5.3 Multivariate Analysis

As discussed in Section 4.4.3, four models are estimated to test the hypotheses of the study.

The results from the models are reported in the following subsections.

4.5.3.1 Discretionary accounting accruals, *Shariah* and control variables

Table 4.9 reports the results of Model (1).

Table 4.9: Results of the Association between Discretionary Accounting Accruals (ACC) and *Shariah* and the Control Variables

$$AAC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (1)$$

Variables	Predicted Sign	Coefficient	t-stat	P value
SHARIAH	-	-.308	-3.690	.000
Control Variables: Firm specific characteristics				
PROFIT	-	-.138	-5.231	.000
SIZE	-	-.067	-2.824	.002
DEBT	+/-	.001	.888	.187
GROWTH	+	.023	2.129	.016
AUD4	-	-.006	-.094	.462
Control Variables: Board of directors characteristics				
BIND	-	.155	.542	.294
BSIZE	+/-	-.029	-1.706	.044
ACIND	-	-.074	-.267	.394
CEO/CHAIR	-	.134	1.802	.036
MCHAIR	+/-	-.004	-.050	.480
MDIR	+/-	.666	4.572	.000
Control Variables: Ownership Structure				
DIROWN	+/-	.001	1.127	.130
FMLYOWN	+	.000	.147	.441
GOVOWN	+	-.004	-1.764	.039
FGNOWN	-	.000	-.096	.461
INDOWN	+/-	.001	.493	.311
CORPOWN	+/-	-.006	-2.046	.020
MSWGOWN	-	.004	1.405	.080
Intercept		-2.625	-10.100	.000
Observation		1,878		
Durbin-Watson		1.970		
R-Square		6..60		
Adjusted R-Square		5.00		

The results show that, as hypothesised, *Shariah* has a significant negative association with ACC ($p<0.001$). This suggests that *Shariah* firms have lower discretionary accruals (better earnings quality) as *Shariah* plays a monitoring role in reducing managerial opportunistic behaviour to manage earnings via discretionary accruals. The findings of the study are consistent to prior studies such as McGuire et al. (2010), who also found a negative significant association between religion and discretionary accruals.

Table 4.9 also shows the effect of the control variables on ACC. As predicted, ACC has significant negative associations with SIZE and PROFIT. These results suggest that discretionary accruals are lower among larger and profitable firms, consistent with the findings of previous studies (for example, Klein, 2002; Rahman & Ali, 2006; Wang, 2006; Xie et al., 2003). The negative association between SIZE and discretionary accrual is consistent with the expectation that larger firms are likely to be under closer scrutiny from outsiders than small firms (Watts & Zimmerman, 1978), which reduces the managers' opportunities to exercise accounting discretion. The results also indicate that the discretionary accruals are higher among high growth firms.

In terms of firms' board characteristics, there is a positive association between ACC and MDIR and CHAIR/CEO, but a negative association with BSIZE. The findings suggest that firms with higher proportions of Muslim directors and CEO and separate CEO and chairman have higher discretionary accruals. The results also indicate that discretionary accruals are lower among firms with larger boards. This is consistent with the earlier research by Bugshan, 2005 in Australia, Chtourou et al., 2001, and Bradbury et al, 2006 in Malaysia and Singapore, and Xie et al., 2003 in the United States.

In terms of ownership structure, government blockholding and corporation blockholding are significantly correlated to ACC. This result suggests that firms that have concentrated government ownership and corporate ownership have a lower degree of discretionary accruals.

Based on the multivariate analysis shown in Table 4.9, the adjusted R^2 of the model is 5.00%. The F statistic is significant at $p<0.001$. The Durbin-Watson statistic for auto correlation of 1.970 is within an acceptable range. Although the adjusted R^2 may be considered low, it is comparable to previous Malaysian studies. For example, Abdullah and Nasir (2004), and Rahman and Ali (2006), in examining the association between corporate governance mechanisms and discretionary accruals, also found a low adjusted R^2.

4.5.3.2 Abnormal cash flow from operations and *Shariah* and control variables

The findings of Model 2 are presented in Table 4.10.

Table 4.10: Results of the Association between Abnormal Cash Flow from Operations (RCFO) and *Shariah* and the Control Variables

$$RCFO_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (2)$$

Variables	Predicted Sign	Coefficient	t-stat	P value
SHARIAH	-	-.011	-2.053	.010
Control Variables: Firms' specific characteristics				
PROFIT	-	-.106	-7.942	.000
SIZE	-	-.005	-3.548	.000
DEBT	+/-	.000	3.835	.000
GROWTH	+	-.001	-1.600	.055
AUD4	-	-.004	-1.020	.154
Control Variables: Firms' board characteristics				
BIND	-	.022	1.239	.108
BSIZE	+/-	.001	.938	.174
ACIND	-	.043	2.490	.006
CEO/CHAIR	-	.000	.091	.463
MCHAIR	+/-	-.005	-1.155	.124
MDIR	+/-	.006	.643	.260
Control Variables: Firms' Ownership Structure				
DIROWN	+/-	.045	1.544	.061
FMLYOWN	+	-.136	-3.872	.000
GOVOWN	+	-.015	-.417	.338
FGNOWN	-	-.061	-2.448	.007
INDOWN	+/-	-.060	-2.309	.010
CORPOWN	+/-	-.041	-1.610	.054
MSWGOWN	-	-.008	-.293	.384
Intercept		-.006	-.388	.349
Observation		1,878		
Durbin-Watson		1.827		
R-Square		13.00		
Adjusted R-Square		11.40		

As shown in Table 4.10, the coefficient of Shariah yields a negative and significant figure. In relation to control variables, the degree of abnormal cash flows is higher in highly leveraged firms but lower among larger, profitable and highly growth firms. Further, firms that have more independent members on the audit committee are more likely to have higher discretionary cash flows. The results also reveal that abnormal cash flows are lower in firm that concentrated by family ownership, foreign ownership, individual ownership, and corporation ownership.

Based on the multivariate analysis shown in Table 4.10, the adjusted R^2 of the model is 11.40%. The F statistic is significant at $p<0.001$. The Durbin-Watson statistic for auto correlation of 1.827 is within an acceptable range.

4.5.3.3 Abnormal production costs and *Shariah* and control variables

Table 4.11 gives the results for Model 3. The study finds a negative coefficient for *Shariah* but the value is not significant. In relation to control variables, abnormal production costs are higher among larger firms, but lower in profitable firms and firms that hire Big Four auditors. Firms that are led by Muslim chairmen and have more Muslim directors are less likely to have higher abnormal production costs. However, abnormal production costs are higher among firms that have separated the CEO and chairman positions and have high degree of managerial ownership.

Table 4.11 also shows that abnormal production costs are lower in family-owned firms, individual-owned firms, and MSWG-owned firms.

Table 4.11: Results of the Association between Abnormal Production Costs (RPC) and *Shariah* and the Control Variables

$$RPC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (3)$$

Variables	Predicted Sign	Coefficient	t-stat	P value
SHARIAH	-	-.001	-.016	.493
Control Variables: Firms' specific characteristics				
PROFIT	-	-.107	-4.114	.000
SIZE	-	.171	5.737	.000
DEBT	+/-	-.008	-.317	.375
GROWTH	+	-.028	-1.239	.107
AUD4	-	-.112	-4.683	.000
Control Variables: Firms' board characteristics				
BIND	-	-.031	-1.118	.132
BSIZE	+/-	-.017	-.608	.271
ACIND	-	.010	.383	.351
CEO/CHAIR	-	.093	3.761	.000
MCHAIR	+/-	-.046	-1.553	.060
MDIR	+/-	-.097	-3.019	.001
Control Variables: Firms' Ownership Structure				
DIROWN	+/-	.053	1.766	.036
FMLYOWN	+	-.090	-2.510	.006
GOVOWN	+	-.018	-.500	.303
FGNOWN	-	.003	.114	.455
INDOWN	+/-	-.074	-2.802	.002
CORPOWN	+/-	-.004	-.155	.433
MSWGOWN	-	-.103	-3.490	.000
Intercept		-.083	-1.479	.139
Observation		1,878		
Durbin-Watson		1.9111.184		
R-Square		9.18.20		
Adjusted R-Square		7.56.60		

4.5.3.4 Abnormal discretionary expenses and *Shariah* and control variables

Table 4.12 presents the results of estimating the effects of *Shariah* on abnormal discretionary expenses. The results show that, as hypothesised, *Shariah* has a significant negative association with abnormal discretionary expenses.

Table 4.12 also reports the associations of the control variables with abnormal discretionary expenses. In general, the degree of discretionary expenses is lower among highly leveraged and high growth firms, but larger in firms that hire Big Four auditors. Further, abnormal discretionary expenses are lower among firms with higher corporate ownership and foreign ownership. However, the positive association with individual blockholding suggests that individual-owned firms are more likely to have higher abnormal discretionary expenses.

The adjusted R^2 of the model is 5.80%. The F statistic is significant at $p<0.001$. The Durbin-Watson statistic for auto correlation of 1.995 is within the acceptable range.

Table 4.12: Results of the Association between Abnormal Discretionary Expenses (RDE) and *Shariah* and the Control Variables

$$RDE_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (4)$$

Variables	Predicted Sign	Coefficient	t-stat	P value
SHARIAH	-	-.014	-2.191	.014
Control Variables: Firms' specific characteristics				
PROFIT	-	.027	1.016	.155
SIZE	-	-.010	-.346	.364
DEBT	+/-	-.049	-1.847	.032
GROWTH	+	-.083	-3.588	.000
AUD4	-	.058	2.399	.008
Control Variables: Firms' board characteristics				
BIND	-	.026	.937	.174
BSIZE	+/-	-.010	-.351	.363
ACIND	-	-.013	-.514	.303
CEO/CHAIR	-	-.025	-1.004	.158
MCHAIR	+/-	-.019	-.637	.262
MDIR	+/-	.009	.276	.381
Control Variables: Firms' Ownership Structure				
DIROWN	+/-	.026	.862	.194
FMLYOWN	+	-.047	-1.283	.100
GOVOWN	+	.006	.164	.434
FGNOWN	-	-.075	-2.940	.001
INDOWN	+/-	.037	1.387	.083
CORPOWN	+/-	-.053	-2.040	.021
MSWGOWN	-	.005	.163	.435
Intercept		.037	1.900	.029
Observation		1,878		
Durbin-Watson		1.995		
R-Square		7.40		
Adjusted R-Square		5.80		

4.5.3.5 Supplementary analysis: Earnings targets

Prior studies have documented that firms use discretionary accounting accruals to meet earnings targets (see for example, Bartov & Cohen, 2007; Koh, 2007; Peasnell et al., 2002). Therefore, it would be interesting for the current study to see whether *Shariah* helps to constrain accruals management to meet earnings targets. The study hypothesised that managers of *Shariah* firms are less likely to make income-increasing accruals to avoid reporting earnings losses or earnings declines.

Out of the 1,883 observations in the current study, 1,075 (808) have positive (negative) discretionary accruals. Of the 1,075 positive discretionary accruals observations, 863 are firms that meet or better their earnings targets via accrual management because their unmanaged earnings for the current period are less than last year earnings (UME < $EARN_{t-1}$). To meet last year's earnings ($EARN_{t-1}$), such firms are expected to use income-increasing discretionary accruals to improve the earnings number for the current period. Therefore, the current study uses 863 firms to examine whether *Shariah* constrains accruals management among firms that manage earnings to meet or exceed earnings benchmarks.

Following Peasnell et al. (2002), this study defines pre-managed earnings (UME) as the current year's reported earnings ($EARN_t$) minus discretionary accruals (ACC-Residual). This study expects the incentives for income-increasing earnings management to be particularly strong when UME falls below target earnings. Burgstahler and Dichev (1997) examined two types of earnings targets that managers will seek to avoid, namely reporting losses ($EARN_t$ <0) and earnings declines ($EARN_t$ < $EARN_{t-1}$). Following

Peasnell et al. (2002), this study predicts that income-increasing accruals will be more likely to occur when UME < $EARN_{t-1}$.

Table 4.17 reports the results of the regression of *Shariah* on income-increasing discretionary accruals. The results show that, as hypothesised, *Shariah* has a significant negative association with income-increasing discretionary accruals. The results support the view that *Shariah* constrains accruals management among firms that manage earnings to meet or exceed earnings benchmarks.

Table 4.18 also shows that firms that are larger and employed Big Four auditors are less likely to use income-increasing discretionary accruals to meet or exceed earnings target. However, such accruals management is more likely to be practiced among high growth firms and profitable firms.

Further, as shown in Table 4.17, the relation between income-increasing discretionary accruals and GOVOWN and INDOWN is positive and significant (p<0.05). This indicates that firms with concentrated ownership of government and individuals meet or exceed earnings targets using income-increasing discretionary accruals. However, the association between MSWG institutional investors and income-increasing discretionary accruals is negatively significant. This suggests that through the existence of the MSWG institutional investors constrain accruals management among firms that manage earnings to meet or exceed earnings benchmarks.

Table 4.13: Results of the Association between Income-Increasing Accruals (ACC) and *Shariah* and Control Variables

Variables	Predicted Sign	Coefficient	t-stat	Sig.P
SHARIAH	-	-.031	-2.330	.020
Control Variables: Firms' specific characteristics				
PROFIT	-	.205	2.758	.006
SIZE	-	-.037	-8.376	.000
DEBT	+/-	.001	.621	.535
GROWTH	+	.011	2.828	.005
AUD4	-	-.014	-1.826	.069
Control Variables: Firms' board characteristics				
BIND	-	-.009	-.188	.851
BSIZE	+/-	.001	.058	.954
ACIND	-	.006	.757	.450
CEO/CHAIR	-	.007	.792	.429
MCHAIR	+/-	-.003	-.392	.696
MDIR	+/-	.044	2.301	.022
Control Variables: Firms' Ownership Structure				
DIROWN	+/-	-.002	-.616	.538
FMLYOWN	+	.000	1.444	.150
GOVOWN	+	.001	2.058	.040
FGNOWN	-	.000	.296	.767
INDOWN	+/-	.001	2.380	.018
CORPOWN	+/-	-.001	-1.319	.188
MSWGOWN	-	-.002	-3.378	.001
Intercept		.311	5.832	.000
Observation		863		
Durbin-Watson		1.827		
R-Square		37.90		
Adjusted R-Square		31.70		

4.5.4 Robustness of Results

4.5.4.1 Multicollinearity

Multicollinearity is one of the statistical problems that occur when the correlations between two or more of the independent variables are high (Black, 2004). For this reason, correlation analysis was conducted to determine whether there is a multicollinearity problem among the independent variables (see Table 4.8). The coefficient is considered substantially strong if it exceeds +/- 0.50 (Vaus, 2002). The highest correlation coefficient between independent variables, as shown in Table 4.8 is 0.588. Therefore, to further check the problem of multicollinearity, a variance inflation factor (VIF) was also computed. The multicollinearity problem exists if the VIF exceeds the value of 10 (Black, 2004).

Table 4.14 shows the values of VIF for each independent variable in all regressions. The results indicate that the VIF values of each independent variable are far below 10, with the range between 1.042 and 2.726. This suggests that the multicollinearity problem is not a serious concern in this study.

Table 4.14: Multicollinearity Tests

Variable	Model 1 VIF	Model 2 VIF	Model 3 VIF	Model 4 VIF
SHARIAH	1.085	1.085	1.085	1.085
PROFIT	1.348	1.348	1.348	1.348
SIZE	1.780	1.780	1.780	1.780
DEBT	1.399	1.399	1.399	1.399
GROWTH	1.042	1.042	1.042	1.042
AUD4	1.138	1.138	1.138	1.138
BIND	1.528	1.528	1.528	1.528
BSIZE	1.489	1.489	1.489	1.489
ACIND	1.339	1.339	1.339	1.339
CEO/CHAIR	1.228	1.228	1.228	1.228
MCHAIR	1.724	1.724	1.724	1.724
MDIR	2.040	2.040	2.040	2.040
DIROWN	1.784	1.784	1.784	1.784
FMLYOWN	2.583	2.583	2.583	2.583
GOVOWN	2.726	2.726	2.726	2.726
FGNOWN	1.284	1.284	1.284	1.284
INDOWN	1.381	1.381	1.381	1.381
CORPOWN	1.319	1.319	1.319	1.319
MSWGOWN	1.728	1.728	1.728	1.728

4.5.4.2 Serial correlation

Given that the present study has time series data, models (1) - (4) were re-estimated using the Auto-Regressive Regression, which controls for auto/serial correlation. The presence of serial correlation in the residuals of the estimated equations might lead to incorrect estimates of the standard errors (Black, 2004). One way to investigate whether there is a serial correlation problem is by using the Durbin-Watson test. The value of the

Durbin-Watson test ranges from zero to four, where values 1.5 - 2.5 would indicate that there is no serial correlation between residuals (Black, 2004).

Table 4.15 reports the Durbin-Watson statistic for all the regression equations. The Durbin-Watson statistic for each of the autoregressive regressions shows the value ranges from 1.98 to 2.21, indicating there is no serial correlation in the residuals of the estimated equations.

After correcting for serial correlation, the results reported in Table 4.15 do not change the effect of *Shariah* on earnings management proxies. In particular, the association between *Shariah* and the four measures of earnings management, ACC, RCFO, RPC and RDE, are still negatively significant.

Table 4.15: Results of Autoregressive Regression

Variable/Regression	R1 ACC			R2 RCFO			R3 RPC			R4 RDE		
	Coeff	t-stat	p-value	Coeff	t-stat	p-value	Coeff	t-stat	p-value	Coeff	t-stat	p-value
SHARIAH	-0.356	-3.43	0.000	-0.015	-3.15	0.016	-0.152	-6.75	0.000	-0.156	-1.754	0.033
Control variable:												
PROFIT	-0.014	-3.90	0.000	-0.071	-4.43	0.000	2.548	0.07	0.004	-0.000	-0.29	0.387
SIZE	-0.145	-4.55	0.000	-0.007	-5.36	0.000	0.025	2.11	0.008	-0.000	-0.02	0.488
DEBT	0.078	3.50	0.145	0.001	3.25	0.000	0.078	1.55	0.376	-0.000	-1.19	0.022
GROWTH	0.016	1.56	0.029	-0.001	-2.53	0.005	-0.011	-0.44	0.324	-0.002	-3.38	0.000
AUD4	-0.016	-0.27	0.391	-0.004	-1.20	0.114	-0.001	-0.29	0.385	0.043	2.78	0.011
BIND	0.216	0.75	0.225	0.123	1.85	0.133	-0.003	-0.11	0.421	0.016	0.79	0.214
BSIZE	-0.027	-1.63	0.022	0.001	1.02	0.153	-0.001	-0.92	0.158	-0.000	-0.76	0.220
ACIND	-0.088	-0.32	0.375	0.039	2.26	0.012	0.033	1.75	0.136	-0.011	-0.55	0.290
CEO/CHAIR	0.134	1.80	0.035	0.000	0.18	0.427	0.077	0.44	0.035	-0.014	-0.91	0.185
MCHAIR	-0.007	-0.10	0.458	-0.016	-1.78	0.051	-0.045	-0.33	0.361	-0.003	-0.60	0.272
MDIR	0.683	4.66	0.000	0.009	0.98	0.195	-0.024	-2.21	0.013	-0.001	-0.22	0.425
DIROWN	0.000	0.74	0.229	0.000	1.03	0.152	0.000	0.75	0.032	0.000	1.20	0.123
FMLYOWN	0.000	0.24	0.405	-0.023	-2.56	0.000	-0.004	-0.25	0.005	-0.000	-0.23	0.145

Table 4.15: Continues

GOVOWN	-0.025	-1.77	0.042	-5.657	-2.54	0.334	0.000	0.79	0.163	0.000	0.21	0.8533
FGNOWN	-0.000	-0.08	0.468	-0.001	-2.12	0.010	0.000	0.14	0.455	-0.011	-2.68	0.0062
INDOWN	0.001	0.55	0.283	-0.000	-1.98	0.022	-0.021	-1.67	0.02	0.000	1.35	0.1780
CORPOWN	-0.005	-2.06	0.019	-0.000	-1.65	0.048	-0.000	-0.55	0.287	-0.001	-2.06	0.0371
MSWGOWN	0.021	1.85	0.013	-0.001	-0.45	0.329	-0.000	-2.90	0.065	0.000	0.21	0.8610
Intercept	-3.211	-9.32	0.000	-0.000	-1.01	0.098	0.071	2.56	0.000	0.037	1.95	0.055
R-Square			7.85			12.06			9.8			8.53
Adj. R-Square			6.77			11.59			8.3			7.63
Durbin-Watson			2.21			1.98			2.17			2.13

Dependent variables: ACC=Natural log of absolute values of the residuals from the regression of the Modified Jones (1991) Model; RCFO=The residuals from the regression of the abnormal cash flows from operations (RCFO) Model by Roychowdhury (2006) multiplied by -1; RPC=The residuals from the regression of the abnormal production costs (RPC) Model by Roychowdhury (2006); RDE=The residuals from the regression of the abnormal discretionary expenses (RDE) Model by Roychowdhury (2006) multiplied by -1. Independent Variable: SHARIAH=1 if Shariah firm and 0 otherwise. Control Variables: PROFIT= Earnings (EBIT) to total assets; SIZE= Natural log of total assets of firm; DEBT=Total liabilities to total assets of firm; GROWTH=Market value to book value of equity; AUD4=1 if a firm is audited by Big-4 audit firms and 0 otherwise; BIND=The proportion of independent directors on the board; BSIZE=The number of directors on the board; ACIND=The proportion of independent directors on the audit committee; CEO/CHAIR=1 if CEO is not board chair and 0 otherwise; MCHAIR=1 if a firm's Chairman is Muslim, 0 otherwise; MDIR=The proportion of board members who are Muslim; DIROWN=The proportion of managerial ownership; FMLYOWN=The proportion of family ownership; GOVOWN=The proportion of government ownership; FGNOWN=The proportion of foreign ownership; INDOWN=The proportion of individual ownership; CORPOWN=The proportion of corporate ownership; MSWGOWN=The proportion of MSWG institutional ownership.

4.5.4.3 Alternative measure for accrual-based earnings management

As a sensitivity test, two alternative measures of discretionary accruals were used in Model 1. Consistent with Siregar & Utama (2008), the first alternative measure of discretionary accruals is the absolute value of residual from the regression of the Kasznik (1999) model. The second additional measure is the absolute value of residual from the working capital accruals (WCA) regression of the Modified Jones (1991) Model.

Table 4.16 compares the results of Model 1 that involves each discretionary accruals measure. As shown in table 4.16, all significant coefficients remain significant with the same sign, except GROWTH, CHAIR/CEO and GOVOWN became not significant for Model 1, when the WCA measure was used. The primary independent variable, SHARIAH, remains significant with the same sign in all measures used. This indicates that for the key variable of the present study (SHARIAH) the results are robust against alternative measurements of discretionary accruals.

Table 4.16: Results of Regressions between Measures of Discretionary Accruals (ACC)

$AAC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi$

Variable/Regression	R1:WCA			R2:Kasznik		
	Coeff	t-stat	p-value	Coeff	t-stat	p-value
SHARIAH	-.045	-1.933	.026	-.076	-3.231	.000
PROFIT	-.047	-1.797	.036	-.159	-6.059	.000
SIZE	-.036	-1.206	.057	-.084	-2.799	.002
DEBT	.156	5.898	.000	.022	.817	.207
GROWTH	.029	1.282	.100	.025	1.082	.139
AUD4	-.011	-.455	.324	.020	.846	.199
BIND	-.013	-.467	.320	.014	.502	.307
BSIZE	-.053	-1.942	.026	-.081	-2.933	.001
ACIND	.012	.463	.321	.011	.410	.341
CEO/CHAIR	-.004	-.181	.428	.042	1.694	.045
MCHAIR	.058	1.987	.023	-.016	-.530	.298
MDIR	.054	1.697	.045	.136	4.224	.000
DIROWN	-.016	-.522	.301	.026	.863	.194
FMLYOWN	.013	.361	.359	-.007	-.179	.429
GOVOWN	.009	.235	.407	-.098	-2.621	.004
FGNOWN	.021	.836	.201	.014	.540	.294
INDOWN	-.051	-1.950	.025	-.017	-.642	.260
CORPOWN	.035	1.365	.086	-.030	-1.152	.124
MSWGOWN	-.021	-.724	.234	.004	.122	.451
Intercept	-3.042	-10.331	.000	-2.849	-10.631	.000
R-Square	9.40			8		
Adjusted R-Square	7.80			6.4		
Durbin-Watson	1.857			1.930		

4.5.4.4 Alternative measure for *Shariah*

In order to further analyse the effect of *Shariah* on earnings management, the current study uses percentage of non-*Shariah* revenues as an alternative measure of *Shariah*. The alternative measure is the percentage of revenue from activities that are consistent with *Shariah.* The study predicts a negative association between the percentages of revenue from activities that are consistent with *Shariah* (SHARIAHREV) and real and accrual-based earnings management proxies. This variable replaces the original *Shariah* dummy variable (SHARIAH) in all the four models. The results are reported in Table 4.17.

As shown in table 4.17, SHARIAHREV has a significant negative association with ACC. This suggests that *Shariah* firms have lower discretionary accruals (higher earnings quality) than non-*Shariah* firms. The association between SHARIAHREV and RPC is negative and significant. This indicates that *Shariah* firms have lower level of abnormal production costs. In addition, the association between SHARIAHREV and RDE is significantly negative, consistent with the findings for SHARIAH in Model 4. The results suggest that *Shariah* firms are less likely to reduce R&D expenses and SG&A expenses in order to manage reported earnings. However, the association between SHARIAHREV and RCFO is not significant, which is not consistent with the findings in Model 2. In general, the results for the key variable of the present study (SHARIAH) are robust for its alternative measurement, SHARIAHREV.

Table 4.17: Results of Regressions Using *Shariah* Alternative Variable

Variable/Regression	R1 ACC			R2 RCFO			R3 RPC			R4 RDE		
	Coeff	t-stat	p-value	Coeff	t-stat	p-value	Coeff	t-stat	p-value	Coeff	t-stat	p-value
SHARIAHREV	-.054	-2.225	.013	-.007	2.524	.205	-.062	-2.634	.004	-.082	-3.452	.000
PROFIT	-.140	-5.282	.000	-.205	-8.056	.000	-.106	-4.072	.000	.027	1.023	.153
SIZE	-.079	-2.587	.005	-.082	-2.810	.005	.159	5.321	.000	-.017	-.555	.289
DEBT	.028	1.032	.151	.097	3.750	.000	-.005	-.200	.420	-.045	-1.666	.048
GROWTH	.046	1.970	.026	-.032	-1.429	.076	-.032	-1.415	.078	-.088	-3.818	.000
AUD4	-.002	-.073	.471	-.021	-.919	.179	-.113	-4.755	.000	.057	2.365	.009
BIND	.019	.687	.246	.030	1.123	.131	-.027	-.981	.163	.032	1.137	.128
BSIZE	-.048	-1.743	.040	.023	.876	.190	-.016	-.582	.280	-.010	-.354	.361
ACIND	-.011	-.422	.336	.062	2.431	.007	.009	.366	.357	-.016	-.622	.267
CEO/CHAIR	.048	1.890	.029	.007	.289	.386	.091	3.668	.000	-.026	-1.035	.151
MCHAIR	.000	-.017	.493	-.031	-1.066	.143	-.047	-1.606	.054	-.020	-.658	.255
MDIR	.150	4.603	.000	.007	.229	.409	-.087	-2.695	.003	.018	.568	.285
DIROWN	.036	1.168	.121	.040	1.362	.086	.057	1.910	.028	.030	1.005	.157
FMLYOWN	.013	.360	.359	-.133	-3.795	.000	-.089	-2.493	.006	-.041	-1.140	.127
GOVOWN	-.058	-1.548	.061	-.018	-.490	.312	-.014	-.367	.357	.015	.397	.345
FGNOWN	.001	.024	.490	-.066	-2.636	.004	.007	.295	.384	-.070	-2.722	.003
INDOWN	.022	.812	.417	-.059	-2.294	.011	-.071	-2.698	.003	.044	1.672	.047
CORPOWN	-.055	-2.111	.018	-.034	-1.336	.091	-.010	-.372	.355	-.059	-2.259	.012
MSWGOWN	.039	1.294	.098	-.008	-.271	.393	-.104	-3.554	.000	.002	.052	.479
Intercept	-2.445	-7.255	.000	-.055	-2.600	.004	.048	.668	.252	.081	3.258	.001
R-Square	6.2			13.1			9.50			7.80		
Adjusted R-Square	4.5			11.5			7.90			6.10		
Durbin Watson	1.971			1.787			1.925			1.969		

4.6 SUMMARY AND CONCLUSION

This study examines the potential impact of *Shariah* on earnings quality. Specifically, this study attempts to investigate whether *Shariah* is an effective monitoring mechanism in mitigating managerial opportunistic behaviour through earnings management, thereby enhancing the quality of reported earnings.

Overall, the study finds support for the hypotheses that *Shariah* firms have lower real and accrual-based earnings management than non-*Shariah* firms. In particular, the findings support the hypothesis that there is a negative association between *Shariah* and discretionary accruals. In addition, the findings support the hypothesis that there is a negative association between *Shariah* and real earnings management proxies. The results reveal that *Shariah* firms have lower levels of both abnormal cash flows from operations and abnormal discretionary costs. This indicates that *Shariah* firms have better quality earnings than non-*Shariah* firms.

However, the finding that *Shariah* firms have lower levels of real earnings management is not consistent with the findings of McGuire et al. (2010). They reported that religion-influenced firms are more likely to manage earnings using real economic activities because such methods are considered more ethical than discretionary accruals. According to Bruns and Merchant (1990), earnings manipulation via real economic transactions is considered a more ethical option relative to an accruals-based method because such a practice is not a violation of GAAP. Islamic ethics, however, prohibit such activities as they violate the concept of justice. According to the concept of justice, managers are not allowed to exploit

other contracting parties nor manage trusts given to them through fraud, deceit, or misrepresentation.

Thus, consistent with Islamic teaching, the study finds that *Shariah* firms are less likely to manage reported earnings either through discretionary accruals or through real economic activities. In general, the findings are consistent with those of prior studies that recognise religion as an enforcement mechanism for ethical behavior in business organisations by reducing agency problems (Longenecker et al., 2004; Noreen, 1988; Weaver & Agle, 2002), and as a contributing factor to a higher quality of financial reporting (Dyreng et al., 2010; McGuire et al., 2010). Overall, given the strong ethical codes in a well-defined institutional setting, religious ethical values are able to provide a more effective monitoring mechanism in limiting unethical corporate behaviour such as accruals-based earnings management and real earnings management than in a conventional market setting.

CHAPTER 5

THE INFLUENCE OF *SHARIAH* ON ACCOUNTING CONSERVATISM

5.1 INTRODUCTION

This thesis uses accounting conservatism as the second proxy to measure the earnings quality of Malaysian listed firms. Additionally, this chapter aims to examine *Shariah* influence on accounting conservatism. Prior studies have documented that accounting conservatism is one of the attributes of high quality earnings (Bernstein & Siegel, 1979; Ku Ismail & Abdullah, 2010; Watts, 2003a).

Lobo and Zhou (2006) argue that firms that have higher degree of managerial opportunism are likely to be more aggressive in reporting their earnings performance. Lobo et al. (2008) investigated the impact of managerial opportunism on accounting conservatism in high-growth firms. They argue that in high-growth firms, incentives to follow aggressive reporting policies to meet or beat analysts' and market expectations are more pronounced, because failure to do so can cause a significantly negative market response. Consistent with their predictions, the results showed that low-growth firms exhibit high levels of conservatism whereas high-growth firms do not exhibit conservatism in their corporate financial reports. The results suggest that high-growth firms are using their reporting discretion more aggressively. Consequently, the level of conservatism in such firms is likely to be lower.

Prior studies highlight the role of religious ethical values in limiting managerial opportunism, which in turn reduces aggressive reporting behaviour (Dyreng et al., 2010;

Grullon et al., 2010). Dyreng et al. (2010) assert that religious moral codes may evoke reminders of personal norms such as honesty and morality. These personal norms could drive ethical behaviour in business conduct as deviation from personal norms could damage an individual's self-concept. In their view the costs of deviating from personal norms are increased when managers report aggressively. Thus, they hypothesised that firms located in an area with more religious adherence are less likely to engage in aggressive financial reporting than firms located in areas with less religious adherence. Consistent with their hypothesis, they found that religious-influenced firms are negatively associated with financial reporting aggressiveness such as income-increasing discretionary accounting accruals.

Prior studies (e.g., Dyreng et al., 2010; Grullon et al., 2010; McGuire et al., 2010) did not examine the levels of accounting conservatism among religious-influenced firms. Although Dyreng et al. (2010) found that religious-influenced firms are less likely to use aggressive financial reporting, they did not examine the association between religious ethical values and accounting conservatism. By not examining this issue, an opportunity is created to carry out the current study by investigating how religious ethical values affect the level of accounting conservatism. This research extends the study of Dyreng et al. (2010), by examining the effect of religious ethical values, *Shariah*, on accounting conservatism.

The chapter begins by providing a review of the concept of accounting conservatism and its determinants in Section 5.2. Section 5.3 develops the research hypothesis. Section 5.4 elaborates the research design employed in the study. The next section, 5.5 presents and

discusses the findings of the study. The final section provides the summary and concludes this chapter.

5.2 ETHICS AND ACCOUNTING CONSERVATISM

This section discusses the existing literature on accounting conservatism mainly from the perspective of its determinants. This review of the literature is carried out to provide an understanding of accounting conservatism in order to establish the link between the religious ethical values of *Shariah* and accounting conservatism.

Conservatism is one of the fundamental characteristics of financial accounting (Watts, 2003a). In fact, prior studies in the earnings-quality literature have suggested that accounting conservatism is an indicator of high earnings quality (Ball & Shivakumar, 2005; Francis et al. 2004; Watts, 2003a). For instance, Bernstein and Siegel (1979) contend that the quality of earnings is positively associated with the use of conservative accounting methods. Graham (1994) also documented similar findings. He found that a high degree of conservatism is positively related to higher earnings quality and informativeness, as evidenced by a higher earnings response coefficient.

Watts (2003a) provides four explanations for the existence of accounting conservatism, which offer significant benefits to the users of financial information. These benefits include improving contracting efficiency, minimising firms' litigation and tax costs, and enabling accounting and industry regulators to minimise economic instability and avoid criticism.

According to the contracting explanation, accounting conservatism is an efficient contracting mechanism for reducing agency costs. The use of conservative accounting numbers in contracts among different parties to the firm reduces information asymmetries and moral hazard problems derived from agency conflicts. Conservatism imposes a higher standard of verification to recognise good news in earnings rather than bad news, which in turn reduces the managers' opportunity to overstate earnings. These restrictions reduce the probability of managerial expropriation of shareholders' resources or the excessive distribution of resources to shareholders at the expense of debt holders (Khan & Watts, 2009). Previous empirical studies support these arguments (Ahmed et al., 2002; Ahmed & Duellman 2007; Nikolaev, 2010; Qiang, 2007). For instance, Ahmed et al. (2002) documented that accounting conservatism plays an important role in mitigating the bondholder-shareholder conflicts over dividend policy by reducing the risk to bondholders that the firm will pay excessive dividends to shareholders.

Further, Watts (2003a) argues that firms use conservative reporting to avoid or minimise litigation risks. It is because firms, and their auditors, are more likely to be sued for overstatements of earnings and net assets than for understatements. Thus, as conservatism understates a firm's net assets, the firm's litigation risk is reduced. A number of papers have shown that proxies for *ex-ante* litigation risk are associated with more conservative accounting (Basu, 1997; Lobo & Zhou, 2006). Basu (1997) presented some of the strongest evidence of this association by showing that in periods of high auditor litigation, firms report more conservatively. The converse was also found to be true. The results suggest that periods of higher litigation risk generally exhibit greater accounting conservatism, as firms pre-emptively try to reduce future litigation costs.

Based on the explanation concerning taxation, Watts (2003a) contends that the links between taxation and reporting can generate conservative reporting. Generally, firms report lower financial earnings to reduce their income tax liabilities. Since financial earnings and taxable income are positively correlated, firms with more conservative financial reporting can also reduce their tax liabilities. Finally, Watts (2003a) notes that conservative accounting enables standard setters and regulators to minimise economic instability and avoid criticism. These bodies are likely to face more criticism if firms overstate their net assets than if they understate them.

Although conservatism offers several benefits to accounting users and is recognised as a desirable trait of financial reporting, accounting standards do not rigidly enforce conservatism on every accounting issue. Generally accepted accounting principles allow managers to exercise judgement in preparing financial statements with the expectation that managers will use this discretion in a manner that conforms to the principle of conservatism (Lobo et al., 2008). However, Bowen, Rajgopal, and Venkatachalam (2008) argue that managers' discretion might be influenced by managerial opportunism. Much of the prior literature highlights that managers use accounting discretion in an opportunistic manner, with the intention of either misleading those using the financial statements or biasing contractual outcomes that depend on accounting numbers (Burgstahler & Dichev, 1997; Healy, 1985; Kasznik, 1999; Teoh et al., 1998). The empirical evidence indicates that opportunistic accounting-choice discretion occurs for a variety of reasons in different settings. Such choices include: increasing management's compensation, reducing the likelihood of violating debt covenants and influencing stock market perceptions (Field et al., 2001; Holthausen & Leftwich, 1983).

Similarly, research shows that firms that have a higher degree of managerial opportunism are likely to be more aggressive in reporting their earnings performance. Lobo et al. (2008) investigated the impact of managerial opportunism on accounting conservatism in high-growth firms. In this study, they argue that growth, as an economic driver of the firm, might foster aggressive accounting and thereby influence the degree of conservatism. They stress that high-growth firms have more pronounced incentives to follow aggressive reporting policies to meet or better analysts' and market expectations, because failure to do so can cause a significantly negative market response. Thus, they hypothesised that the degree of conservatism is lower for high-growth firms than for low-growth firms. Consistent with their hypothesis, the results showed that low-growth firms exhibit high levels of conservatism whereas high-growth firms do not exhibit conservatism in their corporate financial reports. The results suggest that high-growth firms may be using their reporting discretion more aggressively.

Prior studies have documented the impact of ethics in mitigating aggressive financial reporting, which in turn enhances the level of conservatism in financial reporting. For example, Lobo and Zhou (2006) examined whether the ethical code driven by SOX affects accounting conservatism. The SOX seeks to reduce information uncertainty and asymmetry by improving the accuracy and reliability of financial reporting. Further, SOX expands statutory prohibitions against fraud and the obstruction of justice, increases criminal penalties, and strengthens sentencing guidelines in order to reduce opportunistic managerial behaviour. As a result, they argue that firms have more incentives to avoid using aggressive reporting policies such as income-increasing discretionary accruals and to be more conservative when faced with increased legal liability and regulatory scrutiny. Using two

measures of accounting conservatism—discretionary accruals and asymmetric timeliness from the Basu (1997) model— they found that firms were more conservative after SOX than in the period preceding SOX. The results suggest that through its ethical codes SOX may have altered management's discretionary reporting behaviour making it more conservative.

Krishnan and Visvanathan (2008) examined the effect of SOX from a different perspective. In particular, they attempted to examine the association between the accounting expertise of audit committee directors and accounting conservatism. The SOX requires that at least one member of the audit committee is a financial expert in order to improve the effectiveness of the committee in monitoring the financial reporting process. They argue that an audit committee's financial expert can enhance conservatism for three reasons: (i) by having accounting expertise the expert provides the ability to assess the nature and the appropriateness of the accounting choices made by the managers; (ii) the provisions in audit committee charters require the members to ensure the credibility of financial reporting, including maintaining conservatism; and (iii) the risk of litigation and the potential loss of reputation for those with accounting expertise. Using a sample of Standard and Poors (S&P) 500 firms, the study found that the audit committee's financial experts are able to effectively perform their monitoring function and promote conservative reporting. However, the effect of accounting financial expertise in promoting conservative accounting occurs only when they are on boards that are characterised by strong governance. In other words, the presence of accounting financial expertise on the audit committee on weak boards is ineffective in promoting conservative accounting. It shows that the effect of accounting financial expertise can be undermined by weak governance mechanisms. The

results seem to support the argument by Drennan (2004) who asserts that increasing legislation and regulation, and the introduction of codes of corporate governance, may reduce the risk of opportunistic managerial behaviour, but cannot entirely eliminate it.

Nooteboom, Berger and Noorderhaven (1977) note that managers' opportunistic behaviour is driven by three factors: scope for opportunistic behaviour, incentives for managers to engage in opportunistic behaviour, and the managers' propensity for opportunism. According to Li (2008), it is not difficult to develop organisational control mechanisms to reduce the room and incentives for managers to conduct opportunistic behaviour. The third factor that drives opportunistic behaviour, i.e., managers' propensity for opportunism, is the most challenging one of the three to control because it requires dealing with causes rooted in the managers' minds and hearts. In view of that, Li (2008) explores the use of religious ethical values in limiting managers' tendency towards opportunism. He identifies a number of ethical principles from the Bible that have an impact on managers' propensity for opportunism. For example, the Christian ethics emphasise truth and honesty. This calls people to renounce deceit and do what is just, right and honest. Opportunistic behaviour such as lying, cheating and manipulating information in attempting to gain advantage for one's own benefit is not allowed. He adds that religious moral restraint operates through the appeal to a person's awareness of God. This restraint is founded on the person's realisation that God knows the manifest and the hidden, and will hold one accountable for individual deeds. Thus, religious moral restraint is a powerful enforcement mechanism, more so than any legislation and regulation, and organisational control mechanisms in limiting managerial opportunism and unethical behaviour in business organisations.

Empirical evidence generally shows a link between religious ethical values and managerial opportunism. Dyreng et al. (2010) contend that religious social norms might influence managerial reporting behavior in two ways. First, religious individuals are generally characterised as risk averse (Hillary & Hui, 2009). Thus, if a firm is located in regions where religious social norms are more prevalent, managers of such firm become more risk averse and more sensitive to litigation risk when making a financial reporting decision. Second, religious social norms may invoke reminders of personal norms such as honesty and morality. These personal norms could drive ethical behavior in business conduct because deviation from personal norms could damage an individual's self-concept. Both aversion to litigation risk and costs of deviating from personal norms are increased when managers report aggressively. Thus, they hypothesise that firms located in areas with more religious adherence are less likely to engage in aggressive financial reporting than firms located in areas with less religious adherence. They report that firms that are located in areas with more religious adherence have higher accrual quality, lower risk of fraudulent accounting, and are less likely to restate their financial statements or avoid tax.

This research extends the study of Dyreng et al. (2010) and Grullon et al. (2010) by examining whether there is an association between religious ethical values and accounting conservatism. Lobo et al. (2008) found that firms that have less pronounced incentives to follow aggressive reporting policies exhibit high levels of conservatism in accounting. Thus, this provides an opportunity to carry out the current study by investigating how religious ethical values affect the level of accounting conservatism.

5.3 HYPOTHESIS DEVELOPMENT

Religious ethical values are recognised as a monitoring mechanism in limiting aggressive financial reporting (Dyreng et al., 2010; Grullon et al., 2010). Religion, through its ethical framework, builds a basis for what is considered right and wrong (Parboteeah et al., 2007). Religion incorporates strong teachings about appropriate ethical behaviour and the teachings can mitigate managerial opportunism in business settings. This in turn limits aggressive financial reporting and enhances the level of accounting conservatism.

Lewis (2001) asserts that Islam, through *Shariah,* has formulated a comprehensive ethic governing the conduct of business and administrative affairs. In Islam, the goal of business activity is to pursue value-maximisation for the benefit of society. According to Saeed, Ahmed and Mukhtar (2001), the principle of value-maximisation is based on the concept of justice. Miskawayh (1968) argues that the concept of justice in a business setting can be defined as "just dealing". This concept prohibits managers from exploiting the contracting parties of the firm or managing trust given to them by way of fraud, deceit or other illegal means. It is stated in Al-Qur'an:

> Oh you who believe! Do not devour one another's property by unlawful ways, but let there be trade by mutual consent.
>
> (Al-Qur'an, 4:29-30)

These verses of Al-Qur'an encourage people to adhere to justice and morality in all business transactions. Any profit earned in an unlawful manner is prohibited. In Islam, unlawful ways mean all unjust acts, including: cheating, fraud, misrepresentation and exploitation of people on account of their ignorance (Ibrahim, 2000). Consequently,

Ibrahim (2000) asserts that the moral codes of conduct in Islam serve as a mechanism to curb any exploitative activity or behaviour on the part of individuals, groups or institutions. Given that the Islamic ethical code of conduct limits unethical corporate behaviour, *Shariah*-firms are less likely to be involved in any aggressive financial reporting that might violate the concept of justice. This, in turn, increases the degree of accounting conservatism in such firms.

On the other hand, some Islamic scholars cast doubt on the implementation of conservatism in Islamic financial reporting as such a concept is inconsistent with *Shariah* principles (see for examples, Gambling & Karim, 1991; Hamid et. al., 1993). Many of these criticisms relate to *zakat* (religious tax). *Zakat* is one of the fundamental pillars of the Islamic faith, and its calculation and payment is a duty which Muslims have to fulfill.[21] *Zakat* acts as an important mechanism for the redistribution of income and wealth in Muslim society.

In Malaysia, *zakat* is under the jurisdiction of the state governments through their respective Majlis Agama Islam Negeri or State Islamic Religious Councils. The Malaysian Accounting Standards Board issued an accounting pronouncement for corporate *zakat,* namely TR-*i*-1 (Accounting for *Zakat* on Business) on 1 July 2006. According to TR-*i*-1, *zakat* shall be assessed when the firm has been in operation for a period of 12 months. *Zakat* on business is determined by multiplying the *zakat* rate (2.5%) with the *zakat* base.

[21] *Zakat* can be defined in three different connotations: literally, theologically and economically. Literally, *zakat* means increase, growth and purification. Theologically, *zakat* means purification and cleansing from greed, selfishness, and arrogance. Economically, *zakat* means transferring surplus wealth to the poor (Securities Commission, 2009e).

There are two methods to determine the *zakat* base, namely the adjusted working capital (net current assets) method and the adjusted growth (net owners' equity) method.

Regardless of the method of assessing the *zakatable* amount, firms are required to assess their wealth based on current or market value (Securities Commission, 2009e). This is to reflect the most accurate value and its real net worth at the time when *zakat* is assessed. Thus, Gambling and Karim (1991) argue that adherence to the concept of conservatism in the Islamic firms' financial statements would lead to an understatement of assets that could be subject to *zakat*, which in turn reduces the amount of *zakat*.

Ma (1997) argues that Islamic laws, including *zakat*, would have a direct impact on the accounting policies and procedures of *Shariah* firms in Malaysia. This is because, in *Shariah* firms, accounting policy is not determined solely by the judgement of management, but also by reference to Islamic laws. Ball et al. (2003), however, assert that *zakat* does not influence financial reporting and the degree of accounting conservatism of Malaysian *Shariah* firms. Since there is no clear direction, this study draws the following null hypothesis:

H_0. *Shariah* is not associated with accounting conservatism.

5.4 RESEARCH METHODOLOGY

5.4.1 Sample Selection and Data Collection

The sample for this study covers *Shariah* and non-*Shariah* firms listed on Bursa Malaysia from 2000 to 2007. The study limits the sample from year 2000 to year 2007 because earlier annual reports are unavailable on this website. The initial sample consists of 9,981 firm-year observations. The classification of *Shariah* and non-*Shariah* firms is based on the *Shariah* index issued by the SAC. Data required for computing accounting conservatism measures are collected from Global Vantage and Datastream, while boards of directors and types of ownership data are collected from the published annual reports available at the Bursa Malaysia announcements website. The accounting conservatism measures data from Global Vantage and Datastream are then matched with the firms' boards of directors and types of ownership data.

Consistent with the first empirical study (see Chapter Four), this study excludes firms in the banking and finance sector as they have their own guidelines and governance systems. The study also excludes firms with negative equity as these firms could be under serious stress and would not be operating in the normal manner of a going concern. To control for potential outliers, the study removes one per cent of the top and bottom observations of each proxy of accounting conservatism used in the study. This procedure yields 1,621 firm-years with complete data.

Table 5.1 Sample Selection Process

Sample selection criteria	Firm-year observations
Total firm-year observations from Global Vantage, 2000-2007	9,981
Excluding financial institution	120
Excluding firm-year observations with missing accounting conservatism measures data such as stock return	7,624
Excluding firm-year observations with missing annual reports	541
Excluding potential outliers and firms with negative equity	75
Full sample	1,621

5.4.2 Operationalisation of the Dependent, Independent and Control Variables

5.4.2.1 Dependent variables: Accounting conservatism

The study uses two proxies to measure accounting conservatism: (i) the C-Score measure (CON-KW) of Khan and Watts (2009), and (ii) the accrual-based measure (CON-ACC) of Givoly and Hayn (2000).

5.4.2.1.1 The C-Score measure (CON-KW)

Following Khan and Watts (2009), the current study uses C-Score as the first firm-year measure of conservatism. The C-Score measure is based on the timely loss recognition measure introduced by Basu (1997). The standard Basu (1997) regression is specified as

$$X_i = \beta_1 + \beta_2 D_i + \beta_3 R_i + \beta_4 D_i R_i + \varepsilon_i \quad (1)$$

Where i indexes the firm, X is earnings, R is stock returns and D is an indicator variable—it is set equal to one if R is negative and is set equal to zero otherwise—and ε is the

regression residual. In the above regression, β_3 measures the response of earnings to returns when returns are positive, and ($\beta_3 + \beta_4$) measures the response of earnings to returns when returns are negative. Conservatism thus implies $\beta_3 + \beta_4 > \beta_3$, that is, $\beta_4 > 0$. In other words, β_4 captures the incremental timeliness for bad news relative to good news. Basu (1997) calls β_4 the asymmetric timeliness coefficient of earnings and uses it as a measure of conservatism.

Khan and Watts (2009) express the timeliness of good news and the incremental timeliness of bad news as linear functions of firm-specific characteristics for each year. In particular, they use the following specifications to estimate the timeliness of good news (G-Score) and the incremental timeliness of bad news (C-Score), respectively:

$$\text{G-Score} = \beta_3 = \mu_1 + \mu_2 Size_i + \mu_3 MTB_i + \mu_4 LEV_i \quad (2)$$

$$\text{C-Score} = \beta_4 = \lambda_1 + \lambda_2 Size_i + \lambda_3 MTB_i + \lambda_4 LEV_i \quad (3)$$

Where *Size* is the market value of equity, *MTB* is the market-to-book value of equity and *LEV* is leverage.

Next, β_3 and β_4 from equations (2) and (3) are substituted into the regression model (1) to get the following model:

$$X_i = \beta_1 + \beta_2 D_i + R_i(\mu_1 + \mu_2 Size_i + \mu_3 MTB_i + \mu_4 LEV_i) + D_i R_i(\lambda_1 + \lambda_2 Size_i + \lambda_3 MTB_i + \lambda_4 LEV_i) + \varepsilon_i \quad (4)$$

Consistent with Khan and Watts (2009), the study measures *X* as net income before extraordinary items scaled by lagged market value of equity, *R* as annual return calculated by cumulating monthly returns ending with the third month after the fiscal year, *Size* as the natural log of the market value of equity, *MTB* as the ratio of market-to-book value of

equity at the end of the year, and *LEV* as long-term debt plus short term debt scaled by market value of equity.

The model (4) is then estimated cross-sectionally on an annual basis to determine the regression coefficient. To calculate C-Score, there are four coefficients of interest: the coefficient of D_iR_i (λ_1), and the interactions of this term with each of Size (λ_2), MTB (λ_3), and Leverage (λ_4). These four coefficients (λ_1-λ_4) are then applied to model (3) to calculate the C-Score. Specifically, the C-Score is constructed by multiplying λ_1 by one, λ_2 by the firm year value of Size, λ_3 by the firm-year value of MTB and λ_4 by the firm-year value of Leverage. The higher the value of the C-Score, the higher is the level of accounting conservatism of the firm. Table 5.2 reports the mean coefficients from annual cross-sectional estimations of the regression in model (4) above.

As shown in Table 5.2, the coefficient of D x Ret is significantly positive as expected. This suggests that Malaysian listed firms are conservative on average. The coefficient of D x Ret x Size is significantly negative (p<0.05), consistent with larger firms having lower asymmetric timeliness. This indicates that larger listed firms in Malaysia are less conservative. Surprisingly, the coefficients of D x Ret x MtB and D x Ret x Lev are significantly negative (p<0.05). The results reveal that firms with high growth rate and leverage have lower asymmetric timeliness. These findings are inconsistent with those of Khan and Watts (2009), who found that firms in the United States with high leverage and high growth rates have higher asymmetric timeliness.

The inconsistency in results could be because U.S. corporate debt is mostly from public sources. Public debt providers monitor firms through public disclosures to ensure that managers do not distribute excessive dividends to shareholders nor compensate themselves at the expense of the debt holders. Therefore, debt holders would expect managers to report earnings conservatively. For growth, US firms are general reliant on public sources of funding, which would require them to provide better quality accounting earnings information. Whereas, in Malaysia funding is primarily through private sources (private debt and private equity). Private sources rely more on private information, thus it may not require better quality publicly disclosed accounting information such as accounting earnings.

Table 5.2: Coefficients from the Regression Equation (4)

$$X_i=\beta_1+ \beta_2 D_i + R_i (\mu_1 + \mu_2 Size_i + \mu_3 MTB_i + \mu_4 LEV_i) + D_i R_i(\lambda_1 + \lambda_2 Size_i + \lambda_3 MTB_i + \lambda_4 LEV_i)+ \varepsilon_i$$

Independent Variable	Predicted sign	Coefficient	t-stat
Intercept		-0.092	
D		0.267	
Ret		-0.227	-0.616***
Ret x Size	+	0.139	0.648***
Ret x MtB	-	-0.553	0.3525***
Ret x Lev	-	0.423	1.082
D x Ret (λ_1)	+	3.860	3.127***
D x Ret x Size (λ_2)	-	-0.623	-2.483***
D x Ret x MtB (λ_3)	+	-0.556	-0.520**
D x Ret x Lev (λ_4)	+	-1.463	-0.881
D x Size		-0.028	
D x MtB		-0.052	
D x Lev		0.007	
Size		0.002	
MtB		-0.002	
Lev		-0.101	
Adjusted R-Square		35.475	

- *significant at 0.1 ** significant at 0.05 *** significant at 0.01

X_i is net income before extraordinary items, scaled by beginning of the year market capitalisation. D is a dummy variable equal to 1 if returns (Ret) are negative and 0 otherwise. MtB is the market-to-book ratio. Lev is leverage, defined as long term debt plus short term debt deflated by market value of equity. The study controls for firms' characteristics separately (the "main effects").

5.4.2.1.2 The accrual-based measure (CON-ACC)

The second measure of conservatism in this study is the accrual-based measure (CON-ACC). Givoly and Hayn (2000) argue that higher accounting conservatism results in more negative total accruals. They suggest that accruals tend to reverse in periods when net income exceeds (falls below) cash flows from operations. Such periods are expected to be followed by periods with negative (positive) accruals. Therefore they argue that a consistent predominance of negative accruals across firms over a long period is an indication of conservatism.

Following Givoly and Hayn (2000), the current study defines CON-ACC as income before extraordinary items less cash flows from operations plus depreciation expense minus operating accruals deflated by lagged total assets, multiplied by negative one. Positive values of CON-ACC indicate greater conservatism.

5.4.2.2 Independent variables

As stated in Chapter Three, the experimental variable of this study is *Shariah*. The measure of *Shariah* is a dummy variable indicating whether the firm holds *Shariah* status or not. The study uses the list of *Shariah* firms issued by the SAC to identify *Shariah* status.

5.4.2.3 Control variables

To test the hypothesis, the study controls for variables that can influence conservatism in accounting. The control variables of the study can be classified into three categories: the

specific characteristics of the firm, the board of directors of the firm and the ownership structure of the firm.

i. Firm specific characteristics

Under the firms' specific characteristics category, the study controls for five proxies, namely firm size, debt, growth, profitability and audit quality. First, the study controls for firm size. Large firms often receive more media attention, have a higher analyst following and face regular political scrutiny. Therefore, the desire to avoid large political costs induces them to use more conservative accounting (Ahmed & Duellman, 2007; Ho, 2009; Watts & Zimmerman, 1978). However, LaFond and Watts (2008) argue that information asymmetry is often smaller for large firms because they produce more public information which in turn reduces the demand for conservative accounting. Empirical evidence seems to support this view. For example, Ahmed and Duellman (2007) found that firm size is negatively correlated to accounting conservatism. Consistent with Ahmed and Duellman (2007), this study predicts a negative effect of firm size on accounting conservatism.

Second, the study controls for debt. Firms with higher levels of debt tend to have greater bondholder and shareholder conflicts and higher agency costs (Ahmed et al., 2002). Ahmed et al. (2002) found that highly-leveraged firms demand greater conservatism in reporting in order to mitigate bondholder-shareholder conflicts over dividend policy by reducing the risk to bondholders that the firms will pay excessive dividends to shareholders. However, prior studies also report that highly-leveraged firms have greater incentives to use aggressive accounting techniques in order to avoid covenant violations. For example, Sweeney (1994) documented that managers of firms approaching debt covenant default are

more likely to make income-increasing changes in periods before the violation. She also found that managers continue to make income-increasing changes in years following the first year of default. Consequently, the degree of accounting conservatism will be lower in such firms. Due to the competing effects, this study does not have an *a priori* prediction on the coefficient of this variable.

Third, the study controls for firm growth. Prior research suggests that growth is an important driver of firm reporting behaviour. Khan and Watts (2009) argue that high-growth firms are likely to have more volatile stock returns and large losses that trigger lawsuits, suggesting a higher litigation demand for conservatism from such firms. Prior studies, however have documented a negative relationship between growth and accounting conservatism (Lobo et al., 2008). Lobo et al. (2008) find that low-growth firms exhibit high levels of conservatism whereas high-growth firms do not exhibit conservatism. The results suggest that the aggressive reporting behaviour of high-growth firms may be muting the extent of conservatism in their financial reports. Consistent with prior empirical research, this study expects a negative relationship between growth and accounting conservatism.

The study also controls for audit quality. Prior studies highlight the importance of the role of the external audit as the keystone of corporate governance and the gate-keeper to monitor management behaviour (Saeed et al. 2010). According to Wahab et al. (2007) higher-quality auditors are more likely to ensure greater transparency and to eliminate mistakes in financial statements since they are more likely to protect their reputation. Thus, clients of higher-quality auditors are more likely to have conservative financial reporting practices as they have better corporate governance. Empirical evidence seems to support

this view. For example, Basu, Hwang and Jan (2001) found that Big-Five auditees have more conservative financial statements than non-Big Five auditees.

The study also controls for profit. According to Ahmed et al. (2002), firms with low ROA or profit are less likely to use conservative accounting because a reduction in profits associated with conservative accounting would be relatively costly. Therefore, this study predicts a positive association between profitability and accounting conservatism.

ii. Board of director characteristics

Further, the study controls for board characteristics of the firm. Prior studies have documented that corporate governance characteristics are related to accounting conservatism (Ahmed & Duellman, 2007; Beekes, Pope, & Young, 2004; Lara, Osma, & Penalva, 2007; 2009). This is because corporate governance mechanisms require accounting numbers to be used as a tool by boards of directors to monitor and control firms. It has been argued that conservative accounting reports facilitate the contracting and monitoring roles of accounting. For example, accounting conservatism helps to identify negative net present value projects or poorly performing investments and to avoid the inappropriate distribution of the firms' wealth. These arguments suggest that conservatism is a potentially useful tool for directors in fulfilling their role of ratifying and monitoring key decisions. These potential benefits of conservatism in corporate governance suggest a positive relationship between conservatism and corporate governance.

Following prior research, this study controls for six proxies of firms' board characteristics. First, the study controls for board size. There are two views regarding board size.

Proponents of agency theory believe that a larger board has more opportunity to control and monitor the actions of management because it has a greater number of people with more expertise (Dalton et al., 1999), and valuable experience (Xie et al., 2003). However, Lipton and Lorsh (1992) and Jensen (1993) argue that a bigger board is less likely to function effectively. This is because the ability to process problems competently reduces as board size becomes larger (Jensen, 1993). Hermalin and Weisbach (1991) also assert that a bigger board might create difficulties for the members to use their knowledge and skills effectively due to the problems of coordinating their contributions. In addition, prior studies also highlight that small boards are more effective in monitoring a CEO's actions (Jensen, 1993), and that small numbers increase a board's ability to advise and engage in long term strategic planning by making timely strategic decisions (Goodstein et al., 1994). Thus, this study predicts a negative association between board size and accounting conservatism.

Second, the study controls for independent non-executive directors. Fama and Jensen (1983) argue that the ability of the board to act as an effective monitoring mechanism depends on the independence of its management. The presence of independent directors on the board is seen as a check and balance mechanism enhancing boards' effectiveness and constraining opportunistic behaviour among managers (Haniffa & Cooke, 2002; Rahman & Ali, 2006). Consistent with these views, prior studies found evidence that supports the effective monitoring role played by independent directors in deterring accounting fraud (Beasley, 1996) and earnings management via discretionary accruals (Davidson et al., 2003; Klein, 2002; Su, 2001). In the context of accounting conservatism, Beekes et al. (2004) provided evidence suggesting a positive relationship between the proportion of non-executive directors on the board and conservatism. They found that firms with a higher

proportion of non-executive board members are more likely to recognise bad news in earnings in a timely manner, relative to firms with a lower proportion of non-executive directors. The results suggest that boards with more non-executive directors have a propensity for greater monitoring and are therefore expected to insist on greater accounting quality, as reflected in accounting conservatism. Thus, this study predicts a positive association between independent non-executive directors and accounting conservatism.

Third, the study controls for CEO duality. Advocates of agency theory argue that CEO duality, which implies CEO dominance over the board, promotes CEO entrenchment and hence, can lead to opportunistic and inefficient behaviour that reduces shareholder wealth (Jensen & Meckling, 1976). Prior studies report that separation between a CEO and the Chairman is an effective tool for board monitoring, which in turn limits managerial opportunism and aggressive financial reporting (Beasley, 1996; Klein, 2002). Thus, this study predicts a positive association between the separation of the CEO and Chairman positions and accounting conservatism.

Fourth, the study controls for independent audit committee members. Prior studies provide evidence that an audit committee with highly independent members constrains aggressive earnings management. For example, Chtourou et al. (2002), Klein (2002), Xie et al. (2003), Davidson et al. (2003), and Bradbury et al. (2006) find that the independence of the audit committee is negatively associated with aggressive earnings management via discretionary accruals. The results suggest that the effectiveness of monitoring is affected by the extent of the independence of the audit committee members, which in turn reduces opportunistic behaviour and limits aggressive reporting. Consequently, the degree of accounting

conservatism will be higher. Thus, this study predicts a positive association between independent audit committee members and accounting conservatism.

iii. Firm's ownership structure

Further, Malaysia is characterised by concentrated shareholding. Many of the listed companies in Malaysia are owned or controlled either by family, government, financial institutions, or foreign companies. Thus, the study controls for seven types of block ownership in Malaysian business settings: managerial, family, government or state, MSWG institutional, foreign, individual and corporate.

First the study controls for managerial ownership. Jensen and Meckling (1976) argue that greater share ownership by managers helps to promote better incentive-alignment and reduce agency problems. This in turn reduces aggressive reporting behaviour. Prior studies, however report a negative relationship between managerial ownership and accounting conservatism (Beekes et al, 2004; LaFond & Roychowdhury, 2008). For example, LaFond and Roychowdhury (2008) examined the effect of managerial ownership on accounting conservatism. They predicted that the demand for conservatism is greater when managerial ownership is lower, since the separation of the ownership and control becomes more pronounced. Consistent with their hypothesis, they found that conservatism—as measured by the asymmetric timeliness of earnings—declines with managerial ownership. The results suggest that there is less need for conservative reporting when the incentives of managers and shareholders are more aligned. Thus, this study predicts a negative association between managerial ownership and accounting conservatism.

Second, the study controls for family ownership. Prencipe et al. (2008) assert that family ownership reduces agency costs as the controlling family is less likely to focus on short term performance and the related oscillation of the stock market. This is because the main goal of the controlling family is to ensure the long term survival and prosperity of the company rather than to maximise short term shareholder wealth. However, Morck and Yeung (2003) contend that family firms might use their concentrated blockholding to expropriate the wealth of outside shareholders through excessive compensation, related-party transactions and special dividends.

Su (2001) examines the relationship between board composition and earnings management in listed family-controlled companies on the Taiwan stock market. The study found that family controlled companies are more likely to undertake earnings management than non-family controlled companies through the related-party transaction, particularly the sales of properties, and inventories to the related-parties. Therefore, this study predicts a negative association between family ownership and accounting conservatism.

Third, this study controls for government or state ownership. In the Malaysian context, Mohammed, Ahmed and Ji, (2010) found that firms with higher levels of government ownership are positively associated with accounting conservatism. This is because, in Malaysia, firms with government or state ownership appear to play a crucial role in promoting the image of the country. Therefore, it is extremely vital for these firms to produce high quality financial statements. Therefore, this study predicts a positive association between government or state ownership and accounting conservatism.

Fourth, the study controls for foreign ownership. Suto (2003) argues that long term foreign ownership plays a monitoring role in disciplining corporate management by reducing information asymmetry between managers and shareholders who are more concerned about corporate value, and demand more information than local investors. Thus, as foreign investors promote transparency in business and alleviate information asymmetry, it is expected that foreign blockholding in Malaysian firms will mitigate managerial opportunism, which in turn limits aggressive reporting behaviour. Based on these arguments, this study predicts a positive association between foreign ownership and accounting conservatism.

Five, the study controls for MSWG institutional ownership. Prior studies provide evidence suggesting that institutional investors are playing an active role in monitoring and disciplining managerial discretion (Bushee, 1998; Koh, 2007; Rajgopal & Venkatachalam, 1998; Velury & Jenkins, 2006). According to the incentive alignment argument, institutional investors with substantial shareholdings in widely-held firms, can act as a monitoring tool in reducing agency conflicts between managers and shareholders because they are able to force management to focus on economic performance and to reduce opportunistic behavior of managers. This is because this type of investor has more opportunity, resources and incentives to monitor and influence management decisions (Gillan & Starks, 2000).

In Malaysia, institutional investors have emerged as a powerful force playing a very significant role in corporate governance. The MSWG, established in 2000 comprises five of the largest institutional funds: two pension funds, an investment fund, a pilgrim fund and an

insurance fund, and represents about 70 per cent of the total institutional shareholdings in firms listed on the Bursa Malaysia's Main Board (Ameer & Rahman, 2009). The main role of MSWG is to enhance shareholder activism and to protect minority shareholders' interest. Thus, as MSWG plays a significant role in corporate governance in mitigating the problems associated with conflict between controlling owners and minority shareholders, its institutional involvement may act as an external monitor of accounting quality. Thus, firms with MSWG ownership are less likely to use aggressive reporting techniques, which in turn will increase the level of accounting conservatism.

Finally, this study also controls for individual ownership and corporate ownership since some of the Malaysian public firms' shares are owned by these blockholders. This study predicts a negative association between both individual ownership and corporate ownership, and accounting conservatism. In other words, the study expects that the larger the ownership of these parties, the lower the level of conservatism will be because they are insiders of the firms.

5.4.3 Multivariate Regression Models

The study uses the following multivariate regression model to estimate the influence of *Shariah* on accounting conservatism.

$$CON_{ft} = \alpha + \beta_1(SHARIAH_{ft}) + \beta_2(BIND_{ft}) + \beta_3(BSIZE_{ft}) + \beta_4(ACIND_{ft}) + \beta_5(CEOCHAIR_{ft}) + \beta_6(DIROWN_{ft}) + \beta_7(FMLYOWN_{ft}) + \beta_8(GOVOWN_{ft}) + \beta_9(FGNOWN_{ft}) + \beta_{10}(MSWGOWN_{ft}) + \beta_{11}(INDOWN_{ft}) + \beta_{12}(CORPOWN_{ft}) + \beta_{13}(PROFIT_{ft}) + \beta_{14}(SIZE_{ft}) + \beta_{15}(DEBT_{ft}) + \beta_{16}(GROWTH_{ft}) + \beta_{17}(AUD4_{ft}) + \beta_{18}(\sum_{n=2000-2007} YEAR_{fy}) + \beta_{19}(\sum_{n=1} IND_{fy}) + \xi \quad (3)$$

Where,

Dependent variable:

CON_{ft} One of the two conservatism measures (CON-KW and CON-ACC),

Independent variable:

$SHARIAH_{ft}$ 1 if *Shariah* firm and 0 otherwise,

Control variables:

$BDIND_{ft}$	The proportion of independent directors on the board,
$BDSIZE_{ft}$	The number of directors on the board,
$ACIND_{ft}$	The proportion of independent directors on the audit committee,
$CEO/CHAIR_{ft}$	1 if CEO is not board chair and 0 otherwise,
$DIROWN_{ft}$	The proportion of managerial ownership,
$FMLYOWN_{ft}$	The proportion of family ownership,
$GOVOWN_{ft}$	The proportion of government or state ownership,
$FGNOWN_{ft}$	The proportion of foreign ownership,
$MSWGOWN_{ft}$	The proportion of MSWG institutional ownership,
$INDOWN_{ft}$	The proportion of individual ownership,
$CORPOWN_{ft}$	The proportion of corporate ownership,
$SIZE_{ft}$	Natural log of total assets of firm,
$DEBT_{ft}$	The ratio of total liabilities to total assets,
$GROWTH_{ft}$	The annual percentage change in firm sales,
$PROFIT_{ft}$	Earnings (EBIT) to total assets,
$AUD4_{ft}$	1 if a firm is audited by Big Four audit firms and 0 otherwise,
$YEAR_{ft}$	Year,
IND_{ft}	Industry.

5.5 RESULTS AND FINDINGS

5.5.1 Descriptive Analysis

5.5.1.1 Sample characteristics

As mentioned in Section 5.4.1 above, the sample size of this study is 1,621 firm-year observations spanning from 2000 to 2007. Table 5.3 provides the descriptive statistics of the sample across years and industry groups. A majority (86.30 per cent) of the sample are *Shariah* firms. With regards to the classification of firms into respective industry groups[22], the largest proportion of the sample is from the industrial product sector, which accounts for 38.86 per cent of the sample. This is followed by the consumer product sector (22.08 per cent), trading sector (19.37 per cent), construction sector (6.42 per cent), the plantation sector (6.29 per cent). Meanwhile, 3.7 per cent are from the technology sector, 1.54 per cent from the property sector and 0.99 per cent from the hotel sector. The infrastructure industry makes up the least number of sample firms, which accounts for only 0.75 percent of the sample.

[22] The classification of firms into respective industry groups is based on Bursa Malaysia sector code.

Table 5.3: Descriptive Statistics of Sample (Firm-years N=1,621 (*Shariah* firms N=1418; non-*Shariah* firms N=203)

Industry	Year																Total
	2000		2001		2002		2003		2004		2005		2006		2007		
	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	Shariah	Non-Shariah	
Industrial Product	22	1	40	5	65	4	76	7	91	11	96	12	98	8	82	12	630 (38.86%)
Consumer Product	14	1	27	0	36	3	47	3	59	5	50	5	52	6	48	2	358 (22.08%)
Trading	5	4	18	7	26	9	31	10	42	7	38	10	44	7	44	12	314 (19.37%)
Construction	4	1	6	0	11	0	11	1	15	0	18	0	17	1	16	3	104 (6.42%)
Plantation	1	1	3	1	9	5	11	3	11	3	18	0	16	4	12	4	102 (6.29%)
Technology	2	0	2	0	3	0	7	0	8	0	11	0	15	0	11	1	60 (3.7%)
Property	0	0	1	0	3	0	3	1	2	1	3	2	2	2	3	2	25 (1.54%)
Hotel	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	16 (0.99%)
Infrastructure	0	0	0	0	2	0	2	0	2	0	1	0	2	0	3	0	12 (0.75%)
Total	**48**	**10**	**97**	**15**	**155**	**23**	**188**	**27**	**230**	**29**	**235**	**31**	**246**	**30**	**219**	**38**	**1,621 (100%)**

Table 5.4 reports a descriptive analysis of the conservatism measures employed in the present study: C-Score measure (CON-KW), and accrual-based conservatism measure (CON-ACC). Panel A of Table 5.4 provides the mean, standard deviation, range, minimum, and the maximum for the whole sample. Panel B and C of the table present the same categories of descriptive statistics for the *Shariah* firms (N = 1,418) and non-*Shariah* firms (N = 203) sub-sample.

In general, the mean value of the C-Score measure (CON-KW) for the whole sample is 0.491. As shown in Table 5.4, the mean value of CON-KW is 0.653 for *Shariah* firms and -0.644 for non-*Shariah* firms, indicating that *Shariah* firms are more conservative in accounting than non-*Shariah* firms.

The mean value of the accrual-based conservatism measure (CON-ACC) is 0.005 for the whole sample. Table 5.4 also indicates that the mean value of CON-ACC measure is 0.008 for Shariah firms and -0.015 for non-Shariah firms. The findings are consistent with previous studies such as Ahmed et al. (2002) in the United States and Ho (2009) in Malaysia that report the mean value of CON-ACC as 0.004 and 0.003, respectively.

Table 5.4: Descriptive Statistics of Accounting Conservatism Measures

	Mean	Median	Std Dev	25%	75%	Min	Max
Panel A: Full Sample (*N*=1,621)							
CON-KW	.490	1.100	2.219	.033	1.623	-31.20	3.050
CON-ACC	.005	.004	.095	-.019	.032	-1.58	.490
Panel B: *Shariah* Firms (*N*=1,418)							
CON-KW	.653	1.152	1.735	.136	1.647	-27.310	3.050
CON-ACC	.008	.004	.080	-.019	.031	-.340	.490
Panel C: Non-*Shariah* Firms (*N*=203)							
CON-KW	-.644	.655	4.111	-.895	1.289	-31.200	2.440
CON-ACC	-.015	.004	.162	-.024	.036	-1.580	.210

CON-KW=Asymmetric earnings timeliness coefficient as a linear function of firm-specific characteristics (Khan & Watts, 2009); CON-ACC= Income before extraordinary items less cash flow from operations plus depreciation expenses less operating accruals deflated by lag total assets, multiplied by negative one

5.5.2 Univariate and Bivariate Analysis

The univariate analysis carried out in the study involved an analysis of means. This was followed by a bivariate analysis involving the computation of Pearson correlations and Spearman correlations. The results of the analyses are reported in the following subsections.

5.5.2.1 Comparison of mean values of *Shariah* and non-*Shariah* firms

Table 5.5 compares the mean values of accounting conservatism measures and other continuous variables of *Shariah* and non-*Shariah* firms. As shown in Table 5.5, *Shariah* firms have a higher level of accounting conservatism than non-*Shariah* firms when conservatism is measured by CON-KW and CON-ACC. The results suggest that *Shariah* firms are more likely to recognise economic losses in a timely manner than non-*Shariah* firms. Further, the higher mean value of CON-ACC for *Shariah* firms relative to non-*Shariah* firms indicates that *Shariah* firms have more persistent negative accounting accruals.

Table 5.5: Comparison of Mean Values of *Shariah* and Non-*Shariah* Firms

	Shariah Firms (*N*=1,418)	Non-*Shariah* Firms (*N*=203)	
	Mean	Mean	Differences (t-stats)
CON-KW	.653	-.644	4.442***
CON-ACC	.008	-.015	2.076**
SIZE	5.495	6.463	-7.413***
PROFIT	.169	.020	0.861
DEBT	23.072	25.419	-1.444*
GROWTH	.131	.155	-0.502
BSIZE	7.437	7.714	-1.652**
BIND	.411	.424	-1.486*
ACIND	.711	.708	0.356
DIROWN	59.666	39.905	5.844***
FMLYOWN	24.240	21.014	1.789**
GOVOWN	6.261	9.341	-2.027**
FRGNOWN	2.711	6.175	-2.738***
IDVOWN	4.478	4.571	-.108
CORPOWN	3.671	4.569	-1.085
MSWGOWN	3.664	3.141	.716
	***Significant at $p<0.01$	**Significant at $p<0.05$	*Significant at $p<0.10$

5.5.2.2 Correlation analysis

Table 5.6 shows the Pearson correlations and Spearman correlations between the conservatism measures and *Shariah* and control variables (except the dummy variables of year and industry).

As shown in Table 5.6, the Khan and Watts (2009) measure (CON-KW) is positively correlated to the accrual-based measure (CON-ACC) at the five per cent significance level. For the independent and control variables, CON-KW has positive associations with SHARIAH, DIROWN and negative associations with SIZE, PROFIT, DEBT, BSIZE, BIND, CEO/CHAIR, ACIND, GOVOWN and FGNOWN. This indicates that firms that are more likely to recognise economic losses in a timely fashion have higher managerial ownership and hold *Shariah* status.

With respect to the second proxy of conservatism, CON-ACC, Table 5.6 shows that CON-ACC has a positive association with SHARIAH and DEBT but a negative association with BSIZE. This indicates that the level of cumulative negative accruals is higher in *Shariah* firms and highly-leveraged firms but lower in firms that have more board members.

Table 5.6: Correlation Matrix of Dependent and Independent Variables (Pearson-lower triangle; Spearman-upper triangle)

	CON-KW	CON-ACC	SHARIAH	SIZE	PROFIT	DEBT	GROWTH	AUD4	BSIZE	BIND	CEO/ CHAIR
CON-KW		.031	.128**	-.436**	-.262**	-.259**	-.150**	-.100**	-.231**	-.045	-.059*
CON-ACC	.046*		.002	.023	-.200**	.193**	.123**	-.004	-.014	-.031	-.028
SHARIAH	.160**	.086**		-.184**	.007	-.034	-.002	-.074**	-.039	-.028	-.079**
SIZE	-.493**	-.038	-.219**		.265**	.119**	.186**	.150**	.298**	.000	.076**
PROFIT	-.097**	-.018	.030	-.153**		-.445**	.282**	.138**	.214**	-.080**	.076**
DEBT	-.357**	.092**	-.027	.120**	.004		-.012	-.108**	-.073**	.054*	-.047*
GROWTH	.000	.019	-.014	.036	.016	-.031		.043	.101**	-.045	.005
AUD4	-.036	-.013	-.074**	.138**	.054*	-.123**	.025		.076**	-.053*	.065**
BSIZE	-.165**	-.050*	-.056*	.320**	.099**	-.047*	.022	.071**		-.311**	.207**
BIND	-.050*	-.038	-.013	.000	-.033	.064**	-.037	-.051*	-.306**		-.060*
CEO/ CHAIR	-.058*	-.042	-.079**	.083**	.037	-.041	.033	.065**	.205**	-.040	
ACIND	-.094*	-.024	.021	.134**	.009	.043	.011	-.005	.094**	.390**	.064**
DIROWN	.065**	-.013	.074**	-.165**	.015	-.028	-.007	-.058*	.113**	-.185**	-.057*
FMLYOWN	.009	-.037	.004	.006	-.018	-.057*	.018	-.022	.043	-.142**	-.091**
GOVOWN	-.109**	-.004	-.041	.319**	.226**	-.094**	.025	.193**	.200**	-.087**	.126**
FGNOWN	-.078**	.006	-.065**	.126**	-.016	-.069**	-.025	.106**	.163**	-.042	.065**
INDOWN	.032	-.008	-.002	-.077**	-.029	-.030	.041	.024	-.130**	.076**	-.059*
CORPOWN	-.026	.014	-.019	-.015	-.025	-.023	-.030	-.009	-.014	.055*	.068**
MSWGOWN	-.048	-.002	-.019	.233**	-.022	-.055*	.000	.112**	.219**	-.102**	.078**

Table 5.6: Correlation Matrix (Continued)

	ACIND	DIROWN	FMLYOWN	GOVOWN	FGNOWN	INDOWN	CORPOWN	MSWGOWN
CON-KW	-.115**	.201**	-.006	-.175**	-.072**	.105**	-.028	-.102**
CON-ACC	-.019	-.022	-.025	-.023	.015	-.014	-.014	-.022
SHARIAH	.034	.063**	.007	-.039	-.062**	.015	-.030	-.020
SIZE	.125**	-.207**	.022	.243**	.122**	-.091**	.004	.148**
PROFIT	.005	.045	.160**	.122**	.092**	-.094**	.037	.106**
DEBT	.069**	-.042	-.057*	-.108**	-.069**	-.017	-.018	-.093**
GROWTH	.004	.015	.064*	.031	-.019	-.010	-.044	.031
AUD4	-.013	-.102**	-.023	.172**	.095**	.026	-.019	.091**
BSIZE	.147**	-.015	.046	.235**	.179**	-.145**	.016	.223**
BIND	.319**	-.152**	-.127**	-.101**	-.041	.040	.040	-.124**
CEO/ CHAIR	.065**	-.119**	-.090**	.118**	.079**	-.056*	.069**	.058*
ACIND		-.005	-.068**	.017	-.008	-.002	.005	-.008
DIROWN	-.019		.576**	-.384**	-.269**	.016	-.044	-.186**
FMLYOWN	-.073**	.535**		-.251**	-.234**	-.335**	-.272**	-.099**
GOVOWN	.030	-.259**	-.292**		.044	-.106**	-.050*	.528**
FGNOWN	-.045	-.192**	-.230**	-.019		-.065**	-.007	.088**
INDOWN	.021	-.064**	-.321**	-.109**	-.069**		.045	-.056*
CORPOWN	.009	-.010	-.267**	-.082**	-.031	-.006		-.030
MSWGOWN	.003	-.129**	-.144**	.599**	.035	-.056*	-.052*	

**Significant at $p<0.01$(2-tailed), *Significant at $p<0.05$ (2-tailed)

5.5.3 Multivariate Analysis

Ordinary least squares procedures (OLS) are used to estimate the models stated in Section 5.4.3. The results of the above models are reported in the following subsections.

5.5.3.1 C-Score conservatism measure (CON-KW) and *Shariah* and control variables

Table 5.7 reports the results of the regression of *Shariah* on the CON-KW (C-Score) measure. The results show that *Shariah* has a significant positive association with CON-KW. This suggests that *Shariah* firms have higher levels of accounting conservatism.

Table 5.7: Results of the Relationship between the C-Score Conservatism Measure (CON-KW) and *Shariah* and Control Variables

$$CON\text{-}KW_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (1)$$

Variables	Predicted Sign	Coefficient	t-stat	P value
SHARIAH	+/-	.443	3.126	.001
Control Variables: Firm's specific characteristics				
PROFIT	+	-.082	-3.063	.001
SIZE	-	-.622	-16.919	.000
DEBT	+/-	-.032	-13.334	.000
GROWTH	-	.038	.556	.289
AUD4	-	.012	.126	.449
Control Variables: Firms' board characteristics				
BIND	+	-.610	-1.350	.088
BSIZE	-	-.023	-.847	.198
ACIND	+	-.214	-.482	.315
CEO/CHAIR	+	-.164	-1.442	.074
Control Variables: Firms' ownership structure				
DIROWN	-	.001	.992	.160
FMLYOWN	-	-.003	-1.214	.112
GOVOWN	+	.002	.396	.346
FGNOWN	+	-.009	-2.217	.013
INDOWN	-	-.006	-1.418	.078
CORPOWN	-	-.009	-2.054	.020
MSWGOWN	+	.002	.322	.373
Intercept		5.413	13.040	.000
Observations		1,621		
Durbin-Watson		1.421		
R-Square		36.20		
Adjusted R-Square		34.80		

Table 5.7 also shows the effect of the control variables on CON-KW. CON-KW has significant negative associations with SIZE, consistent with the findings of previous studies (for example, Ho, 2009; LaFond & Watts, 2008). LaFond and Watts (2008) argue that information asymmetry is often smaller for large firms because they produce more public information which in turn reduces the demand for conservative accounting. The results also find a significantly negative relation between CON-KW and PROFIT and DEBT. The findings indicate that accounting conservatism is lower among profitable and high debt firms.

In term of firms' board characteristics, there is a significant negative relation between CON-KW and BIND and CEO/CHAIR. The findings suggest that firms with a higher composition of independent non-executive directors on the board and separated positions of CEO and Chairman are less likely to practice conservative accounting. The results support the doubts raised by Rahman and Ali (2006), who questioned the effectiveness and quality of board members in Malaysian firms. They argue that board and audit committee members do not posses sufficient skills, knowledge and experience to monitor unethical corporate behaviour and financial reporting quality.

In relation to firms' blockholding, FGNOWN, INDOWN, and CORPOWN have a significant negative correlation to CON-KW. The results suggest that firms that have concentrated ownership by foreign, individual and corporate have lower levels of accounting conservatism. Larger concentrated block holders tend to rely more on private sources of information, which in turn would reduce the pressure on firms to produce better quality accounting earnings information.

5.5.3.2 Accrual-based conservatism measure (CON-ACC) and *Shariah* and control variables

The results of estimating the effects of *Shariah* on the accrual-based conservatism measure CON-ACC are presented in Table 5.8. Consistent with the first proxy of accounting conservatism CON-KW, the results show that *Shariah* has a significant positive association with CON-ACC ($p<0.01$). For the control variables, CON-ACC has a significant negative association with SIZE. Further, CON-ACC is found to be positively associated with DEBT. The findings indicate that highly-leveraged firms are more likely to use conservative accounting choices when measured by CON-ACC. The positive relationship between CON-ACC and DEBT is consistent with earlier studies (for example, Ahmed et al., 2002; Ahmed & Duellman, 2007).

Of the firms' board characteristics variables, only independent director on board (BIND) and board size (BSIZE) are significant and negatively correlated to CON-ACC. These results suggest that firms that have more directors and independent non-executive directors on the board are less likely to practice conservative financial reporting.

Table 5.8: Results of the Relationship between Accrual-based Conservatism Measure (CON-ACC) and *Shariah* and Control Variables

$$CON\text{-}ACC_{ft} = \alpha + \alpha_1 SHARIAH_{ft} + f(control\ variables) + \xi \quad (2)$$

Variables	Predicted Sign	Coefficient	t-stat	p-value
Shariah	+/-	.026	3.357	.000
Control Variables: Firms' specific characteristics				
PROFIT	+	-.001	-.211	.416
SIZE	-	-.003	-1.334	.090
DEBT	+/-	.001	3.831	.000
GROWTH	-	.004	1.085	.139
AUD4	-	.001	.280	.390
Control Variables: Firms' board characteristics				
BIND	+	-.047	-1.883	.030
BSIZE	-	-.003	-1.787	.037
ACIND	+	-.004	-.143	.443
CEO/CHAIR	+	-.007	-1.122	.131
Control Variables: Firms' ownership structure				
DIROWN	-	-.000	-.209	.417
FMLYOWN	-	-.000	-.540	.294
GOVOWN	+	.000	.760	.223
FGNOWN	+	.000	.721	.235
INDOWN	-	-.001	-.519	.302
CORPOWN	-	.000	.696	.243
MSWGOWN	+	.000	.124	.450
Intercept		.044	1.946	.025
Observations		1,621		
Durbin-Watson		1.999		
R-Square		3.80		
Adjusted R-Square		1.80		

5.5.4 Robustness of Results

5.5.4.1 Multicollinearity

Similar to the first empirical study in Chapter Four, this study also computes the variance inflation factor (VIF), to further check multicollinearity between independent variables.

Table 5.9 shows the values of VIF for each independent variable in all regressions. The results indicate that the VIF values of each independent variable are far below 10, ranging from 1.030 to 2.492. This suggests that the multicollinearity problem is not a concern for the analysis

Table 5.9: Multicollinearity Tests

Variable	Regression 1-VIF CON-KW	Regression 2-VIF CON-ACC
SHARIAH	1.182	1.182
ROA	2.060	2.060
SIZE	1.649	1.649
LEV	1.186	1.186
GROWTH	1.030	1.030
BIG FOUR	1.127	1.127
BIND	1.479	1.479
BSIZE	1.566	1.566
INDAC	1.335	1.335
BCEO/CHAIR	1.106	1.106
DIROWN	1.688	1.688
FMLYOWN	2.418	2.418
GOVOWN	2.492	2.492
FGNOWN	1.349	1.349
INDOWN	1.358	1.358
CORPOWN	1.278	1.278
MSWGOWN	1.925	1.925

5.5.4.2 Serial correlation

Given that the analysis utilises time series data, models (1) and (2) were re-estimated using an autoregressive regression technique that controls for auto/serial correlation. Table 5.10 reports the results including the Durbin-Watson statistic for all regression equations. The Durbin-Watson statistics for each of the autoregressive regressions shows the value range from 1.999 to 2.001, indicating that there is no serial correlation in the residuals of the estimated models.

After correcting for serial correlation, the results reported in Table 5.10 do not change the effect of *Shariah* on accounting conservatism measures. In particular, the association between *Shariah* and the two measures of accounting conservatism remain positive and significant.

Table 5.10: Results of Autoregressive Regression

Variable/Regression	R1	CON-KW		R2	CON-ACC	
	Coeff	t-stat	p-value	Coeff	t-stat	p-value
SHARIAH	0.457	2.55	0.005	0.026	3.39	0.000
PROFIT	-0.074	-3.03	0.001	-0.000	-0.18	0.430
SIZE	-0.600	-17.76	0.000	-0.002	-1.28	0.101
DEBT	-0.030	-13.17	0.000	0.001	3.83	0.000
GROWTH	0.063	1.01	0.155	0.004	1.09	0.138
AUD4	0.055	0.62	0.267	0.002	0.30	0.381
BIND	-0.218	-0.52	0.300	-0.047	-1.89	0.029
BSIZE	-0.031	-1.25	0.105	-0.003	-1.82	0.034
ACIND	-0.446	-1.09	0.137	-0.004	-0.15	0.440
CEO/CHAIR	-0.119	-1.13	0.129	-0.007	-1.12	0.131
DIROWN	0.000	0.47	0.320	-0.000	-0.21	0.416
FMLYOWN	-0.004	-1.68	0.047	-0.000	-0.54	0.293
GOVOWN	0.000	0.06	0.475	0.000	0.97	0.167
FGNOWN	-0.003	-1.05	0.147	0.000	0.72	0.235
INDOWN	-0.008	-2.16	0.015	-0.000	-0.52	0.301
CORPOWN	-0.010	-2.55	0.005	0.000	0.70	0.241
MSWGOWN	0.001	0.39	0.348	0.000	0.04	0.483
Intercept	5.159	12.97	<.000	0.043	1.92	0.027
Total R-Square	41.65			3.51		
Regress R-Square	36.30			3.50		
Durbin-Watson	1.999			2.001		
Observations	1,621			1,621		

5.5.4.3 Alternative measure for accounting conservatism

As an alternative measure of conservatism, the study uses the asymmetric loss recognition model devised by Ball and Shivakumar (2005). The model measures conditional conservatism based on the links between total accruals and operating cash flows. They argue that total accruals and cash flows are negatively associated. However, this negative association tends to be lower in periods with economic losses as both total accruals and cash flows recognize the impact of negative economic events in the period in which they take place.

To analyse the differences in conservatism between *Shariah* and non-*Shariah* firms, the following adaptation of the Ball and Shivakumar (2005) model is estimated by interacting the explanatory variables with the SHARIAH proxy as follows:

$$ACC_t = \beta_1 + \beta_2 CFO_t + \beta_3 DCF_t + \beta_4 DCF_t * CFO_t + \beta_5 SHARIAH_t + \beta_6 CFO_t * SHARIAH_t + \beta_7 DCF_t * SHARIAH_t + \beta_8 CFO * DCF_t * SHARIAH_t + \Sigma\alpha_t + \varepsilon_i \quad (1)$$

Where ACC is the total accruals scaled by beginning-of-period total assets, CFO is the operating cash flows scaled by beginning-of-period total assets, DCF is a dummy variable that takes 1 for negative cash flows and 0 otherwise, and $\Sigma\alpha_t$ represents year dummies. This dummy variable captures the occasions when bad news (economic losses) have occurred during the period.

Table 5.11 indicates that β_8 is positive and significant, indicating that timely recognition of losses via accruals is greater, that is, more conservative, for *Shariah* firms. The results confirm that *Shariah* firms are more conservative in accounting than non-

Shariah firms. The findings also indicate that the results for the key variable of the study (SHARIAH) are robust against alternative measurements of accounting conservatism.

Table 5.11: Ball and Shivakumar (2005) Asymmetric Loss Recognition Model and *Shariah*

$$ACC_t = \beta_1 + \beta_2 CFO_t + \beta_3 DCF_t + \beta_4 DCF_t * CFO_t + \beta_5 SHARIAH_t + \beta_6 CFO_t * SHARIAH_t + \beta_7 DCF_t * SHARIAH_t + \beta_8 CFO * DCF_t * SHARIAH_t + \Sigma\alpha_t + \varepsilon_i \quad (1)$$

Variable		Coeff	t-stat	p-value
Intercept	β_1	-.031	-2.537	.005
CF	β_2	-.080	-1.006	.157
DCF	β_3	-.041	-2.181	.014
DCF*CF	β_4	-.998	-7.960	.000
SHARIAH	β_5	.014	1.225	.110
CF* SHARIAH	β_6	-.426	-4.769	.000
DCF *SHARIAH	β_7	.023	1.129	.129
DCF*CF* SHARIAH	β_8	.464	3.123	.001
R-Square		29.70		
Adj. R-Square		28.80		
Durbin-Watson		2.084		
Observations		1,621		

ACC = Total accruals scaled by beginning-of-period total assets; CFO = Operating cash flows scaled by beginning-of-period total assets; DCF = 1 if negative cash flows, 0 otherwise; SHARIAH = 1 if *Shariah* firms, 0 otherwise.

5.6 SUMMARY AND CONCLUSION

The purpose of this chapter is to examine the association between *Shariah* and accounting conservatism. The study employs a sample of 1,621 firm-year observations of Malaysian listed firms from 2000 to 2007. To capture accounting conservatism, the study uses two different measures: the C-Score model (CON-KW) developed by Khan and Watts (2009), and the accrual-based measure (CON-ACC) developed by Givoly and Hayn (2000).

Overall, the results of the study support the view that *Shariah* encourages conservatism in accounting. In particular, the findings indicate that there is a significant positive relation between *Shariah* and the two measures of accounting conservatism (CON-KW and CON-ACC). The findings indicate that *Shariah* firms are more likely to recognise economic losses in a timely fashion than non-*Shariah* firms. Further, the study also finds that *Shariah* firms are more likely to have persistent negative accounting accruals than non-*Shariah* firms. The results suggest that *Shariah* firms have better earnings quality than non-*Shariah* firms.

In general, these findings are consistent with the findings of Lobo et al. (2008), who found that firms which are less likely to be aggressive in reporting their accounting earnings have high levels of accounting conservatism. Prior studies recognise that religion is a monitoring mechanism in limiting managerial opportunism in business organisations (Longenecker et al., 2004; Noreen, 1988; Weaver & Angle, 2002). This limitation then reduces aggressive reporting behaviour (Dyreng et al., 2010; McGuire et al., 2010). Consequently, the level of accounting conservatism in religious-influenced

firms is likely to be higher. Consistent with this argument, the analysis finds that *Shariah* firms have higher levels of accounting conservatism than non-*Shariah* firms.

CHAPTER 6

SUMMARY AND CONCLUSION

6.1 INTRODUCTION

The purpose of this study, as outlined in the first chapter of the thesis, is to examine the relation between religious ethical values, *Shariah,* and reported earnings quality. The study focuses on two different attributes of earnings quality: earnings management and accounting conservatism. Based on the two measures of earnings quality, this thesis developed the following research objectives:

i. to examine the impact of *Shariah* on real and accrual-based earnings management, and

ii. to examine the impact of *Shariah* on accounting conservatism.

This chapter is organised as follows. Section 6.2 reviews the research approach carried out in achieving the objectives. Section 6.3 summarises the overall findings of this study. Section 6.4 describes the contributions of the study. Section 6.5 discusses the limitations of this study and provides a number of suggestions for future research.

6.2 SUMMARY OF THE IMPLEMENTATION OF THE STUDY

The thesis consists of two interrelated empirical studies regarding the impact of *Shariah* on earnings quality. The first study, reported in Chapter Four, examines the relation between *Shariah* and earnings management. The study employs two proxies of earnings management, namely accrual-based and real earnings management to measure the quality of reported earnings. The accrual-based earnings management measures using absolute value of discretionary accruals are derived from the regression of the modified Jones (1991) model. The real earnings management measures are the level of abnormal cash flow from operations, abnormal production costs, and abnormal discretionary expenses, computed using the model developed by Roychowdhury (2006).

The second empirical study, reported in Chapter Five, investigates the impact of *Shariah* on accounting conservatism. The study employs two proxies to capture the level of accounting conservatism among Malaysian listed firms. These include the C-Score measure of conservatism developed by Khan and Watts (2009) and the accrual-based measure of conservatism developed by Givoly and Hayn (2000).

Prior to conducting these studies, the thesis lays down the underlying basis of the research in chapters 2 and 3. The research reported here is in a unique setting. Prior studies, as reviewed earlier, attributed religious influence on firms to certain environmental features in which firms exist or the religiosity of their managers. *Shariah* firms, on the other hand, are based on specifically defined corporate and reporting norms driven by religious ethics The firms identifying themselves as *Shariah* firms have to commit themselves to strong ethical norms promoting greater levels of ethical decision-making than the non-*Shariah* firms.

The institutional background of the *Shariah* firms is laid down in Chapter Two. The chapter provides information on the Malaysian financial system and its capital market. It then describes the components of the ICM in Malaysia and its regulatory and reporting framework. The theoretical background of *Shariah* is presented in Chapter Three. The chapter explains that the study is based on the principles and ethical framework of Islamic teachings (*Shariah*). It provides a discussion on the concept of Islamic ethics and its core values, and elaborates the implication of Islamic ethics for business and accounting practices.

6.3 SUMMARY OF THE MAIN RESULTS

6.3.1 *Shariah* and Real and Accrual-based Earnings Management

The findings of the first study reveal that *Shariah* has a significant negative association with accrual-based and real earnings management. In particular, the study finds that *Shariah* firms have lower levels of discretionary accounting accruals than non-*Shariah* firms. The results are consistent with the findings of Dyreng et al. (2010) and Grullon et al. (2010) that suggest religious ethical values deter unethical corporate behaviour including aggressive earnings management.

In relation to real earnings management, the study finds that *Shariah* firms have lower levels of abnormal cash flow from operations, and abnormal discretionary expenses. The results suggest that *Shariah* firms are less likely to have unusually lower levels of cash flow from operations due to increasing price discounts or lenient credit terms in order to accelerate sales for the current period and unusually lower levels of discretionary expenses due to the aggressive reduction in R&D, and SG&A expenses in order to improve current reported earnings.

However, the findings of this study are contrary to those of McGuire et al. (2010) who find that religious ethical values are unable to limit earnings manipulation via real economic transactions. The Islamic ethical framework is comprehensive and specific (Arslan, 2001), and managers have to make a careful and conscientious decision in joining the ranks of *Shariah* firms. This study provides evidence that such ethical frameworks limit both the accrual-based and real earnings management practices.

6.3.2 *Shariah* and Accounting Conservatism

The results of the second study indicate that *Shariah* influences the level of accounting conservatism. Specifically, the study finds a significant positive association between *Shariah* and the two measures of accounting conservatism (CON-KW and CON-ACC). It suggests that *Shariah* firms are more likely to recognise economic losses in a timely fashion and have higher negative cumulative accruals than non-*Shariah* firms.

The findings support the view that religious ethical values mitigate managerial opportunism and unethical corporate behaviour (Dyreng et al. 2010; Grullon et al., 2010; McGuire et al., 2010; Omer et al. 2010). This, in turn limits aggressive reporting behaviour (i.e. income-increasing accruals), and consequently enhances the level of accounting conservatism (Lobo et al, 2008).

Overall, the results of this thesis confirm that religious ethical values, as exemplified by *Shariah*, are associated with better quality reported earnings. The results strengthen the notion that ethical qualities arising from a commitment to religious ethics play an important role in promoting ethical behaviour in business organisations, which in turn enhances the quality of financial reporting.

6.4 CONTRIBUTIONS OF THE STUDY

Overall, this study expands on the existing body of knowledge on the relation between religion and the quality of accounting earnings. The study examines the impact of religion from the perspective of an Islamic ethical framework, *Shariah.* This is an extension of prior studies on religion's influence on corporate financial reporting (Dyreng et al., 2010; Grullon et al., 20010; McGuire et al., 2010). It defines *Shariah* as another determinant of earnings quality.

The study focuses on the two types of measures of earnings quality: earnings management based measures and accounting conservatism measures. Prior studies such as McGuire et al. (2010) and Dyreng et al. (2010), examine the effect of religious ethics on accrual-based earnings management. These two studies, however, examine the impact of religious ethical values on financial reporting practices in settings where there are no clear guidelines to make a distinction between a religious mode and a non-religious mode of business. Contrary to previous research, this study extends the work of prior studies by examining the influence of Islamic ethics on accrual-based earnings management in a setting where the firms driven by religious ethics are distinctly classified through well-defined institutional arrangements.

In addition, some prior studies have documented that ethics are unable to limit real earnings management practices (Cohen et al., 2008; Cohen and Zarowin, 2008; McGuire et al., 2010). McGuire et al. (2010) find that religious-influenced firms manage earnings via real economic transactions in order to meet or beat earnings targets. The reason for the weak result could be that religious ethics are not institutionalised in their research setting. This study, therefore, extends prior studies by

examining the impact of Islamic ethics in mitigating earnings manipulation via real economic decisions in a setting where the religious ethics are institutionalised.

Next, Lobo et al. (2008) examine the impact of managerial opportunism on accounting conservatism. They argue that firms that have high levels of managerial opportunism are more likely to practice aggressive reporting. This in turn reduces the level of accounting conservatism. Noreen (1988), Conroy and Emerson (2004) and Li (2007) assert that religions provide moral restraint on managers' propensity for opportunism, which in turn limits aggressive financial reporting behaviour. Consistent with this argument, prior studies find that a religious-influenced firm is less likely to practice aggressive financial reporting (Dyreng et al., 2010; Grullon et al., 2009; McGuire et al., 2010). Thus, this study's results suggest that the Islamic ethics limit aggressive financial reporting practices such as income-increasing accruals and consequently increase accounting conservatism.

Furthermore, this study also adds some non-*Shariah* related information to the earnings quality literature. More specifically, it extends the literature on the relation between blockholders and discretionary accounting choices by controlling six different types of blockholders: family, government, foreign, individual, corporation and institutional blockholders in a Malaysian business setting. This study follows the recommendation of Sánchez-Ballesta and García-Meca (2009) to consider different types of large shareholders. Sánchez-Ballesta and García-Meca (2009) argue that different types of blockholders have different effects on the use of discretionary accruals to manage earnings.

Finally, the results of the study should be of interest to regulators (e.g., SC and BNM) and accounting standard setters (e.g., MASB) as an aid to improving the financial reporting of *Shariah* firms. Malaysia aims to strengthen its ICM, to ensure that both local and foreign investors are willing to invest in that market and in *Shariah* firms. *Shariah* firms can convince investors that they are a good investment opportunity by providing high quality accounting information. This study aims to contribute towards the knowledge and understanding of the effect of *Shariah* in the capital market setting on corporate financial reporting. International regulators can also benefit from the findings of this study. This study suggests that a good ethical framework of corporate governance can have beneficial influences on corporate reporting by firms.

6.5 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The study is subject to several limitations. First, earnings quality in this thesis has been measured by using earnings management and accounting conservatism proxies. Prior studies have documented other attributes of earnings quality such as earnings informativeness (Fan & Wong, 2002; Francis, LaFond, Olsson, & Schipper, 2005; Wang, 2006; Warfield et al., 1995), predictability (Velury & Jenkins, 2006) and persistence and timeliness (Chamber & Penman, 1984; Velury & Jenkins, 2006). However, these alternative interpretations and measurements have not been covered in this study. The conclusions derived from this study are limited to earnings quality as measured by earnings management and accounting conservatism.

Second, although the study argues that *Shariah* has extensive provisions for good business behaviour and accountability, the findings only document an association rather than a causal relationship between *Shariah* and earnings quality. Therefore, the

causality of *Shariah* leading to higher earnings quality requires further theoretical and empirical examination. While the principles of *Shariah* call for honest and trustworthy behaviour, whether or not the managers of *Shariah* firms take appropriate action in accounting on the basis of *Shariah* needs further scrutiny at the firm and the individual levels.

Besides, another limitation of this study is the issue of missing variables. For example the professional values of managers, accountants and auditors can affect the preparation of accounting reports or board composition can affect monitoring by the board. Further research is needed to deal with these limitations before we can draw firm conclusions about the role of religion and ethics in accounting decision making. Perhaps, a study of change from non-*Shariah* to *Shariah* could allow causality to be studied.

Further, in examining the association between *Shariah* and accounting conservatism, the study did not account for the impact of *Shariah* firms that paid *zakat* on behalf of their shareholders. As such firms pay *zakat*, and disclose *zakat* information in the notes to the financial statements, they could exhibit different behaviour regarding conservative reporting. For example, a *zakat*-paying firm could be less conservative because they would be using fair value accounting to value their assets and to report their earnings.

There are other *Shariah*-based markets such as Hong Kong and Singapore. For example, Hong Kong introduced the *Shariah*-compliant Hang Seng China Index in 2008 to attract Muslim investors into its capital market. Relative to other *Shariah*-based markets, Malaysia has a comparative advantage because the Islamic finance

infrastructure and regulation was in place much earlier and is more comprehensive than those of other countries. Malaysia also has a large Muslim population seeking to invest in Islamic financial instruments as compared to Hong Kong and Singapore. Given the unique features of the Malaysian ICM, the findings of this study should be interpreted in the context of the Malaysian institutional setting.

There are several future research avenues that may flow from this study. First, the study has provided evidence that *Shariah* is significantly associated with higher earnings quality. However, this study only employs three measures of earnings quality (accrual-based earnings management, real earnings management and accounting conservatism). Future studies could test the relations examined in this study using different proxies of earnings quality such as the value-relevant earnings numbers as suggested by Lang, Raedy and Wilson (2006). As researchers do not identify a uniform method to measure earnings quality (Dechow & Schrand, 2004), testing the relations using other proxies of earnings quality could validate the findings of this study.

It would be more interesting for future studies to examine earnings quality of *Shariah* firms in countries other than Malaysia. There are now an increasing number of *Shariah* indices internationally such as the S&P *Shariah* Index, the Russell-Jadwa *Shariah* Index, and the FTSE-SGX *Shariah* Index that provide lists of *Shariah* firms all over the world. This provides an opportunity for a future study to examine whether there are differences between the reporting outcomes in these different settings.

Finally, an important extension to this study would be an examination of the relation between *Shariah* and earnings management among *Shariah* Initial Public Offering

(IPO) firms in Malaysia. Zaluki (2005) provides evidence that Malaysian IPO firms manage their earnings at the time of IPOs. Therefore, future research on the impact of *Shariah* on earnings management of *Shariah* IPO firms may extend the findings of Zaluki's study and consequently provide a further understanding of the impact of *Shariah* on financial reporting issues.

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