CORPORATE SOCIAL RESPONSIBILITY AND NATURAL ENVIRONMENTAL RISK MANAGEMENT IN THE CONTEXT OF THE BANKING SECTOR OF MALAYSIA

By

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ABSTRACT

The concept of corporate social responsibility (CSR) has had a long and varied history since its beginnings in the 1930s with the seminal work of Berle and Means. Many occidental studies regarding CSR have concentrated on natural environmental management and the influence of social and culture differences on such management. However, such research has not as yet been undertaken to any significant extent in the Malaysian context. To fill this gap, the present study therefore investigated environmental management in Malaysia's banking sector, and the methods deployed by bank managers in evaluating and accommodating environmental risk in the credit assessment process. Malaysia was chosen as the study location because it is a multi racial country and has a dual banking system (conventional and Islamic banking). These characteristics enabled the study to investigate the influence of cultural and institutional differences on credit evaluation orientations, stakeholders' group activism and perceptions, and general CSR orientations. To achieve the study aims, a questionnaire survey was designed to collect data from managers and executives in corporate banking departments whose main task is to evaluate loan applications, especially in project financing. The findings obtained from analyses of the data collected suggested that Malaysia's banking sector has, in general, good environmental management practice. However, local banks' environmental management practice falls short of that of international banks. It was also found that Islamic banks have better environmental management practice than conventional banks. As regards the credit evaluation process, the study findings suggested that environmental criteria are of secondary importance compared to financial and economic criteria. The study also found that cultural and institutional differences influenced the attitude of bank managers towards environmental management practice. Thus, to improve such practice in the future, these factors should be taken account of in the environmental policy development process if future rules and regulations, including environmental laws, are to gain widespread acceptance across racial and religious boundaries.

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List of Abbreviations Used

ANOVA	Analysis of Variance
AP	Action Plan
BAFIA	Banking and Financial Institution Act
BNM	Bank Negara Malaysia/Central Bank of Malaysia
BankTrack	Is a global network of civil society organisations and individuals tracking the operations of the private financial sector (commercial banks, investors, insurance companies, pension funds) and their effects on people and the planet
BIMB	Bank Islam Malaysia Berhad
CEOs	Chief Executive Officer
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
EIR	Extractive Industries Review
EMS	Environmental Management System
EPs	Equator Principles
FOE	Friends of the Earth
GII	Government Investment Issue
IBA	Islamic Banking Act
ICSR	Islamic Corporate Social Responsibility
IFC	International Financial Corporation
KMO	Kaiser-Meyer-Oikin
MANOVA	Multivariate Analysis of Variance
NGOs	Non-governmental Organisations
OFA	Official Secrets Act
PLS	Profit and Loss Sharing

RAN	The Rainforest Action Network
SSB	*Shari'ah* Supervisory Board
UNEP	United Nations Environmental Programme
WWF	World Wildlife Fund for Nature

CHAPTER ONE

Introduction

1.1 Introduction

Corporate social responsibility (CSR) has had a long and varied history since its beginnings in the early 1930s (Berle and Means, 1932; Carroll, 1999). It has become part of the corporate agenda for business development and survival, and is considered important in explaining business relationships and business management in order to achieve business goals. CSR acts by providing a framework for strategic management and business relationship among various stakeholders.

In general, CSR can be divided into four main dimensions: the environmental, the human resource, the philanthropic, and human rights. The environmental dimension has been discussed in the academic literature focusing on how business can contribute to better environmental management and protection (Ghobadian et al., 1998; Henriques and Sadorsky, 1999; Winn and Angell, 2000; Buysse and Verbeke, 2003; Paulraj, 2009, Clemens et al., 2008; Sprengel and Busch, 2010; and First and Khetriwal, 2010). Even though the financial industry would appear to be an industry that contributes minimally to environmental degradation, studies suggest that this type of industry contributes indirectly to environmental problems (Coulson and Dixon, 1995; Thompson, 1998; Cowton and Thompson, 2000; Lundgren and Catasus, 2000; Annandale et al., 2001; Billiot and Daughtrey, 2001; Thompson and Cowton, 2004; Coulson, 2009). For example, financial institutions (FIs) contribute to environmental problems through their financing of projects and businesses that have a high impact on the environment.

Project financing is particularly relevant to environmental issues for two reasons. First, most project financing is provided to investment in industries typically associated with a high potential for adverse environmental and social impacts, such as the extractive industries, oil, energy and transportation. Second, as individual projects are often very large, they can have a substantial and significant impact on the natural environment and the well-being of local communities (Wright and Rwambizambuga, 2006).

To address such environmental issues, the Equator Principles (EPs) were established on June 4, 2003. The EPs are international voluntary codes of environmental conduct for banks. The EPs were drawn up under the auspices of the World Bank Group Environmental, Health, and Safety Guidelines (EHS Guidelines) and the International Finance Corporation (IFC) Performance Standards. The EPs are directed primarily at private, commercial lending in developing countries and emerging economies where borrowers rely more heavily on external project financing.

Among the first banks to adopt the EPs were ABN-Amro Bank, Barclays, Citigroup, and WestLB. Currently, more than 72 banks have adopted the EPs, and they account for 85% of the market for project financing in developing countries. The main reasons for adopting the EPs are reputation, stakeholder demand, non-governmental organisation activism (NGOs), industry standards and international norms (Equator Principles, 2012).

The establishment of the EPs was due to industry reaction to the demand for effective natural environmental management in the banking industry. They have since become an industry standard for managing natural environmental risk in project financing. Their establishment

and adoption present a worthwhile opportunity to study natural environmental management in the banking sector in Malaysia for the reasons given below.

First, Malaysia is a developing[1] country and project financing from the banking industry is important. It is contended that natural environmental management in developing countries differs from that in developed countries. In developing countries, natural environmental policies and programmes are based on 'top-down initiatives' from government and not because of a perceived necessity by industry nor in response to growing environmental awareness as in developed countries (Boyle, 1998; Blackman, 2008). It is therefore important to study the current implementation of natural environmental risk management in the banking sector in Malaysia in order to understand the nature and stages of its implementation.

Second, since it is a multi-racial country, Malaysia's unique culture may also influence attitude towards the natural environment. For this reason, this study will investigate ethnic and religious attitudes towards the natural environment in order to ascertain how cultural difference can influence attitude towards CSR and the natural environment. The findings obtained from such investigation will contribute to providing a useful template for better policy implementation of natural environmental risk management as they will indicate how cultural differences influence attitude to and perception of such management.

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[1] Malaysia's categorised as a developing country based on its income level and gross national income (GNI) per capita by the World Bank (2011)

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Third, there is a dual banking system in Malaysia consisting of Islamic banking and conventional banking operations that will make this study particularly useful and also allow the study to both explore the influence of organisational characteristics or attributes on the perception of CSR and natural environmental management, and to investigate whether Islamic banks have a better natural environmental risk management programme than conventional banks. These two types of banking operations also reflect the different religious affiliations that exist in Malaysia and allow the study to explore the influence of religious affiliations on natural environmental risk management.

Fourth, since many foreign banks in Malaysia are from developed countries such as the United States of America (USA) and the United Kingdom (UK), the study investigated whether banks' nationalities influence attitude to and perception of CSR and natural environmental risk management, and, in turn, whether there are differences in developed and developing countries' attitude to and perception of them.

The study hopes to usefully contribute to the CSR and natural environmental management literature by examining the influence of social and organisational attributes on CSR implementation and natural environmental management in the banking sector as this sector has received less attention than other industries. Moreover, by considering cultural differences and testing a series of hypotheses, the study hopes to evolve a model or template for better implementation of natural environmental management.

1.2 The Rationale for the Study

The importance of the study arises from the need to understand perceptions of and attitudes towards the implementation of natural environmental risk management in project financing in

the banking sector. It is important to understand the needs and differences in organisations, societies and countries, as a deep understanding of the variables is one of the main factors that has contributed to the success of policy implementation, such as the United Nations' Environmental Programme and International Codes of Conduct (Equator Principles, 2006).

Implementation of standardised international environmental management without considering the aforementioned differences may affect the effectiveness of policy implementation because of participant resistance due to different nations and organisations having different values and norms. Moreover, there needs to be a comprehensive model of natural environmental risk management which integrates organisational attributes, stakeholders' attributes, and social attributes. Attention should also be paid to the nature of the interactions and relationships between these attributes.

During the course of this study, the researcher sought to identify factors which may contribute to better natural environmental risk management policy and, at the same time, increase understanding of how CSR can be used as a tool for improving natural environmental management. To do so, this study considered the following:

1. Differences in social and cultural[2] factors that may influence environmental management in the banking sector in Malaysia. The study investigated differences in social and cultural factors that may influence credit evaluation orientation,

[2] In general, Jones et al. (2007) defined culture as a property of an organisation constituted by: (1) its members' taken-for granted beliefs regarding the nature of reality, called assumptions; (2) a set of normative, moral, and functional guidelines or criteria for making decisions, called values; and (3) the practices or ways of working together that follow from the aforementioned assumptions and values. In this study, our focus was on organisational culture that may be influenced by type of bank (Islamic or conventional), racial group and religion of banks' managers which comprises the beliefs, values and practices that have evolved for solving natural environmental risk management in project financing.

stakeholder orientation, and CSR orientation, and examined how such differences may affect natural environmental risk evaluation in project financing.

2. Differences in attitude between developed and developing nations to CSR and natural environmental risk management.
3. Differences in organisational attributes that may influence attitude towards credit evaluation orientation, stakeholder orientation, and CSR orientation and how such differences may affect natural environmental risk management in the Malaysian banking sector.
4. How Malaysian financial institutions address the issue of natural environmental risk management in project financing and what their attitudes are towards environmental management.

1.3 Research Objectives

The primary objectives of the study were twofold. First, the study aimed to discuss and delineate the concept of CSR and stakeholder theory from Malaysian financial institutions' perspective and justify why CSR and stakeholder theory should consider cultural and religious differences. Second, the study intended to elicit differences in environmental management in project financing and investigate how CSR orientation, stakeholder theory, and the credit evaluation process can be used to address the differences. Accomplishing these objectives will contribute to better understanding of actual attitudes towards and perceptions of environmental management in Malaysian financial institutions.

1.4 Research Questions

Based on the above, this research aimed to explore how Malaysian banks' managers viewed credit evaluation orientations, stakeholder groups' orientations and CSR orientations and to

investigate whether their perceptions were influenced by their racial group and religious affiliation and their employer banks' type and nationality. To achieve the study aims, the following research questions were formulated:

1. What is the current state of natural environmental issue consideration in project financing[3] in Malaysia?
2. What is the Malaysian financial institution perspective on credit evaluation orientations, stakeholder groups' orientations and CSR orientations?
3. To what extent is the environmental management perspective of a bank influenced by credit evaluation orientations, CSR orientations, and stakeholder groups' orientations, and how does this affect project financing assessment?
4. How do differences in ethnicity and religion influence the perception and attitude of Malaysian financial institutions towards credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?
5. What are the differences between the conventional bank's and Islamic bank's approach to credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?
6. What are the differences between the local bank and foreign bank approach to credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?

[3] Project financing is "a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. This type of financing is usually for large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure (Equator Principles, 2006).

1.5 Thesis Layout

The remainder of this thesis is divided as follows (see Figure 1.1). Chapter two focuses on definitions and theories of CSR and reviews the literature relating to the historical development of the CSR concept, recent CSR development, and the rationale for CSR practices. The chapter also discusses in context the five theories underpinning CSR: (1) classical view theory; (2) instrumental/strategic theory; (3) social contract theory; (4) legitimacy theory; and (5) stakeholder theory. The concept of stakeholder theory in CSR practices, key stakeholder relationships, and the relationship between stakeholders and CSR performance are also discussed. This chapter considers the issue of the natural environment having the characteristics of a qualified stakeholder.

Chapter three defines corporate social responsiveness and presents several corporate social responsiveness models based on the management literature and natural environmental management literature. This chapter also discusses corporate environmental management evaluation. Chapter four focuses on the CSR concept from the Islamic perspective and presents the Islamic perspective on the natural environment. The following chapter, chapter five, discusses Islamic banking and Islamic banking business characteristics. The development of Malaysia's financial system and Islamic banking in Malaysia is also explained in this chapter. Finally, the chapter explores the impact of banks' activities on the natural environment. The EPs, developed by industry, and the code of conduct guidelines subsequently formulated by the World Bank and United Nations for managing social and environmental issues related to the project financing, are discussed in detail.

The research methodology utilised in this research is presented in chapter six. This chapter describes the research paradigm, justifies the selection of the quantitative method, and

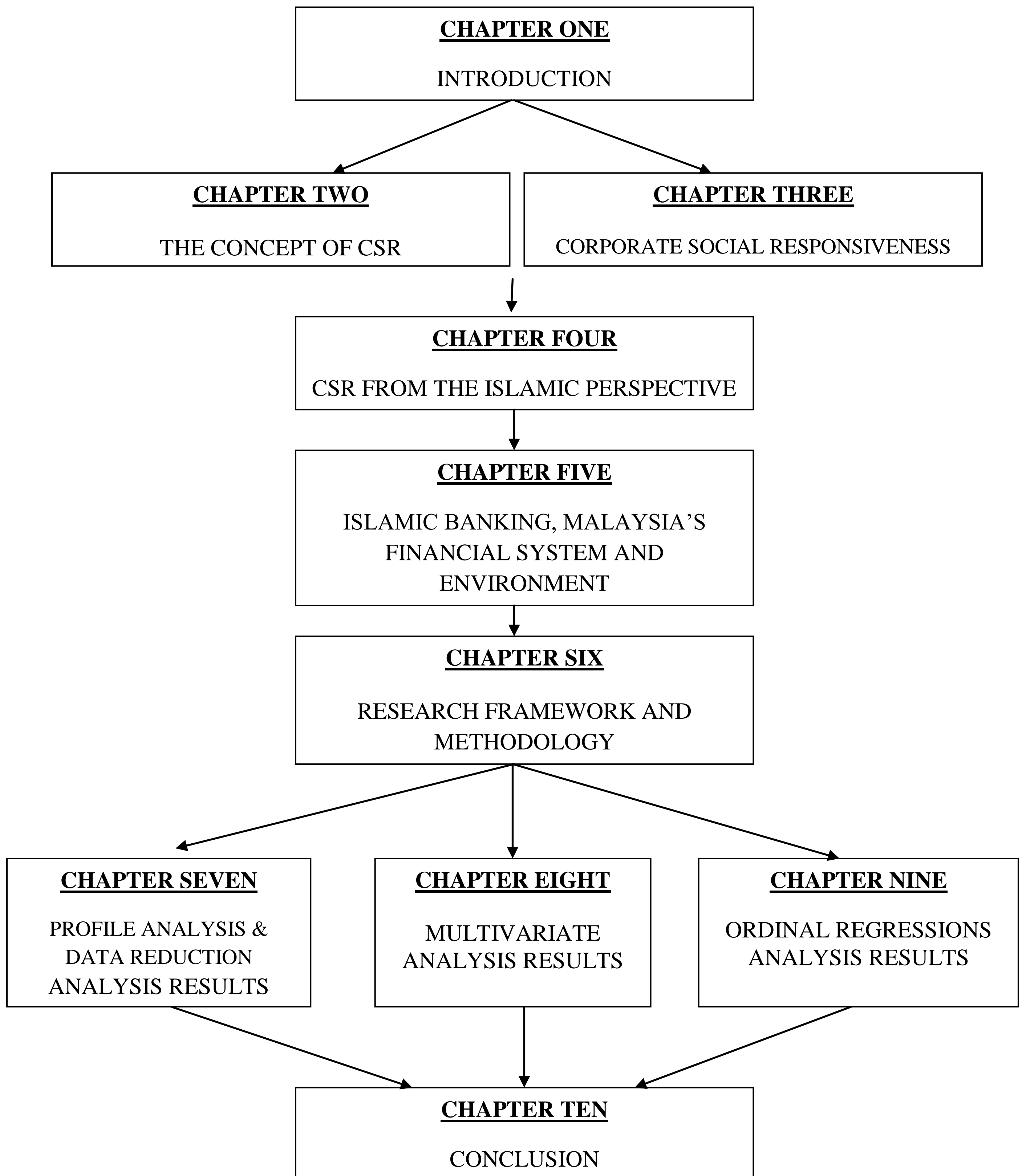
explains the data collection, sampling, and questionnaire design processes. The statistical tests applied to the data such as univariate analysis, bivariate analysis, and analysis of variance (ANOVA), factor analysis, Multivariate Analysis of Variance (MANOVA), cluster analysis and ordinal regressions are also explained.

The research results are presented in chapters seven, eight and nine. Chapter seven presents profile findings relating to respondents and banks. Banks' commitment to environmental management based on respondents' evaluation is subsequently analysed. Banks' CSR orientation is then assessed. The results of Multivariate Analysis of Variance (MANOVA) which support or reject eighteen hypotheses are presented in chapter eight. Chapter nine focuses on ordinal regression analysis results. Finally, chapter ten presents a brief summary and discussion of the study findings. This chapter provides recommendations and suggestions for future study.

1.6 Chapter Summary

This introductory chapter has presented the background to the research problem and provided a brief explanation of the study's rationale and objectives. This chapter has also provided a brief summary of the contents of chapters' two to ten. The next chapter reviews the concept of corporate social responsibility and discusses main CSR theories.

Figure 1.1: Thesis Layout



CHAPTER TWO

The Concept of Corporate Social Responsibility

2.1 Introduction

This chapter discusses the concept of corporate social responsibility (CSR), its development and the theories underlying the concept, namely: (1) classical view; (2) instrumental/strategic view; (3) social contract theory; (4) legitimacy theory and (5) stakeholder theory. The discussion is important as it provides a general overview of how previous researchers have explored the issue of CSR management. The discussion is also important to explain how these five theories have been used and applied in CSR studies.

Stakeholder theory will be discussed at some length as it is of fundamental relevance and importance in the present research. For this reason, stakeholder salience and key stakeholder relationships will be discussed in the chapter. One of the purposes of the present study is to examine the relationships between stakeholders, such as government, customers, employees, the community, NGOs, investors, competitors, and the natural environment in natural environmental risk management in the Malaysian banking sector.

2.2 The Concept of Corporate Social Responsibility (CSR)

The corporate social responsibility (CSR) concept has had a long and varied history. Although references to a concern for social responsibility appeared during the 1930s and 1940s, the modern era of social responsibility began in the 1950s (Carroll, 1999).

Bowen (1953, cited in Carroll, 1999) referred to CSR as the obligations of businessmen to pursue those decisions, those policies, those lines of action which are desirable in terms of

societal objectives and values. In the 1960s, in an overview of CSR, Frederick (1960) defined CSR as an action taken by businessmen to oversee the operations of an economic system so that it fulfils the expectations of the public. In other words, production and distribution must be conducted in such a way that will enhance total socio-economic welfare. Frederick (1960) drew attention to five major thoughts about business responsibility at that time, each attempting to tackle the problems of power in a complex society and highlighting the importance of businesses' responsibility to society.

Davis (1960) divided CSR into socio-economic obligation and socio-human obligation. As regards socio-economic obligation, the businessmen's role is to manage economic units in the society, with a broad obligation to the community with regard to economic development and public welfare. As regards socio-human obligation, businessmen are obliged to nurture and develop human values, such as morale, cooperation, and motivation. These two obligations should underlie businessmen's decisions and actions should be taken for reasons at least partially beyond the firm's direct economic or technical interests.

In the 1970s and 1980s, the debate on obligation extended to groups other than shareholders. Jones (1980) extended CSR to include the notion that corporations have an obligation to constituent groups in society other than shareholders and beyond those prescribed by law or union contract. Such obligation is voluntary and, second, the obligation is a broad one, extending beyond the traditional duty to shareholders to other societal groups, such as customers, employees, suppliers, and neighbouring communities. According to Carroll (1999), in the 1980s and 1990s research into CSR increased. Three conceptual categories were employed to discuss business performance: business ethic, CSR, and corporate social

responsiveness. These categories influenced perceptions of the role of business (Epstein, 1987).

Frederick (1986) divided CSR into four developments known as CSR_1, CSR_2, CSR_3, and CSR_4. CSR_1, called the first wave of CSR, began in the early 1950s and carried forward into the mid 1970s. It focused on corporate social responsibility. During that period (1950-1970) people felt that something was wrong with the norms governing business conduct. Moreover, although scholars recognised the importance of CSR and accountability, their work was unspecific regarding the values of CSR. Husted and Allen (2000) stated that during this period, scholars spoke only of what obligations corporations should fulfil in order to improve the social environment, rather than how they should respond and react in order to improve it.

Corporate social responsiveness emerged in 1970 as a reaction to the lack of clarity on CSR_1 in order to provide managers with tools for managing CSR_1. It is an ethical-philosophical concept of CSR, since corporate social responsiveness is viewed as being concerned:

> *"with the ability of the firm to respond to social pressure in an apparently antagonistic environment with the firm on one side and the 'stakeholders' on the other" (Frederick*, 1998, p. 154).

Scholarly interest then moved to the way corporations can enhance skills and effectiveness when dealing with social pressures (Frederick, 1986). CSR_2 was a move from an ethical and philosophical concept to an action-oriented managerial concept of social responsiveness. Frederick (1986, p. 135) subsequently referred to CSR_3 as social corporate attitude:

> *"CSR_3 embodies the notion of moral correctness in actions taken and policies formulated. Its general value referent is that body of sometimes dimly and poorly expressed but deeply held moral convictions that comprise the culture of ethics."*

A CSR_3 corporation whose normative elements are based on ethics and values will:

a) acknowledge that ethics belong at the core and not just the periphery of management decision and policies;
b) employ and train managers who accept and practise the central role of ethics;
c) possess sophisticated tools for detecting, possibly anticipating, and coping realistically with ethical problems affecting the company and its employees; and
d) attempt to align its current and planned future policies with the core values found within the culture of ethics.

Frederick (1998) finally proposed CSR_4 that considers the cosmos, science and religion in social responsibility issues. CSR_4 was developed as a result of the inadequacies of the then prevailing CSR definition. Frederick (1998) stated that in CSR_4, the researcher should expand the study of CSR to emphasise how business practice should reflect the broadest realms of human knowledge and experience instead of limiting their analysis to the norms and values of any given society or historical period. Frederick (1998) also mentioned that it is important for the researcher to study CSR based on the religious viewpoint. Religious belief is of importance in CSR research since it can influence organisational decision-making and workplace behaviour. Thus, this present study aims to undertake a comprehensive overview of CSR activities, especially in natural environmental management, based on the religious perspective represented by banks' managers' religious affiliations and employer bank types.

Carroll (1991) argued that one of the factors that contributed to the ambiguity that frequently shrouded discussions about social responsibility was the lack of consensus on what the concept meant. The concept of CSR expounded by Carroll (1979; 1991 and 1994) introduced

four layers of CSR or four kinds of social responsibility: economic, legal, ethical and philanthropic. According to Carroll (1991), the four components of CSR begin with the basic notion that economic performance undergirds all else. At the same time, business is expected to obey the law because the law is society's main reference of acceptable and unacceptable behaviour. It is also obliged to do what is right, just, fair, and to avoid or to minimise harm to stakeholders. Business is also expected to be a good corporate citizen. This can be achieved through philanthropic responsibility, where business is expected to contribute financial and human resources to the community and to improve the quality of life. The four levels of corporate social responsibility outlined by Carroll (1979; 1991; and 1994) are shown in Table 2.1 below.

Table 2.1: The CSR Pyramid

Economic Responsibility	• It is a profit motive of the business. • Business is considered the basic economic unit with the principal role to produce goods and services that consumers need and want and to make an acceptable profit in the process.
Legal Responsibility	• As a partial fulfilment of the 'social contract' between the business organisation and society, businesses are expected to pursue their economic missions within the framework of the law.
Ethical Responsibility	• To avoid those activities and practices that is prohibited by societal members, even though they are not codified into law. • Encompasses additional behaviours and activities that are not necessarily codified into law but nevertheless are expected of business by society's members.
Philanthropic Responsibility	• Encompasses business actions that are in response to society's expectation that businesses be good corporate citizens. • This responsibility is purely voluntary and the decision to be philanthropically responsible is guided only by the desire of business to engage in social roles not mandated, not required by law, and not even expected in an ethical sense. • Includes activities such as contributions to the arts, education or the community.

Since then, Carroll's pyramid has received substantial attention among scholars and has been used as a main concept in CSR studies.

Aupperle et al. (1985) utilised Carroll's (1979) four CSR orientations (economic responsibility, legal responsibility, ethical responsibility, and philanthropic responsibility) in their study, which endeavoured to assess how CEOs viewed CSR. Their study found that CEOs were capable of distinguishing between the four CSR orientations when sorting written statements reflecting each orientation.

Ten years later, Pinkston and Carroll (1996) repeated the study in order to ascertain if there had been differences in the priorities accorded to CSR orientations over time. A relatively strong preference towards economic and legal responsibility was reported. Moreover, ethical responsibility was consistently less important than economic and legal responsibility, but more important than philanthropic responsibility. Their study also found the same orientation rankings as reported in Aupperle et al.'s (1985) study.

O'Neill et al. (1989), Ibrahim and Angelidis (1995), and Ibrahim et al. (2003) examined how board of directors (BODs) viewed CSR orientations. O'Neill et al.'s (1989) study revealed that BODs could successfully differentiate between the four CSR orientations as in the earlier study. Ibrahim and Angelidis (1995) and Ibrahim et al. (2003) expanded O'Neill et al.'s (1989) study by categorising BODs into two groups: (1) inside; and (2) outside. Their study results indicated that outside BODs expressed greater concern about philanthropic responsibility and less concern about economic responsibility. No significant difference between the two groups was observed with respect to legal and ethical responsibility.

Pinkston and Carroll (1994) expanded previous studies on CSR orientations to examine the influence of country of origin on attitude towards them. Their study sought to determine whether CSR orientations and their approximate weightings were similar for respondents

employed by local and foreign organisations. Their findings indicated that the four CSR orientations were perceived differently by respondents. Germans and Swedes attached greater importance to legal responsibility than economic responsibility. The study result therefore demonstrated that there were significant differences in the perceived relative importance of CSR orientations based on the country of origin of respondents' employing organisations.

Edmondson and Carroll (1999) conducted a study on CSR orientations among the owners or CEOs of African American businesses. Their study results revealed that economic responsibility was perceived to be the most important, and ethical responsibility was more important than legal responsibility. Philanthropic responsibility was found to carry more weight for this study's sample than previous studies. Thus, the present study investigates the inter-relationship between multi-racial, multi-cultural society in the wider sense (difference racial groups), and multi religious society (difference religions) in a more specific sense as exists in Malaysia, and how this interrelationship is reflected in different perceptions amongst bank managers specifically and stakeholders more generally towards CSR.

Smith et al. (2001) examined how personal characteristics and organisational characteristics influenced attitude to CSR orientations. Personal characteristics included gender and racial group while organisational characteristics included respondents' role, such as BOD, employee or customer. The study results indicated that both personal characteristics and organisational characteristics influenced attitude to CSR orientations. Employees were most concerned about economic responsibility whereas customers were most concerned about ethical responsibility. The results also indicated that women black employees and customers

were more concerned about whether an organisation fulfilled its philanthropic responsibility than males and whites.

Marz et al. (2003) carried out a study that evaluated the influence of organisational and personal characteristics on CSR orientations in Germany. Organisational characteristics comprised hierarchical level and professional activity. Personal characteristics comprised political system origin (former East Germany versus former West Germany) and gender. The results indicated that mid-level management exhibited a significantly lower social orientation than low-level managers. Female respondents expressed a higher social orientation than male respondents. However, no political influence as an affecting factor in the context of CSR orientation was found.

As cultural diversity is one of the major factors influencing CSR orientation, several studies have compared evaluation of CSR orientation between countries. Maignan (2001) examined American, French and German consumers' evaluation of CSR orientation. The study's results suggested that American consumers highly valued economic responsibility, whereas French and German consumers were more concerned about legal responsibility and ethical responsibility.

Kusku and Zarkada-Fraser (2004) conducted a study which compared Turkish and Australian business organisations' CSR orientation, since Turkey and Australia differ in terms of culture and economics. The study results showed that Australian and Turkish business organisations' CSR practices differed significantly on a number of variables. For example, Australian business organisations were more likely to obey the law than Turkish business organisations.

In their study, Ibrahim and Parsa (2005) examined the differences between American and French managers' CSR orientations. Their study showed that American and French managers significantly differed with regard to CSR orientation. American managers expressed greater concern about the legal and ethical components of CSR than their French counterparts. French managers expressed greater concern about the economic and philanthropic components of CSR. Smith et al. (2007) investigated differences in CSR orientation between American and Japanese students. Their study finding supported the assertion that CSR orientation would vary across students of different cultures.

Peterson (2004) and Smith et al. (2001) investigated the relationship between CSR orientation and CSR commitment. Their study findings indicated that ethical responsibility was a stronger predictor of business commitment towards CSR than economic, legal or philanthropic responsibility. The result also revealed that philanthropic responsibility was more strongly associated with organisational commitment towards CSR than economic, legal or ethical responsibility. The study also found that legal responsibility was positively related to the willingness of businesses to observe legal requirements. The aforementioned studies were all conducted in developed countries. The following paragraphs will review studies carried out in developing countries.

Ramasamy and Yeung (2009) studied differences in the importance consumers in China attached to CSR orientation based on Carroll's (1979) pyramid. Their study found that Chinese consumers considered economic responsibility to be most important and philanthropic responsibility to be least important. Arli and Lasmono (2010) conducted a similar study on Indonesian consumers. Their study results showed that economic

responsibility was considered to be the most important responsibility followed by philanthropic responsibility, legal responsibility, and ethical responsibility.

Dusuki and Yusuf (2008) investigated the importance attached to CSR orientations in Malaysia. Their study results showed that Malaysians ranked the orientations in order of importance as follows: economic, ethical, legal, and philanthropic. The ranking differed slightly from the idealised model of Carroll (1979) suggesting that personal characteristics such as gender, racial group, educational level, work experience, and religious affiliation contributed to the difference. However, the research focused only upon MBA students in a public university in Malaysia. A different sample may have produced different results.

Given the above review of studies in developed and developing countries, this study investigated differences in importance attached to CSR orientations and their influence on natural environmental management in Malaysia's banking sector generally and project financing in particular. As has been shown in previous studies, attitude and perception of CSR orientations can be influenced by personal characteristics and organisational characteristics. Thus in this study personal characteristics included racial groups and religious affiliations, and organisational characteristics comprised bank types and bank profiles. This study also investigated how banks' nationalities influenced CSR orientation in order to fill the gap in the literature as few studies have examined the influence of cultural difference on attitude to CSR orientation, especially in the banking sector in Malaysia. The study also sought to identify how CSR orientations influence natural environmental management.

2.3 Rationale for CSR Practices

The company has come under increasing pressure to demonstrably engage in activities described as CSR. Beurden and Gossling (2008) highlighted the increased pressure for corporations and businesses to adopt CSR. According to them, CSR pressures come from legal, social, moral, and financial factors. Legal restrictions increase as a result of government restrictions, customers keep demanding higher transparency and ask for sustainable products, and investors set a greater demand based not only on financial performance but also the way businesses meet their CSR. All of these pressures and developments increase corporate motivation to implement CSR.

Several factors have been reported in the literature to motivate CSR implementation in general and motivate companies to implement natural environmental management in particular. In his study of major Australian and International companies, Dummet (2006) identified 11 main drivers: (1) government legislation; (2) government incentive; (3) cost savings; (4) market advantage; (5) reputation; (6) avoiding risk; (7) champion in industry; (8) pressure from investors; (9) consumer pressure; (10) non-government organisations; and (11) societal expectation.

The above factors were supported in a survey by Levy (1995), who found that CSR practice can be influenced by a wide range of factors, including stakeholders such as employees, suppliers, and customers. His survey of 169 transnational companies indicated that organisational characteristics and regulatory factors have a positive influence on CSR practices. This study therefore aimed to explore how the perception of and attitude to stakeholders influenced perception of and attitude towards natural environmental management.

In another study on drivers in small manufacturing and business enterprises (SMEs), Williamson et al. (2006) found that environmental practice (one of the components of CSR) is driven by two important considerations, namely; business case and regulation. They also found that 'business case' is a particularly important driver. They defined business case as the ability to provide shareholders with additional benefits and in this way to become more attractive to its wider stakeholders.

Jenkins (2006) focused on CSR issues among SMEs in the UK. In-depth interviews with representatives from 24 UK SMEs revealed that an internal driver (business performance) was their main motivation for CSR implementation. In another study, Dummett (2006) interviewed 25 business leaders and found government legislation and policies to be dominant drivers for CSR implementation.

The above discussion suggests there must be strong drivers for a company to implement CSR. Moreover, implementation of CSR policies is related to the ability of the company to maximise shareholders' wealth and generate profit. Even though there are many factors associated with CSR implementation, Dummett (2006) contended that all of them will ultimately be linked to financial motivation. For example, breach of legislation will affect a company's reputation in wider society and among customers and investors. This, in turn, will lead to reduced sales and loss of potential investors, leading to financial loss.

This section has discussed general factors that contribute to CSR implementation. Based on the discussion, in this research we aimed to explore the implementation of natural environmental management in project financing and identify the factors that contribute most to such implementation applying stakeholder theory, which will be discussed in section 2.6.

In addition, the influence of societal diversity was explored in this study. According to Gossling and Vocht (2007), CSR comprises the notion that organisations have to meet the expectations of the society. As Malaysia is a multi-cultural (different racial group) and multi-religious (different religions) country, this study examined the influence of societal diversity on natural environmental management, this approach being a departure from previous studies that have assumed societal homogeneity (Agle et al., 1999; Henriques and Sadorsky, 1999; Buysse and Verbeke, 2003; Gago and Antolin, 2004; Eesley and Lenox, 2006). The next section will focus on theories underpinning CSR practices.

2.4 Theories Underpinning CSR Practices

2.4.1 Classical View Theory

Friedman (1962; 1970) is the most prominent defender of this theory. According to Friedman, the most important responsibility of business is to increase shareholders' wealth. For this reason, managers' and executives' main aim is to make as much profit as possible while conforming to the basic rules of society. Firms are commonly assumed to incur significant private cost by pursuing social welfare objectives beyond profit maximisation within the law. This creates a major conflict between profit maximisation and CSR. Accordingly, classical view theory asserts that management, as agents of the shareholders, should pursue no goal other than profit maximisation (Herremans et al., 1993).

This theory thus emphasises profit maximisation. It recognises three aspects of CSR propounded by Carroll (1999) (economic responsibility, legal responsibility and ethical responsibility) but opposes philanthropic responsibility, since, in its proponents' view, such responsibility can jeopardise the business and shareholders' wealth. They believe free

markets are responsible for and can handle social problems (Shrivastava, 1995). Social problems can be managed by creating incentives and disincentives to elicit appropriate behaviour from business.

According to the classical view theory, there is a negative relationship between social performance and financial performance, since, by implementing CSR, firms will incur a competitive disadvantage, as they will have additional costs that might otherwise be borne by other parties such as the government (Aupperle et al., 1985). For example, adopting an environmentally friendly production process may increase the cost of production, which in turn, will reduce competitive advantage.

CSR practices may also have an adverse impact on productivity. For example, strict environmental control will force the company to commit resources and workers to non-productive activities such as environmental auditing, waste treatment, and litigation (Dowell et al., 2000). Waddock and Graves (1997) therefore point out that, according to this theory, there are few readily measureable economic benefits to be derived from socially responsible behaviours. Accordingly, this theory best explains why businesses resist CSR implementation. It also contends that implementation of CSR will result in additional cost to the business.

2.4.2 The Instrumental / Strategic Theory

In the previous section, we discussed the advantages and disadvantages of CSR to the company. The instrumental or strategic theory looks at CSR from a different perspective. It focuses on the ways in which CSR programmes can create strategic benefits for the organisation (Burke and Logsdon, 1996). According to this theory, CSR is linked with profit

maximisation of businesses and this benefits their stakeholders. Therefore, Burke and Logsdon (1996) stated that CSR policy should focus on the economic benefits to the business. CSR is strategic when it yields substantial business-related benefits to the firm, such as by supporting core business activities and thereby contributing to the firm's effectiveness in accomplishing its mission.

Instrumental/strategic theory is similar to classical view theory as it assumes the business is an instrument for wealth creation and that is its sole social responsibility. On the other hand, instrumental theory differs from classical view theory as only the economic aspect of the interaction between the business and society is considered. Social activity is therefore accepted if, and only if, it is consistent with wealth creation (Garriga and Mele, 2004).

A number of studies have endeavoured to determine the relationship between CSR and corporate social performance. Many have found a positive relationship between CSR and financial performance (Herremans et al., 1993; Hart and Ahuja, 1996; Dowel et al., 2000; Ruff et al., 2001; Kumar et al., 2002; Goll and Rasheed, 2004; Luo and Bhattcharya, 2006; and Mittal et al., 2008). Thus, CSR is related to maintaining a good corporate reputation that is likely to pay a good return in the long run.

According to Garriga and Mele (2004), a positive relationship between CSR and economic achievement can be achieved through: (1) maximising shareholder value; (2) benefitting from competitive advantage; and (3) marketing the advantages of CSR activities based on systematically targeting areas for superior performances (Johnson, 2003). Motivation for CSR implementation is strategic/instrumental since each activity is targeted to enhance

financial performance. For example, working with the community not only shows that the company is a good citizen; it also provides a means to attract and to retain good customers.

2.4.3 Social Contract Theory

Based on Sacconi (1999 p. 193), social contract theory views the firm as an institution endowed with a formal constitution. The social contract establishes the 'constitution' of the firm and provides a hypothetical model of ideal agreement that constitutes the criterion for assessing the actual economic institution. That is to say, the social contract is the constitution of the firm and the code of ethics or 'constitutional chart' makes the implicit social contract explicit (Chua and Rahman, 2011, p. 316).

Donaldson (1982) viewed the social contract as the indirect responsibilities of the business towards society. Such responsibilities are indirect due to commercial interest and policy and because of how society implicitly expects business to act (Moir, 2001). Thus companies which adopt social contracts view implementation of CSR as being due to 'societal expectation', and this may also be one of the initial motivations for CSR implementation. Chua and Rahman (2011, p. 315) state:

> *"A social contract perspective is used to reflect the tacit understanding within society that corporations, in the process of serving their own business interests, are obliged to take actions that also protect and enhance society's interests."*

The social contract implies that society allows businesses to operate on the assumption that they will behave fairly and show accountability for their actions beyond legal requirements. The social contract states society's expectations of businesses as well as businesses' expectations of society (Kakabadse et al., 2005). This research therefore endeavoured to

explore the influence of a multi-cultural society and its expectations on natural environmental management.

In explaining the adoption of corporate social responsibility, Chua and Rahman (2011) indicated that according to social contract theory, adoption may be induced by external and internal factors. Internal factors may come from social obligation, social identity, social control, and reputation. On the other hand, external factors may come from public pressure, social and cultural shift, and stakeholder claims.

Wempe (2005) referred to two types of contract in social contract theory: macro-social contracts and micro-social contracts. Donaldson (2009) defined macro-social contracts as hypothetical agreements designed to guide all economic agreements. Micro-social contracts are the norms created by 'economic communities' that reflect the attitudes and behaviours of most members of those communities. Micro-social contracts represent agreements and shared understandings about economic rules and propriety (Donaldson and Dunfee, 1994).

Donaldson and Dunfee (1994) extended social contract theory to integrated social contract theory. Integrated social contract theory is a comprehensive view of social contracts where both macro-social and micro-social contracts are synthesised (Wempe, 2005). Thus, based on this theory, ethical obligation is viewed as two levels of consent: (1) macro-social and (2) micro-social (Garriga and Mele, 2004).

Many studies of corporate social responsibility have applied this theory. For example, Chua and Rahman (2011) studied the implementation of codes and ethics based on social contract theory. Hartman et al. (2003) applied social contract theory to identify labour rights in their

study of global labour standards. Kolk and Tulder (2002) applied social contract theory in their study of child labour and multinational companies. Gosling and Huang (2009) utilised social contract theory as a framework in their study of integrity in ethical theory. These are just a few examples of how social contract theory has been applied in CSR and ethics research.

According to such theory, the implementation of corporate social responsibility by business is based on the expectations of society. For example, in a society that emphasises accountability and corporate social responsibility, the public will have high expectations that businesses will follow ethical codes or CSR guidelines that specify the principles and standards of behaviour required of their society (Chua and Rahman, 2011).

2.4.4 The Legitimacy Theory

Suchman (1995, p. 574) defined legitimacy as:

> *"a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions".*

According to Palazzo and Scherer (2006, p. 71):

> *"Legitimacy can be understood as the conformation to social norms, values, and expectations."*

Legitimacy theory focuses on how businesses respond to various expectations and pressures in order to survive. For Aguilera et al. (2007) legitimacy is seen as a relational motive as it refers to a concern for how the firm's actions are perceived by others. Firms within a given industry are confined by the specific norms, values, and beliefs of that industry, some of which are enacted into law. Firms have a relational motive to engage in the CSR practices of

their industry and thereby come to be regarded as legitimate through their compliance with industry norms and regulations, and an instrumental motive to pre-empt bad publicity, institutional investor disinvestment, and penalties arising from non-compliance with applicable legislation. Thus, organisations are likely to engage in CSR practices in order to preserve their social legitimacy, by preventing negative perceptions and to ensure their long-term survival. For example, business organisations may become involved with charity and community activities. Although such activities might not benefit their shareholders directly, they may engender positive perceptions of the organisations which, in turn, may create customer loyalty and increase sales.

According to legitimacy theory, in order to survive, companies have to perform well and meet the expectations of the various parties from whom they derive power. Observer groups (audiences or relevant sections of the public) evaluate the organisations based on their perceptions and/or assumptions regarding congruence between their values and organisational values (Mobus, 2005).

Palazzo and Scherer (2006) indicated that legitimacy has become a critical issue for corporations, especially for those who operate globally. This is because many corporations have been involved in conflicts with civil society, such as financial scandals, human rights violations, and environmental disasters. This is one of the reasons for deteriorating public trust and increased NGOs' involvement in corporate activities. For example, the fashion industry has come under fire for employing child labour and forced labour in unsafe working conditions. To overcome such criticism, NIKE, GAP and Inditex have come together with NGOs, multilateral and academic partners to form 'Global Alliance', which operates in their

overseas factories, to influence local business practices and promote CSR by exposing issues such as child and forced labour, and unsafe working conditions (Dijken, 2007).

Lindblom (1994, cited in Gray et al. 1995) indicated that there are four strategies which a corporation seeking legitimation may adopt. First, an organisation may seek to educate and inform its relevant public about actual changes in the organisation's performance and activities. Second, the organisation may seek to change the perceptions of the relevant publics. Third, the organisation may seek to manipulate perceptions by deflecting attention from the issues of concern to other related issues; and, fourth, the company may seek to change external expectations of its performance.

In his work, Suchman (1995) divided legitimacy into two distinct approaches the strategic and the institutional. The strategic approach adopts a managerial perspective and emphasises the ways in which organisations instrumentally manipulate and deploy evocative symbols in order to garner societal support. In contrast, the institutional approach adopts a more detached stance and emphasises the ways in which sector-wide structuration dynamics generate cultural pressures that transcend any single organisation's purposive control. Based on this approach, legitimacy is depicted not as an operational resource, but as a set of constitutive beliefs. The cultural factor plays an important role in determining how the organisation is built, how it is run and, simultaneously, how it is understood and evaluated. Since culture is shown to play an important role in CSR practices, this research will explore the influence of cultural diversity in society on natural environmental management.

Moir (2001) indicated that legitimacy theory implies that there is some form of social expectation that a legitimate business will act in a particular manner and this is, in effect, a

form of social contract. Campbell (2000) stated that legitimate organisations exist in society under an expressed or implied social contract and, social disclosure can be used to narrow the legitimacy 'gap' between how the organisation wishes to be perceived and how it actually is perceived.

Legitimacy theory has been extensively used by scholars to explain corporate social disclosure in financial reporting. Suchman (1995) pointed out that “legitimacy management rests heavily on communication” – therefore, in any attempt to involve legitimacy theory, there is the need to examine some forms of corporate communication. The theory also indicates that business organisations need to look for a balance between their business activities and society’s perceptions.

2.4.5 Stakeholder Theory

Stakeholder theory focuses on the relationship between groups and individuals who can affect or be affected by the achievement of the organisation’s objectives (Freeman, 1984). Clarkson (1985) defined a stakeholder as a person or group that have, or claim, ownership rights or interest in a corporation and its activities, past, present or future. Such claimed rights or interests are the results of actions taken by the corporation and may be legal or moral, individual or collective. Starik (1995) expanded the definition of stakeholder to include both human and non-human entities. He argued that the non-human natural environment can be integrated into the stakeholder management concept, since the natural environment is one of the important components of the business environment.

Clarkson (1985) categorised stakeholders into primary and secondary groups. The primary stakeholder group consists of those without whose continuing participation the corporation

cannot survive as a going concern. There is a high level of interdependence between the corporation and its primary stakeholder group. The corporation's survival and continuing success depend upon the ability of its managers to create sufficient wealth, value, or satisfaction for those who belong to each stakeholder group. Primary stakeholders typically comprise shareholders, investors, employees, customers, suppliers and public stakeholders (government and communities). Secondary stakeholders are those who are influenced or affected by the corporation, but who are not engaged in a transaction with the corporation (Moir, 2001). Secondary stakeholders are referred to as secondary since in general they do not have a formal contractual bond with the firm or direct legal authority over the firm (Eesley and Lenox, 2006).

From the firm perspective, secondary stakeholders can bring pressures to bear to induce firms to respond to stakeholders' requests. Such stakeholders can engage in a set of actions such as protests, civil suits, and letter writing campaigns to advance their interests (Eesley and Lenox, 2006). Moreover, they can provide strong incentives for firms to meet stakeholders' demands in two ways: (1) they may impose direct operational costs in terms of legal fees, public relations expenses, and managerial attention if stakeholder demands are not addressed; and (2) their actions may have important consequences for a firm's reputation and its subsequent ability to attract customers and employees and appease regulators and shareholders.

From a stakeholder perspective, corporate social performance (CSP) is assessed in terms of a company meeting the demands of multiple stakeholders (Ruf et al. 2001). Waddock and Graves (1997) found a positive relationship between stakeholder and corporate social performance practice due to the relationship between a firm's explicit costs, such as payments

to bondholders and its implicit costs to other stakeholders, such as product quality costs and environmental costs. A firm that lowers its implicit costs by socially responsible actions will produce higher explicit costs, resulting in competitive disadvantage.

Freeman (1994) contended that businesses have a responsibility to all stakeholders. The central idea in stakeholder theory is that the success of an organisation depends on the extent to which it is capable of managing its relationship with key groups, such as financiers and shareholders, and also customers, employees, and even communities or societies. Managing the stakeholder relationship is non-optional: it is morally required.

Stakeholder theory, unlike classical view theory, admits additional costs are incurred when implementing CSR. However, the actual costs are minimal and pay back with greater potential benefits. For example, British Petroleum (BP) imposed a firm wide cap on greenhouse gas emission and began a corporate emission trading system, thereby acknowledging the appropriateness of reducing greenhouse gas emission. As a result of implementing this system, emission has been reduced significantly and no additional cost has been incurred. In fact, BP has increased net income by about US$600 million (Heal, 2005). Improved environmental performance induces cost savings, increases sales, and improves economic performance.

When implementing CSR, an organisation will gain competitive advantage without jeopardising the interests of its primary stakeholders, for example, customer loyalty and efficient management will be increased. Ruf et al. (2001) found some support for stakeholder theory, which asserts that the dominant stakeholder group (shareholders) financially benefit

when management meets the demands of multiple stakeholders. They found that by implementing CSR, firms can gain both short-term and long-term financial benefits.

Donaldson and Preston (1995) categorised stakeholder theory into descriptive, instrumental, and normative. According to Freeman (1994), descriptive stakeholder theory describes how organisations manage or interact with stakeholders, normative stakeholder theory prescribes how organisations ought to treat their stakeholders, and instrumental stakeholder theory explains the relationship between stakeholders and business performance. Even though these three stakeholder theories are distinctly different, Donaldson and Preston (1995) concluded that they are mutually defensive.

Given the cultural and religious diversity of Malaysian society, this study examined the influence of such diversity upon banks' managers' perception of and attitude towards stakeholders, and how such perception and attitude influence their natural environmental management practices.

2.5 Stakeholder Salience

Mitchell et al. (1997) introduced a theory of stakeholder identification and salience based on stakeholders possessing one or more of three relationship attributes: power, legitimacy and urgency. This theory provides a comprehensive typology of stakeholders based on the normative assumption that these attributes define the field of stakeholders.

Stakeholder power enables a stakeholder group to gain access to coercive, utilitarian, or normative means, to impose its will in the relationship with for example an investment company. Stakeholder power also emphasises two factors. First, the power of the

stakeholder depends on both the resource base of the stakeholder group and, second, the firm being targeted. The greater the stakeholder group's resources, the more likely the firm will respond positively. The greater the firm's resources, the less likely the firm will respond positively (Eesley and Lenox, 2006).

According to Mitchell et al. (1997), legitimacy refers to socially accepted and expected structures or behaviours, often coupled implicitly with power. The more legitimate stakeholders are, the more likely they are to elicit a positive response from firms. Even if a stakeholder group lacks power, as defined above, the legitimacy of the group may be sufficient to elicit a positive firm response.

Despite the linkage between power and legitimacy, both are distinct attributes that can combine to create authority but, at the same time, can also exist independently. This situation implies that legitimacy is a social good that is something larger than mere self-perception, and that may be defined and negotiated differently at various levels of the organisation. Urgency is defined as the degree to which stakeholder claims call for immediate attention. The urgency attribute of stakeholder management exists when two conditions are met: (1) when a relationship or claim is of a time-sensitive nature; and (2) when that relationship or claim is important or critical to the stakeholder. Mitchell et al. (1997) demonstrated that the urgency of a stakeholder group can positively influence outcomes.

The aforementioned three attributes contribute to stakeholder salience. Mitchell et al. (1997) contended that a dynamic model, based upon identification of the three stakeholder attributes of power, legitimacy and urgency, can enable a manager to recognise situational uniqueness, develop managerial perception, and prioritise stakeholder relationships. Stakeholder salience

as perceived by managers has been reported to be positively related to the cumulative impact of the three stakeholder attributes (Buysse and Verbeke, 2003).

According to their characteristics, stakeholders can be divided into seven categories (see Table 2.2 below).

Table 2.2: Stakeholder Characteristics

Category	Characteristics	Example
Dormant	Do not exercise their power since they lack legitimacy and urgency. Have little or no interaction with the firm.	Stakeholders who can spend a lot of money and stakeholders who can command the attention of the news media.
Discretionary	Possess the attribute of legitimacy, but have no power to influence the firm and no urgent claims. The recipients of corporate philanthropy.	Non-profit and volunteer organisations.
Demanding	Stakeholders with urgent claims but having neither power nor legitimacy	Picketers
Dominant	Stakeholders are both powerful and legitimate; their influence in the firm is assured. Have some formal mechanism in place that acknowledges the importance of their relationship with the firm	(1)Investor relation office handles ongoing investor relationship (2) Human resource department
Dependent	Stakeholders that have urgency and legitimate claims but lack power. These stakeholders depend on other stakeholders or the firm's managers for their power.	Local residents and natural environments
Dangerous	Stakeholders with urgency and power but who lack legitimacy.	Wildcat strikes, employee sabotage or NGOs with purposely biased reports of the company's environmental performance.
Definitive	Have power and claims that are both legitimate and urgent.	Stockholder requests

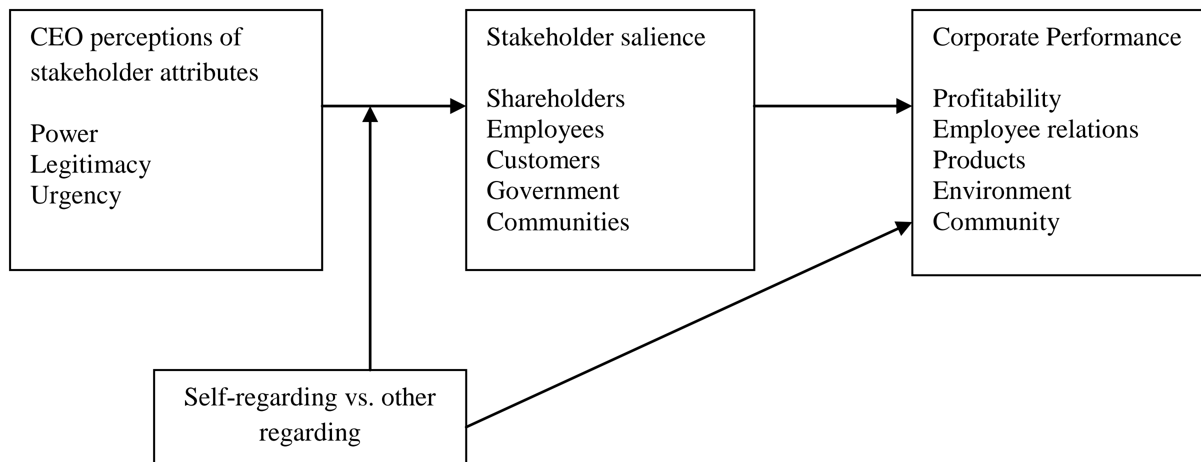
Source: Mitchell et al. (1997)

In this study, bank managers were asked how various stakeholders influenced their implementation of natural environmental management.

As pointed out by Mitchell et al. (1997), managers are central to stakeholder salience theory since their own characteristics are likely to influence their perceptions of stakeholder attributes and salience. Managerial characteristics are therefore a moderator of the stakeholder-manager relationship. As per Mitchell et al. (1997), we treated managerial characteristics as a variable and proposed that it would be an important moderator of the stakeholder-manager relationship.

Agle et al. (1999) studied the relationship between the stakeholder attributes of power, legitimacy and urgency, and stakeholder salience, CEO values, and corporate performance. They applied the theory proposed by Mitchell et al. (1997) in their study and their research framework is shown below in Figure 2.1.

Figure 2.1: Relationship between Stakeholders Attributes of Power, Legitimacy and Urgency, Stakeholder Salience, CEO Values, and Corporate Performance



Source: Agle et al. (1999)

Agle et al. (1999) mailed a questionnaire survey to 650 CEOs on the Kinder Lydenberg, Domini and Company database. They found strong support for a relationship between

stakeholder attributes and stakeholder salience, and some significant relationships among CEO values. They also reported that of the three attributes, urgency was the best predictor of stakeholder salience.

Mitchell et al.'s (1997) theory of stakeholder identification and salience was applied by Gago and Antolin (2004) in their study of the environmental performance of Spanish companies. They elicited the perceptions of environmental managers in Spanish manufacturing firms of stakeholder, power, legitimacy, urgency, and salience, with regard to environmental issues in order to assess whether firms' strategy pertaining to environmental issues was seen as a response to the pressures and demands of different stakeholders. Referring to their study, Gago and Antolin (2004, p. 67) commented:

> *"It is interesting to consider the relative importance of each stakeholder when its expectation concerns the company's environmental policy. As there can be differences among stakeholders when dealing with environmental issues and for different reasons, not all stakeholders have the same relationship with the company, the perceptions and considerations managers have of them will also vary. These stakeholders' attributes will be assessed differently depending on the stakeholder and the environmental issue".*

Gago and Antolin's (2004) study showed a hierarchy among stakeholders, with the government occupying first place in importance. Legitimacy and urgency were also found to positively influence environmental salience.

Berman et al. (1999) studied the relationship between two stakeholder management models and firm financial performance. The two models were the strategic stakeholder model and the intrinsic stakeholder commitment model. They found that the relationship between stakeholder relationship and financial performance depended on which model was being examined. Based on the model used, the stakeholder relationship had a direct effect and

moderating effect on financial performance. Even though there was no specific relationship between environmental management and financial performance, the study showed the importance of the stakeholder relationship for performance and strategy.

In their study, Eesley and Lenox (2006) extended Mitchell et al.'s (1997) stakeholder identification and salience theory by defining salience in terms of actions and not perceptions, and by proposing that power, legitimacy, and urgency arise out of the nature of the stakeholder. To test this framework, Eesley and Lenox (2006) built a unique dataset of over 600 secondary stakeholder actions within the United States relating to environmental issues over the period 1971 to 2003. The dataset contained federal and state case law on environmental-related civil suits, including the US Supreme Court, Courts of Appeal, Federal District Courts and State Courts. Eesley and Lenox findings generally supported Mitchell et al.'s (1997) stakeholder identification and salience theory that power, legitimacy, and urgency are important drivers of salience. They found evidence that stakeholder requests are likely to be met by targeted firms when stakeholder actions are taken by groups with greater power, legitimacy and urgency.

Henriques and Sadorsky (1999) conducted a survey of 750 large firms in Canada. They investigated the relationship between environmental commitment and stakeholder pressure. Based on responses to questions describing a firm's practices, Henriques and Sadorsky classified environmental commitment into 4 profiles known as reactive, defensive, accommodative, and proactive as per Carroll (1979) and Wartick and Cochran (1985). They found that firms with more proactive profiles differed from less environmentally committed firms in their perceptions of the relative importance of different stakeholders. However, firms with defensive and accommodative profiles produced the weakest results.

2.6 Key Stakeholder Relationships

Based on Henriques and Sadorsky (1999), Banarjee et al. (2003) categorised stakeholders as regulators, organisational members, and community members. Mandatory compliance with regulators' environmental standards is an important antecedent to environmentalism. Organisational stakeholders represent an assortment, including shareholders, customers, and employees. Community stakeholders include many non-governmental organisations and other potential lobby groups that have an interest in the environment and the activity to mobilise public opinion. In the next section we will discuss different stakeholder groups and how they impact on CSR.

2.6.1 Government

Buysse and Verbeke (2003) found public agencies play a prominent role in shaping corporate environmental management practices. Banarjee et al. (2003) reported that regulatory forces have a significant direct influence on environmental corporate strategy. Berry and Rondinelli (1998) stated that since government regulations have become more stringent, legal liabilities for environmental damage have become more burdensome. For example, in a case in the United States, a bank foreclosed on a loan and took control of a small piece of real estate. The property was later found to be contaminated with hazardous wastes and after a long drawn out case, the bank was held liable for half a million dollars (Hunt and Auster, 1990). This outcome demonstrates that banks need to be aware of government rules and regulations relating to environmental risk and liability in order to avoid involvement in activities that may damage their reputation and income.

2.6.2 Customers

Many studies have examined the relationship between CSR implementation and consumer buying behaviour, perception, satisfaction, and willingness to pay. Brown and Dacin (1997); Handleman and Arnold (1999); Lichtenstein et al. (2004); Pivato et al. (2008); Williams and Zinkin (2008) and Mattila et al. (2010) found a positive relationship between CSR activities and consumer purchase attitude; Nan and Heo (2007); Aqueveque and Encina (2010); Brunk and Bluemelhuber (2010) reported a positive relationship between CSR activities and consumer perception; Creyer and Ross (1997); Bhattacharya and Sen (2004) and Elen et al. (2006) recorded a positive relationship between CSR activities and consumer purchase behaviour; Carlvalho et al. (2010) and Schubert et al. (2010) identified a positive relationship between CSR activities and customer willingness to pay; and Luo and Bhattacharya (2006) and Marin et al. (2009) found a positive relationship between CSR activities and customer satisfaction and loyalty.

In conventional banking, the customer is treated as a creditor of the bank. Customers participate as a source of funds by depositing their cash in savings and investment accounts of the bank. How customers influence a bank's CSR activities may depend on their financial standing. Individual customer movement may not have a large impact on the bank's business, however, if the movement creates a trend and is followed by other customers, it may have a negative impact on the bank. On the other hand, Islamic banks treat customers as business partners through their participation in profit and loss sharing. Islamic banks may therefore be more sensitive to customers' preferences and value systems than conventional banks. The customer is thus an important stakeholder group to study in an investigation of banks' implementation of CSR activities such as natural environmental management.

2.6.3 Employees

Branco and Rodrigues (2006) and Rodrigo and Arenas (2008) investigated how CSR implementation can be a source of competitive advantage to a business organisation. They found that awareness of CSR and the implementation of CSR activities can create job satisfaction, develop employee loyalty to a company, attract talented employees, and increase employee motivation. Employees make distinct judgements about their employing organisation's CSR and positive perceptions can fulfil psychological needs and increase affirmative behaviour (Rupp et al. 2006).

As regards CSR implementation, Collier and Esteban (2007) stated that employee responsiveness is important in order to achieve effective CSR. Employees must first have to be motivated to deliver CSR requirements and, second, to be committed to surmounting the challenges and attaining the goals of responsible corporate behaviour. Employees play a vital role in the implementation of CSR activities. Therefore, according to Collier and Esteban (2007), it is important for CSR to become embedded in the cultural fabric of the business as well as in the hearts and minds of its employees. This study investigated the attitude of banks' managers to the implementation of natural environmental management in project financing. It analysed how their racial and religious differences influenced their perception of and attitude to stakeholder groups and how these, in turn, influenced their natural environmental practice.

2.6.4 Global Community/Local Community and Non-Governmental Organisations (NGOs)

In the global arena, business policy and strategy must be fitted to global requirements. Moreover, the expansion of the global market and the proliferation of international

agreements have increased pressure on the global business community to adopt natural environmental management (Berry and Rondinelli, 1998). For example, British Standard BS7750, an industrial response to the adoption of the 1990 Environmental Policy Act in Great Britain, has been adopted internationally. The European Community has issued a Standard Eco-Management and Audit Scheme (EMAS), which member nations are expected to implement. The ISO 14000 series has now become the dominant international standard for environmental management systems. Even though different policies have emerged with different requirement standards and functions, they all seek explicitly to encourage corporations to integrate their environmental and corporate management systems. Such developments require businesses to proactively participate in voluntary environmental standards (BS7750, EMAS and ISO 14000) in order to ensure their competitiveness in the market and industry.

The same phenomenon has happened in the financial sector where many CSR standards have been adopted by banks, for example, through their participation in United Nations' environmental and sustainable development programmes. In project financing, '*BankTrack*', established in 2002, is one of several NGOs that monitor banks, including Friends of the Earth (FoE), The Rainforest Action Network (RAN), and WWF-UK. Such cooperation under *BankTrack* is expressed in the Collevecchio Declaration of January 2003, which is used as a benchmark of civil society to measure the banking sector's commitment to sustainable development. The establishment of all standards and requirements indirectly creates an industry norm and standard. Financial institutions must achieve and meet the standards and requirements set, since failure to do so can have a negative impact on business competitiveness.

The development of CSR has created awareness among civil society with the result that many non-government organisations (NGOs) have been established to monitor business organisations' CSR implementation. The importance of NGOs' influence on business CSR initiatives has been discussed in several studies (Winston, 2002; Michael, 2003; Guay et al., 2004; Aguilera et al., 2007; Nijhof et al., 2007; and Lyon and Maxwell, 2008). Such studies show how NGOs attempt to achieve their objectives, for example: (1) they seek to influence policymaking; (2) they fulfil an educational role by informing consumers, business, and policymakers; (3) they work in collaboration with government (Michael, 2003). Further, NGOs enforce threats through boycotts, negative media campaigns, and disseminating negative propaganda about businesses (Aguilera et al., 2007; Nijhof et al., 2007; and Lyon and Maxwell, 2008).

2.6.5 Investors

The development of CSR has also affected investors. They have become more aware and concerned about CSR issues. Aguilera et al. (2006) studied the awareness of institutional investors in the US and UK and showed that they are becoming more aware of and concerned about firms' social and environmental actions. Further, CSR issues have become more popular and important among investors. Hockerts and Moir (2004) in their study suggested that CSR must be communicated to investors and used as a tool for investor relations. Wang (2010) revealed in his study that CSR financial disclosure can influence investors' subsequent responses, such as perceived trust and attitude towards companies. Good CSR information not only attracts dedicated institutional investors but at the same time attracts good analyst coverage (Dhaliwal et al., 2011).

The implementation of CSR also brings various benefits to the practising company. Gande et al. (2009) identified five potential gains of CSR for the company: (1) CSR meets the expected demands of consumers, clients and investors; (2) CSR builds brand equity; (3) CSR can attract and retain talent; (4) CSR makes financial sense; and (5) CSR holds the key to a crisis.

Commitment to CSR is therefore important to attract and retain institutional investors as demonstrated by Cox et al. (2004) who studied the pattern of institutional shareholding in the UK and its relationship with CSR behaviour. They found that long-term institutional investment is positively related to corporate social performance. Their investigation of the impact of investment screens on the selection of stock suggests that long-term institutional investors select primarily through exclusion, rejecting those firms that have the worst corporate social performance. Investors are therefore expected to integrate social and environmental criteria into their assessments. They will not only look at conventional risk criteria such as sales and earnings, but also at the risk from the impacts of their investment screens on the environmental and social fronts (Hockerts and Moir, 2004).

The California Public Employees' Retirement System (CalPERS) is one of the best examples of how institutional investors can influence policy implementation of CSR. As at July 2011, CalPERS' (2011) total asset was US$235.8 billion. With this amount of funds, CalPERS can influence the direction of a business organisation towards CSR. Through collaboration with other institutional investors in the USA, CalPERS can exert strong pressure on public listed companies in the USA, since institutional investors hold more than 50% of all equity shares traded in the USA (English et al., 2004).

Besides investors' demands, Marquez and Fombrun (2005) and Valor et al. (2009) suggested one of the reasons for companies to implement CSR is the demands from ethical fund managers and ethical index managers. Marquez and Fombrun (2005) examined the importance of CSR performance on principal agencies and indexes operating in OECD countries, such as the Dow Jones Sustainability Index and the FTSE 4 Good. Table 2.3 shows the principal agencies and indexes. The indexes are important since they are one of the criteria used for investment decision. Cheung (2011) studied the impact of index inclusions and exclusions by examining a sample of US stocks that had been added to or deleted from the Dow Jones Sustainability World Index over the period 2002-2008. They found evidence for a relationship between inclusion/exclusion from the Dow Jones Sustainability World Index and stock return and risk.

Table 2.3: Principal Agencies and Indexes Operating in OECD Countries

Country	**Rating agencies**	**Indices**
Australia	SIRIS (SIRI)	300 Companies on the ASX
Belgium	Stock at Stake (SIRI)	Ethibel: Asia/Global/America/Europe
Canada	MJRA (SIRI)	Jants S.I.
France	Vigeo	ASPI Euro zone
Germany	IMUG	ATX 21
	Oekum	DAX 30
	Scoris (SIRI)	MDAX 70
Italy	Avanzi (SRI)	
Japan	Good Bankers	
	CPRD	Morning Stars Socially Responsible I.I
The Netherlands	Triodos (SIRI)	
Spain	Fundacion EYD (SIRI)	
Sweden	Caring-Company (SIRI)	
Switzerland	Centre-Info (SIRI/SAM)	
UK	Core Ratings	
	EIRIS	
	PIRC (SIRI)	FTSE 4 Good
USA	KLD	Domini 400
	Innovest	Dow Jones Sustainability World Index

Source: Marquez and Fombrun (2005)

2.6.6 The Natural Environment and Stakeholder Theory

The word natural means produced by nature, not made or caused by humans. The environment contains both human and non-human elements. For Starik (1995), all organisations have some human and non-human components, and humans are both products and consumers of natural environments. Driscoll and Starik (2004, p. 56) described the natural environment as encompassing;

> *"…the atmosphere, hydrosphere, lithosphere, ecosystems' processes, and all human and non-human life form. Because of this, the natural environment is seen as a stakeholder entity in the same sense as the local community, the general public, and future human generations."*

Hart (1995) described the natural environment as biophysical. According to Hart, environmental impacts associated with business activities have multiplied. For example, air and water pollution, toxic emissions, chemical spills, and industrial accidents have created regional environmental and public health crises for thousands of communities around the world.

The natural environment has a mutually dependent, exchange-based relationship with business organisations. Firms depend on local ecosystems as well as the broader ecosphere for raw materials, plant and microbial inputs, and energy. In fact, business organisations exchange more with the natural environment than with any other stakeholder (Starik, 1995; Driscoll and Starik, 2004).

Stakeholders have been defined or described almost exclusively in human terms, such as groups or individuals who affect or are affected by organisational performance (Freeman, 1984). Based on this definition, stakeholder theory has not explicitly identified the natural environment as one of the various stakeholders, such as consumers, stockholders, suppliers,

and the media. Starik (1995) offered four reasons for excluding the natural environment as a stakeholder. The first is because stakeholder status has been restricted to humans only. The present list of stakeholders or organisations includes only human individuals such as consumers, stockholders, creditors, suppliers, employees, government agencies/officials, legislators, local communities, competitors, interest groups, and the media. Because of this, the natural environment and its elements have been excluded in stakeholder definition. For example, Delmas and Toffel (2004) categorised environmental interest groups as stakeholders but not the environment.

The second reason is because of the exclusion of non-human nature from the business environment; for example, Freeman (1984) defined stakeholders in human terms and Clarkson (1985) referred to stakeholders as persons or groups. The third reason is because the stakeholder idea has been an exclusively political and economic concept. Stakeholders have been perceived as important because they possess the political and economic legitimacy and power that may hurt an organisation (Mitchell et al., 1997). Non-human entities do not possess a political and economic voice and, therefore, are not able to identify nor assert their stake (Starik, 1995). The last reason is because non-human nature already has stakeholder proxies such as environmental related government agencies and environmental interest groups. Therefore, it is not necessary to consider the natural environment as a stakeholder.

Despite the aforementioned reasons, Starik (1995) argued that non-human nature should be included as a stakeholder primarily because the natural environment is relevant to many businesses. Because of that reason, Starik and Marcus (2000) stated that there should be increasing attention paid to organisations, since they have had or could have a significant impact on ecosystems. Second, the stakeholder idea should include ethical, social-emotional,

legal, and physical characteristics and, third, human environmental stakeholders such as NGOs that act on behalf of the natural environment are necessary but insufficient to represent the natural environment.

Implementation of CSR in the natural environment has been widely discussed in the literature and many scholars have advised that its implementation has a positive effect on business: for example, Dechant and Altman (1994); Hart (1995); Shrivastava (1995); and Berman et al. (1999) found that being proactive in environmental issues can lower the cost of complying with present and future regulations. Environmental responsiveness can enhance firm efficiency and drive down operating costs (Shrivastava, 1995; Russo and Fouts, 1997). Firms can create distinctive 'eco-friendly' products that appeal to customers, thereby creating a competitive advantage for themselves (Shrivastava, 1995). Being environmentally proactive not only avoids the costs of negative reactions on the part of key stakeholders, but can also improve a firm's image and enhance the loyalty of such key stakeholders as customers, employees and government (Dechant and Altman, 1994; Hart, 1995; Shrivastava, 1995).

2.6.7 Competitors (CSR Policies of other Rival Businesses)

In a transparent marketplace, competitors' policies towards CSR are very important. This is because the leader in an industry through CSR implementation has a market advantage over its competitors. This can be achieved, for example, through company image differentiation, product differentiation, and marketing strategy differentiation. According to Misani (2010), the implementation of CSR can lead to product and company differentiation from rivals, which, in turn, can result in competitive advantage and enhancement of the business. In their study, Prado-Lorenzo et al. (2008) found that CSR practices in Spanish firms are geared

towards social welfare, and are mainly associated with differentiation with regard to competitors and improving company image, which lead to performance-linked economic advantages, such as sales' increase. The awareness of CSR among consumers, investors and the media, contribute to a better competitive advantage for the leader in CSR implementation compared to competitors in the industry. This is one of the reasons for CSR implementation (Boehe and Cruz, 2010; Chih et al., 2010).

The awareness and concern about CSR among communities, consumers, and investors create a high demand for visible and measurable CSR performance. This high demand makes industry take a proactive attitude towards CSR. Thus, industry and sectors may induce the implementation of CSR activities, especially if the industry is risky and receives high attention from the media, public and NGOs (Wanderly et al., 2008; Laudal, 2010). For example, in the banking sector, the Equator Principles were introduced in response to the high demand from various stakeholders such as government and NGOs. A signatory of these Principles has a definite competitive advantage over those organisations which fail to comply with standard industry requirements, as demonstrated by Wright and Rwambizambuga (2006) who found in their study that banks are signatories to the EPs due to a strategic desire to maintain and enhance corporate reputation and competitiveness.

Bertels and Peloza (2008) advised that in order to improve and sustain its reputation for CSR, a company must be able to: (1) manage its own CSR activities; (2) keep an eye on the actions of other firms within the industry and industry associations; (3) keep an eye on the development of the industry and other industries that may shift CSR attention; and (4) keep track of the actions of individual firms and of development in other industries. This shows

that competitors' CSR policies are one of the factors that may influence the CSR policy of a business. In this study, therefore, this factor was one of the considerations for evaluation.

2.7 Chapter Summary

The above discussion has shown that implementation of environmental strategy can be influenced by stakeholders. However, reactive strategy relating to the development of and attention to environmental matters is limited to small groups within society. There is also slow development in environmental legislation as a result of the limited interest of customers in green products. All of these factors reduce innovation and development in environmental management (Azzone and Bertele, 1994). Azzone and Bertele (1994) have also suggested that companies implement a pro-active environmental strategy due to pressure from legislation and from green consumerism.

Berry and Rondinelli (1998) indicated that the move of corporations towards environmental management has been the result of pressure from investor, insurers, environmental interest groups, financial institutions, and international trading partners. The public have become more vocal in demanding responsible environmental performance as incomes rise and education spreads. Customers and investors have also begun to realise and see more clearly the relationship between business performance and environmental quality. In addition, implementation of CSR benefits corporations as a result of reduced risk, improved staff recruitment and retention, cost savings, and building good relationships with various stakeholders.

Therefore in this research the perceptions and attitudes of participants within the Malaysian banking sector towards the implementation of environmental risk management in project

financing were investigated. Bank managers' attitudes were then compared with their actual environmental risk management performance. The research also investigated the perceptions of the Malaysian banking sector towards the natural environment.

The next chapter will focus on the issue of corporate social responsiveness based on a review of management and natural environmental management journals. The focus will lead to the identification of criteria for corporate social responsiveness and environmental commitment evaluation. These are important as one of the research questions is to identify the current state of natural environmental risk management in Malaysia's banking sector.

CHAPTER THREE

Corporate Social Responsiveness

3.1 Introduction

Chapter two focused on the concept of corporate social responsibility (CSR), the development of CSR, and the theories underpinning CSR, including stakeholder theory and how stakeholder salience influences the implementation of CSR. In order to investigate actual performance of CSR, this chapter will discuss the concept of corporate social responsiveness in detail. Corporate social responsiveness will be defined and stages of corporate social responsiveness will be discussed in the chapter.

As the present study aimed to evaluate natural environmental management performance, discussion will be limited to a view of corporate social responsiveness in management and natural environmental management journals and previous studies on natural environmental management performance.

3.2 Definition of Corporate Social Responsiveness

McAdam (1973) used the term 'corporate social responsibility' rather than corporate social responsiveness. Corporate social responsibility comprises four main areas of strategy that help to provide general guidelines for major resource allocation and to integrate social responsibility thinking into everyday corporate planning, evaluation, and management.

Frederick (1986) defined corporate responsiveness as CSR_2, which refers to the capacity of a corporation to respond or achieve a generally responsive posture to society. The prime focus of corporate social responsiveness is on the degree and kind of managerial action.

Carroll (1979) viewed corporate social responsiveness as the action phase of management responding to social issues. Being responsive enables organisations to act on their responsibilities and to identify what their true responsibilities are before acting. Corporate social responsiveness action can range on a continuum from no response (do nothing) to a proactive response (do much).

Wartick and Cochran (1985) used the term corporate social performance instead of corporate social responsiveness. Corporate social performance relies on an expanded version of social responsibility as per Carroll (1979), where corporate social performance comprises three elements (principle, process, and policy) in order to provide a distinctive view of a corporation's overall efforts towards fulfilling its obligations. Corporate responsiveness is important as it can lead managers to place a clearer emphasis upon implementation and policy development

For natural environmental management, it is important for managers to know at what stage a company is in meeting its obligations, and what challenges it will face in advancing and extending its own corporate responsibility. This will enable them to frame strategic choices about future possible directions and internal policies, set compliance benchmarks and goals, and deepen future environmental awareness in the context of impact of the company's activities (Mirvis and Googins, 2006).

This study explored corporate social responsiveness in order to investigate the actual performance and actual implementation of natural environmental management in the banking sector in Malaysia. While banks might produce a good campaign policy, written statement and report to show their commitment to natural environmental management, the written

statement or policy might differ from actual performance and implementation. Therefore, the study investigated the actual performance of natural environmental risk management in project financing. Project financing was the area of focus because this activity in the banking sector provides funding to industries typically associated with a high potential for adverse environmental and social impacts, and individual projects are often large and can therefore have a significant impact on the natural environment.

3.3 Corporate Social Responsiveness Strategies

Carroll (1979) proposed a corporate social performance model that defines corporate social responsiveness action based on a continuum from no response (do nothing) to a proactive response (do much). Based on this classification, corporate social responsiveness can be divided into four possible business strategies known as reactive, defence, accommodative, and proactive as per Wilson (1975).

According to Lotila (2010), the reactive approach is a situation where the firm provides limited information or comments and avoids any contact with a given group of stakeholders. It demonstrates an incapability and unwillingness to act in response to social pressure due to its inability to identify social issues, its lack of concern about social pressure, and its incapability to handle it. Such reactive approach includes either fighting against a stakeholder's interests or completely ignoring them (Jawahar and McLaughlin, 2001).

A reactive environmental strategy is the situation where the company has not implemented any environmental policy in its environmental management. Azzone and Bertele (1994) stated that in a reactive strategy, environmental problems are not viewed as needing strategic attention; however, the legal department in the company must monitor the evolution of

environmental standards. The attention to environmental problems is also limited to small groups. In terms of firm implementation of environmental management, there is no support and involvement from top management, no environmental reporting, and no employee involvement and training in environmental matters.

Lotila (2010) classified the defensive strategy as a short-range objective approach. In this strategy, the firm reacts to social pressure by adjusting its activities to the prevailing conditions to safeguard its operations. Many CSR activities take place on an ad-hoc basis and are not consistent. The firm addresses CSR issues to meet stakeholders' expectations to escape being forced into addressing them by external forces (Joyner and Payne, 2002).

Lotila (2010) described the accommodative strategy as a strategy to convince the public. The firm addresses those CSR issues which are considered an inevitable part of the business. In this strategy, the firm uses two-way communication methods such as organising public forums. According to Maon et al. (2010), in this strategy, the firm addresses the social issues that exist, takes responsibility for problematic behaviours, and acts positively to rectify them. The firm may adopt a voluntary approach to handle social issues and act before it is forced to do so by outside forces.

Lotila (2010) viewed a proactive strategy as one in which management anticipates potential issues and acts before an issue develops into a conflict situation. In this strategy, firms will become involved in two-way communication with various stakeholder groups. Stakeholders and their arguments are treated with respect and cooperation is seen as a possibility. Firms move to deal with potential issues constructively, and resolve latent problems or protect against unethical behaviour (Maon et al., 2010). The aims of the study is to identify the

current state of natural environmental risk management in Malaysia's banking sector by classifying it within several strategies (for example, reactive, defensive and proactive) and then identifying how these can influence the perception towards credit evaluation orientations, stakeholder groups' orientations and CSR orientations.

Since 1979, several writers have presented conceptual schemes that well describe corporate social responsiveness. Beside the four main strategies (proactive, defence, accommodative, and reactive), there are other strategies described in the literature. For example, Lotila (2010) utilised an interaction-based model that illustrates the interactive approach to social pressure. It comprises three management strategies namely, tactical, strategic, and no action, that can be used to manage a firm's relationship with society. In their study, Maon et al. (2010) described seven strategies that firms can apply in CSR management: dismissing, self-protecting, compliance seeking, capability seeking, caring, strategising, and transforming.

Table 1A in Appendix 1 shows the characteristics of various social responsiveness strategies in the management literature which discusses CSR management in general in relation to the production process, marketing practices, employee, philanthropy, environment consumerism, and external relations (for example, Carroll, 1979; McAdam, 1973). The literature also refers to studies that have focused on CSR activities in natural environmental management in particular. According to Kolk and Mauser (2002), 50 studies were carried out on environmental management between 1980 and 2002. These studies developed classifications to describe environmental management strategies and processes. Table 1B in Appendix 1 shows some of these studies, their classifications, and evaluation criteria.

Henriques and Sadorsky (1999) compared the characteristics of CSR management strategies and natural environmental management strategies in the environmental management literature and environmental management literature. In the environmental management literature, Roome (1992) referred to five strategies (non-compliance, compliance, compliance plus, commercial and environmental excellence, and leading edge) as did Hunt and Auster (1990), namely, beginner, fire fighter, concerned citizen, pragmatist, and pro-activist. In the management literature, Carroll (1979) and Wartick and Cochran (1985) referred to four strategies (reactive, defensive, accommodative and proactive). The characteristics of the strategies are presented in Table 3.1.

Table: 3.1: Characteristics of CSR Management Strategies and Natural Environmental Management Strategies in the Environmental Management Literature and Management Literature

Environmental Management Literature		Management Literature	Characteristics
Roome (1992)	Hunt and Auster (1990)	Wartick and Cochran (1985) and Carroll (1979)	
Non-Compliance	Beginner	Reactive	• No support or involvement of top management • Environmental management is not necessary • No environmental reporting • No employee environmental training and involvement

Compliance	Fire fighter	Defensive	• Piecemeal involvement by top management • Environmental issues only dealt with when necessary • To satisfy environmental regulation • Little employee environmental training and involvement
Compliance plus	Concerned citizen	Accommodative	• Some involvement by top management • Environmental management is a worthwhile function • Internal reporting but little external reporting • Some employee environmental training and involvement
Commercial and environmental excellence	Pragmatist	**Proactive**	• Top management support and is involved in environmental issues • Environmental management is an important business function • Internal and external reporting • Employee environmental training and involvement encouraged
Leading edge	Pro-activist		

Sources: Henriques and Sadorsky (1999)

Various writers have discussed the concept of CSR using different terms and stages of development. However, the development stages can be related to the social responsiveness categories of Carroll (1979) and Wilson (1975) for the following reasons:

1. Although the literature presents different corporate responsiveness strategies, they consistently emphasise key organisational stages along a continuum which reflects Carroll's (1979) social responsiveness continuum, and Maon et al. (2010) stated that the strategies are comparable and related.
2. Although different authors may use different names to explain different stages in corporate responsiveness strategies, they possess the same characteristics of corporate responsiveness as those described by Carroll (1979). Maon et al. (2010) contended that the key characteristics of the stages appear similar across models

Hass (1996) indicated that ordering concepts, objects or entities into groups or classes based on their similarities increases our understanding of observed complexities and communicates our observations more easily. It should, however, be noted that although various concepts and models have been proposed to explain corporate social responsiveness, none have gained widespread acceptance.

In this research the corporate social responsiveness strategies developed by Wilson (1975), Carroll (1979), and Wartick and Cochran (1985) are applied; namely, the reactive, defensive, accommodative, and proactive strategies, since their use by other researchers would allow comparison between this study's findings in relation to natural environmental practice and results reported by others. Findings relating to bank managers' natural environmental practices are presented and discussed in chapter seven.

3.4 Corporate Social Responsiveness in Natural Environmental Management

The environmental strategy of an organisation here refers to a pattern in action over time intended to manage the interface between the business and the natural environment. Sharma

(2000) referred to environmental strategy as the outcomes in the form of actions firms take for regulatory compliance and those they take voluntarily to further reduce the environmental impacts of operations.

Henriques and Sadorsky (1996) defined the environmental responsive firm as a firm that has formulated an official plan for dealing with environmental issues. The environmental commitment of the company can be deduced from what the company is actually doing or has done with reference to environmental issues. In their study, Henriques and Sadorsky (1999) identified six environmental activities and practices a company might engage in with regard to its natural environmental management. First is having an environmental plan. Second is having a written document describing the environmental plan. This process is an internal process that shows the commitment of the company to the implementation of natural environmental management.

The formulation of an environmental plan is the outcome of a series of communications between various groups within and outside the organisation. The absence of such a document suggests environmental management is not a priority, leaving both management and employees relatively uninformed about environmental problems and their consequences (Hunt and Auster, 1990). Third is communicating the environmental plan to shareholders or stakeholders, while fourth is communicating the environmental plan to employees. Henriques and Sadorsky (1999) stated that communicating an environmental plan to employees and shareholders is an important sign that a firm is serious about its plan. Fifth is having an environmental, health and safety (EHS) unit, and sixth is having a board or management committee dedicated to dealing with environmental issues.

Banerjee et al. (2003) described environmental strategy as corporate environmentalism that consists of two elements: (1) environmental orientation; and (2) environmental strategy. Environmental orientation is the recognition by managers of the importance of environmental issues facing their firms. Environmental strategy is the extent to which environmental issues are integrated with a firm's strategic plan. Accordingly, Banerjee et al. (2003) defined corporate environmentalism as the recognition of the importance of environmental issues facing the firm and the integration of those issues into the firm's strategic plan.

3.5 Criteria for Corporate Social Responsiveness and Environmental Commitment Evaluation

The aim of one of the research questions in this study was to identify the current state of environmental management in Malaysia's banking sector, especially in project financing. In order to evaluate banks' performance in natural environmental management, a set of questions to elicit banks' commitment to and performance in natural environmental management was developed (see chapter six, section 6.8.1). This section focuses on the concept of CSR performance and natural environmental management evaluation.

Carroll (1979) stated that corporate social performance comprises three major elements: 1) social responsibility categories, 2) social issues involved, and 3) philosophy of social responsiveness. Social responsibility is comprised of four major elements: economic responsibilities, legal responsibilities, ethical responsibilities, and discretionary responsibilities (known as Carroll's pyramid). These four social responsibility categories are not mutually exclusive, nor are they intended to portray a continuum with economic concerns at one end and social concerns at the other. The second element, social issues involved, relates to the enumeration of those issues for which a social responsibility exists; for

example, environment, product safety, consumerism, discrimination, product safety, occupational safety, and shareholders. Lastly, philosophy of social responsiveness relates to how businesses respond to CSR issues. It can be ranged on a continuum from no response (reactive) to a proactive response.

However, Caroll (1979) offered a conceptual idea without explaining how corporate social performance can be measured. For this reason, Wartick and Cochran (1985) expanded Caroll's (1979) work and introduced three elements of corporate social responsiveness. In their model, corporate social responsiveness reflects an underlying interaction among the principles of social responsibility, the process of social responsiveness, and the policies developed to address social issues. Wartick and Cochran (1985) showed how several competing perspectives such as economic responsibility, public responsibility, and social responsiveness can be incorporated into the framework.

Wartick and Cochran (1985) viewed effective corporate social performance as being due to (1) motivating principles; (2) the behavioural process; and (3) observable outcomes of corporate and managerial performance relating to the firm's relationship with its external environment. Based on this, Carroll (1991, p. 40) defined corporate social performance as:

> *"A business organisation's configuration of principles of social responsibility processes of socially responsiveness, and policies, programmes, and observable outcomes as they relate to the firm's societal relationships".*

Wood (1991) suggested that several general factors can be used to assess a company's social performance. They include: (1) the degree to which principles of corporate social responsibility motivate actions taken on behalf of the company; (2) the degree to which the firm makes use of social responsive processes; and (3) the existence and nature of policies

and programmes designed to manage the firm's social relationships and the social impacts (for example: observable outcomes) of the firm's actions, programmes, and policies.

Ilinitch et al. (1998) developed a framework to help clarify the environmental performance concept as per Table 3.2. They introduced a corporate environmental performance matrix consisting of four dimensions: process, outcome, and internal and external components, and suggested environmental variables that might fall into each cell.

Table 3.2: A Corporate Environmental Matrix

	Internal	External
Process	Organisational systems	Stakeholder relations
Outcome	Regulatory compliance	Environmental impacts

Internal organisational systems	Refers to organisational processes designed to enhance environmental performance, including environmental audit programme, environmental performance, environmental mission statements, etc.
External stakeholder relations	Refers to the interaction between the company and its various external constituencies, including its shareholders, the local community, government, customers, suppliers, and industry.
Internal regulatory compliance	Refers to the degree to which businesses meet minimum standards required by laws and regulations.
External environmental impacts	Refers to negative externalities generated in the conduct of business such as toxic release and spills, liability for such spills, and legal and insurance costs associated with such contingencies.

Source: Ilinitch et al. (1998)

The process dimension reflects the structural and programmatic characteristics of the company, including written policies, internal control mechanisms, communications, public relations, training, and incentives. The outcome dimension reflects more observable and quantifiable results achieved by the company, including level of toxic emissions, hazardous spills, legal and regulatory violations, and fines and penalties paid (Ilinitch et al., 1998; Kolk and Mauser, 2002). Ilinitch et al. (1998) further divided the process and outcome dimension

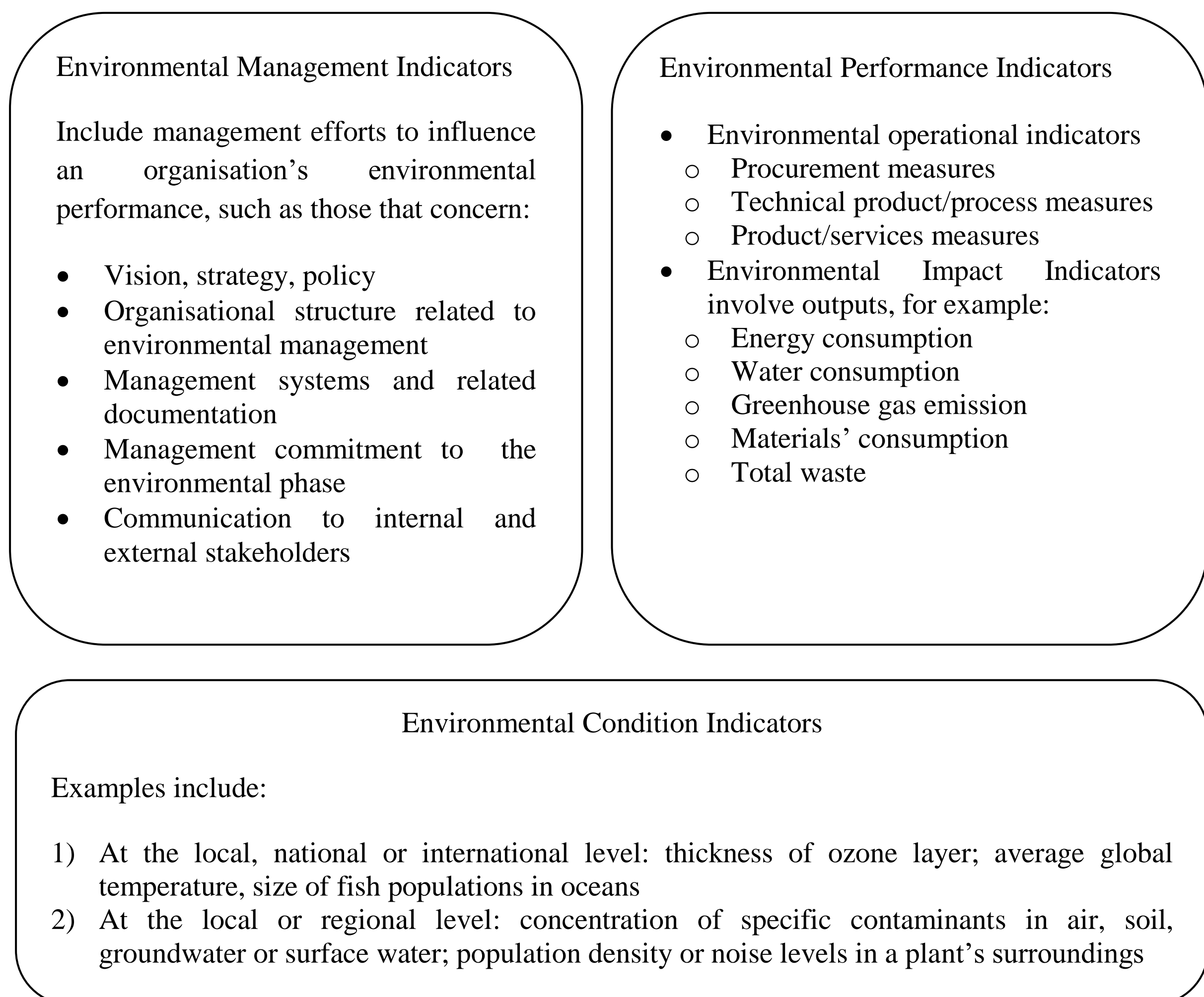
into four conceptually distinct and related categories: (1) internal organisational systems; (2) external stakeholder relations; (3) internal regulatory compliance, and (4) external environmental impacts.

To offer new insight, Winn and Angell (2000) carried out a survey of consumer-goods producers implementing environmental management subject to the 1991 German Packaging Ordinance. Their explanatory research found that environmental management in the corporate sector can be divided into two: (1) policy commitment; and (2) approach to implementation. Policy commitment shows management's degree of commitment to environmental issues, whether they view them as strategically important. Approach to implementation refers to the level of engagement of a company in environmental activities. This dimension confirms the importance of the reactive/proactive distinction in corporate environmental management, because it is not necessary for a company that has strong commitment to have a high commitment to environmental issue implementation. This study therefore aimed to investigate the relationship between natural environmental commitment and natural environmental management in project financing.

For Kolk and Mauser (2002), one major problem in evaluating environmental performance is that more attention is paid to environmental management than environmental performance. Management aspects such as environmental strategies, policies, communication, and commitment, are frequently considered part of environmental performance and are therefore incorporated as defining criteria in environmental management models. While these environmental management aspects are, indeed, very closely related to environmental performance, it can be argued that they should be included in an organisation's environmental performance since management ideally leads the desired performance.

Kolk and Mauser (2002) introduced three environmental performance indicators for evaluation purposes: (1) environmental management indicators (EMIs); (2) environmental condition indicators (ECIs); and (3) environmental performance indicators (EPIs) (see Figure 3.1). The performance indicators are subdivided into operational indicators (specific actions related to areas such as procurement, the production process, and the use and disposal of products) and impact indicators (outputs such as emissions, water and energy consumption, and waste).

Figure 3.1: Environmental Performance Indicators for Evaluation Purposes



Source: Kolk and Mauser (2002)

Environmental condition indicators (ECIs) are difficult to standardise. Adaptation thus needs to be made that considers country, sector, and organisational peculiarities, and reckons with the particular objectives for the performance evaluation. In this study, a combination of the three environmental performance indicators was utilised in the study's questionnaires survey. This will be discussed at the end of this section.

First and Khetriwal (2010) defined environmental performance as the sum of the environmental attributes of its products and processes. For that purpose, First and Khetriwal (2010) classified environmental management orientation into two perspectives: (1) environmental embeddedness; and (2) environmental policies. Environmental embeddedness refers to the level to which environmental values are incorporated in brand identity and environmental policies refer to the level of a firm's accordance with environmental policies and good practices.

Table 1B in Appendix 1 indicates that there are differences among scholars about factors or criteria that should be considered for environmental management evaluation. Each researcher has used different criteria for evaluation purposes and asked between five and twelve questions to evaluate environmental management and commitment. Until now there is therefore no single approach that addresses all the dimensions of corporate environmental performance (Ilinitch et al., 1998) in a formal theoretical or systematic empirical way, and there is lack of agreement on what and where to measure (Rondinelli and Vastag, 1996; Xie and Hayase, 2007; First and Khetriwal, 2010).

Even though different classifications of environmental strategies have been suggested, similarities among them can be found (Albino et al., 2009). For example, Albino et al. (2009) used two main criteria to measure environmental performance: (1) process orientation; and (2) management orientation. These criteria are similar to the environmental management indicators and environmental performance indicators introduced by Kolk and Mauser (2002), and the more comprehensive third party environmental performance measurement known as the Environmental Performance Measurement (EPM) proposed by Xie and Hayase (2007).

Based on the foregoing literature review, Table 3.3 presents the statements used in this study's questionnaire survey to evaluate environmental management/commitment in the banking sector in Malaysia. The statements endeavoured to accommodate the different criteria used in the literature on environmental commitment in order to achieve a comprehensive set of natural environmental commitment evaluation measures. This was an important aspect in this study as one of the research question sought to ascertain the current state of natural environmental risk consideration and management practice in Malaysia's banking sector.

Table 3.3: Statements to Evaluate Environmental Commitment/Management in the Banking Sector in Malaysia

No.	Statement
1.	The bank has guidelines and policies on environmental issues
2.	The bank has a special department and staff that deal with environmental issues
3.	The bank has a committee dedicated to dealing with environmental risk in credit assessment
4.	The bank has a manual detailing environmental procedures in credit assessment
5.	The bank has employee training programmes on environmental procedures in credit assessment
6.	The bank disseminates a special financial product that rewards the environmental achievement of customers
7.	The bank disseminates environmental information through external communications such as bulletins, newsletters, and annual reports
8.	The bank conducts environmental reviews or audits
9.	The bank has a policy of refusing loans to companies with poor environmental records
10.	The bank has integrated environmental risk procedures into general risk management policy

Ilinitch et al. (1998) emphasised process (i.e. statements 1 and 8), outcome (i.e. statements 9 and 6), internal components (i.e. statements 2 and 5), and external components (i.e. statement 7) in criteria used for environmental management evaluation. Winn and Angell (2000) emphasised policy commitment (i.e. statements 1, 2, 5, 7 and 10), and approach to implementation (i.e. statements 3, 4, 6, 8 and 9). Kolk and Mauser (2002) emphasised environmental indicators (i.e. statements 1, 2 and 5) and environmental performance (i.e. statements 3, 4 and 9). Asking ten questions about natural environmental risk management helped the study identify its actual practice or performance by Malaysia's banking sector. The study also investigated how such practice or performance was influenced by bank types and bank nationalities.

3.6 Chapter Summary

It is important to discuss the concept of corporate social responsiveness, as the main objective of this research was to evaluate the actual natural environmental risk management action taken by Malaysian banks in their approaches towards project financing. While Malaysian banks may provide an overview of their CSR policies and natural environmental management activities in their Annual report and on their web site, this research aimed to go deeper by investigating actual performance through eliciting information from bank staff about their usual credit assessment practices.

In this chapter the concept of corporate social responsiveness was also discussed, and its stages as identified in the management and natural environmental management literature. Criteria and statements used to evaluate corporate social responsiveness have also been presented.

Chapters two and three have discussed the concept of CSR and corporate social responsiveness based on the Western perspectives. In the next chapter the concept of CSR from the Islamic perspective is discussed.

CHAPTER FOUR

The Concept of Corporate Social Responsibility from the Islamic Perspective

4.1 Introduction

In chapter two the concept of CSR and natural environment management was considered from the Western/occidental perspective. This chapter discusses CSR and the natural environment from the Islamic perspective. Islamic banks aim to conduct their activities based upon Islamic principles; it is therefore important to identify the extent to which they achieve this objective, bringing an Islamic perspective to CSR. This chapter first discusses Islamic corporate social responsibility (ICSR) and then explains the Islamic view of the natural environment.

The concept of Islamic CSR discussed in this chapter is based on five Islamic principles: (1) *Tawhid*; (2) *Shari'ah*; (3) *justice*; (4) *benevolenc*e; and (5) *Maslahah.* These principles should be reflected in Islamic organisations' CSR activities and should, theoretically, distinguish Islamic banks' CSR practices from those of conventional banks. This chapter therefore discusses the Islamic view of CSR in relation to Islamic banks' natural environmental management practices.

4.2 CSR in Islam

Islam provides a complete code of behaviour for life since it embraces every aspect of life. CSR is therefore not isolated in the Islamic view and is one of the main concepts in Islamic teaching. Dusuki and Abdullah (2007b) stated that the concept of CSR is deeply inscribed in the *Shari'ah.* Therefore, any corporation such as an Islamic bank that claims to follow *Shari'ah* based principles should naturally practise CSR, as it enshrines Islam's true spirit.

Williams and Zinkin's (2010) study on the compatibility between the tenets of Islam and the United Nations' Global Compact found that the teachings of Islam not only appear to be in close conformity with the Ten Principles of the United Nations' Global Compact, but in many respects, go further than the minimum standards adopted by this framework. In their study, Williams and Zinkin (2010) found that Islamic teachings exceed the requirements of the Global Compact in a number of important ways:

1. They appear to be wider in scope, for example, in the development of human capital and transparency requirements in business transactions.
2. They have a clear codification defining what is permissible or *halal* and what is forbidden or *haram*.
3. Islam has an explicit enforcement mechanism in the *Shari'ah* as well as in the community and there is the final accountability of the individual for unethical behaviour on the Day of Judgement.

Thus, an investigation of Islamic financial institutions (Islamic banks) was relevant in this study since they should establish or implement CSR practices and natural environmental management policies which are at least comparable with or at best exceed those followed by conventional non-Islamic banks. In addition, this study sought to identify whether religion influenced Islamic bank managers' perceptions of attitudes to natural environmental management since the study aimed to identify differences between conventional banks' and Islamic banks' approach to environmental issues. In order to gain a better understanding of Islamic CSR, the next section focuses on Islamic principles that should be reflected in Islamic organisations' CSR practices.

4.2.1 The Concept of Unity (*Tawhid*) and the Principle of Vicegerency

In Islam, the concept of CSR is consistent with the concept of Unity *(Tawhid*). According to this concept, God is the Creator, Owner and Source of all things and has entrusted mankind to use and manage all things wisely. In return for the use of the physical universe, mankind agrees to be accountable for how they use and manage the universe (Farook and Lanis, 2007). Thus, the purpose of man is to live his life in submission and obedience to Allah (Graafland et al., 2006).

The principle of vicegerency denotes that mankind is the representative of God on Earth and, as such, Allah (God) has entrusted mankind with stewardship of His possessions.

> *"Al Quran 2:30: "And remember when your Lord said to the angels: "Verily, I am going to place (mankind) generations after generations on earth…."*
>
> *Al Quran 35:39: "He it is who has made successive generations after generations on the earth…."*

The concept of vicegerency in Islam requires mankind to take care of God's creation (Farook, 2007; Siwar and Hossain, 2009). God will question everything that has been done in this world during the Day of Judgement. Therefore, all actions must be based on God's rules and regulations. According to the vicegerency concept in Islam, the human being has responsibility towards other human beings, society, and the natural environment. Zinkin (2007) indicated that Islam has prescriptions that are consistent with a modern view of what needs to be done to enhance the social, human, and natural environment. Zinkin also found that Islamic principles are in harmony with the principles of the UN Global Compact.

The concept of vicegerency is related to the concept of *Tawhid* and trusteeship in Islam. The concept of *Tawhid* states that all possessions, wealth, expertise, abilities, positions and power

belong to Allah. The human being is only a trustee of them. For example, ownership of land in Islam is connected and conditioned by the ability of the owner to sustain and nourish the land. The accumulation of wealth is not the key objective of landowners in Islam, but their ability to sustain and bring benefit to self and others from the land (Kamla et. al., 2006). This concept is different from the conventional concept of profit as, in Islam, the management of all resources must be in accordance with religious requirements.

Based on the concept of vicegerency and trusteeship, every human act in this world will be questioned on the Day of Judgement. Farook (2007) called this concept 'divine accountability' and it is the basis for all actions of Muslims and, in turn, representative organisations of Muslims. The concept of divine accountability is clearly stated in the holy Quran in such verses as:

> *"When you are greeted with a greeting, greet in return with what is better than it or (at least) return it equally. Certainly Allah is Ever a Careful Account Taker of all things" (Quran 4:86).*

In Islam, worship to Allah is not restricted to the five pillars of Islam. It involves all activities and daily routines in life. Any activity not only brings reward in this world but also in the Hereafter. For example, the objective of business is not restricted to materialistic gain only but also to bring about human well being and achieve a good life overall (Williams and Zinkin, 2005). Thus, profit is not a main driver of business.

Williams and Zinkin (2005) stated that, in Islam, there is no separation between the individual's public and private life. Thus, every decision and act in life and business must be based on Islamic teachings. This principle not only applies among Muslims but also in their relationship with non-Muslims, society, and the environment.

Based on the vicegerency concept, there are no inhibitions attached to economic enterprise, and people are encouraged to avail themselves of all opportunities available (Rice, 1999). There is no conflict between the moral and socio-economic requirements. People can enjoy profit and wealth, but there must be an allocation for paying *zakat*[4]. Moreover, even though, the right to personal property and profit-making is not negated in Islam, it does not allow this right to be achieved at the expense of other stakeholders (Beekun & Badawi, 2005; Ullah & Jamali, 2010). Resources are for the benefit of all and not just a few, and everyone must acquire resources rightfully (Rice, 1999).

Based on the concept of *Tawhid,* Islamic organisations should produce a more proactive CSR and natural environmental management than conventional banks. However, actual implementation and policy might differ from the expectation. This study therefore explores how Islamic banks actually manage natural environmental risk in their project financing. The study also examines the differences between Islamic banks' and conventional banks' natural environmental risk management practice.

4.2.2 The *Shari'ah*

In Islam, the *Shari'ah* or 'Islamic Law' is the foundational basis for understanding CSR in Islam. The concept of the *Shari'ah* in Islam consists of ethics and values covering all aspects of life (e.g. personal, social, political, economic, and intellectual). Dusuki and Abdullah (2007a) stated that the concept of the *Shari'ah* reflects the holistic view of Islam, which is a complete and integrated code of life encompassing all aspects of life, be it individual or

[4] *Zakat* is one of the five pillars of Islam. The payment of *zakat* is a religious obligation and must be fulfilled by Muslim who own wealth above the threshold (i.e 2.5%) (Jehle, 1994; Kamali, 2003; Ali and Myles, 2010). *Zakat* can be divided into two types *zakat-al-fitr* and *zakat-al-mal*. *Zakat-al-fitr* must be paid for charity at the end of Ramadan (fasting month in Islamic Calendar), while *zakat-al-mal* is the *zakat* on wealth (Ali and Myles, 2010 pp.838).

social, both in this world and the Hereafter. Zinkin (2007) indicated that the *Shari'ah* is not just a legal, but also a moral framework. It differs from secular laws, where laws and ethics may differ. The purpose of the *Shari'ah* is to make people and society do good as well as to provide a legal framework. Thus, its objective is moral and ethical.

The *Shari'ah* is best understood through its objective (*Maqasid-Al-Shari'ah*). According to Al-Ghazali cited by Dusuki and Abdullah (2007a, p. 31),

> *"The objective of the Shari'ah is to promote the well being of all mankind, which lies in safeguarding their religion (din), their human-self (nafs), their intellect (aql), their family (nasl) and their wealth (mal)"*

For example, in relation to wealth and property management, Islamic banks act as an alternative to conventional banks which charge interest that has a negative impact on the distribution of income and fairness in economic transactions. The activities of Islamic banks must be consistent with the objective of the *Shari'ah.*

The *Shari'ah's* content consists of three main elements: (1) the *Aqidah* that discuss belief and faith; (2) the *Akhlaq* that discuss morality and ethics; and (3) the *Fiqh* or legal rulings governing the acts of human beings. Fundamental aspects, such as the *Aqidah* and *Akhlaq,* are not subject to change, however, the *Fiqh* or legal rulings may change and vary according to time (Dusuki and Abdullah, 2007a; Siwar and Hossain, 2009).

Farook (2007) states that human beings are responsible for their actions to Allah, therefore, they must act responsibly and endeavour to do good and avoid doing evil. Such responsibility encompasses all aspects of a Muslim's life and constitutes the basis of individual or business social responsibility.

As a general guideline, Islamic jurisprudence (*Fiqh*) provides five categories of degree of lawfulness (*halal*) and unlawfulness (*haram*) in daily activities that can also be used as useful guides in daily business transactions. They are described below:

1. *Fardh* (required)

   This represents the class of actions that are mandatory on every person claiming to be a Muslim. For example, the responsibility of business to pay *zakat* and to use Islamic banks' products in daily business transactions.

2. *Mustahabb* (recommended)

   These actions are not obligatory but highly recommended for Muslims, for example, donations, charitable acts, and endowments.

3. *Muhab* (indifferent)

   These actions are neither mandatory nor forbidden, for example, to gain profit in business activities.

4. *Makhruh* (reprehensible)

   These actions are not absolutely forbidden but are detested. *Makhruh* is less than *haram* (prohibited), and the punishment for *makruh* is less than that for acts that are *haram*, except when done in excess.

5. *Haram* (prohibited)

   Haram are actions that are unlawful and prohibited and committing them is a major sin, such as engaging in business activities that involve interest.

The *Shari'ah* has evolved within the guidelines set by its objective (*Maqasid-Al-Shari'ah*) which is to promote the well-being of all mankind. First, the interest of the community takes precedence over the interest of the individual. Second, relieving hardships takes precedence over promoting benefits and, third, a bigger loss cannot be prescribed to alleviate a smaller

loss and a bigger benefit takes precedence over a smaller one. Conversely, a smaller harm can be prescribed to avoid a bigger harm and a smaller benefit can be dispensed with in preference to a bigger one (Khalid, 2002).

Dusuki and Abdullah (2007a) also indicated that the concept of the *Shari'ah* has three implications for the concept of CSR. First, in Islam, CSR is a moral and religious initiative based on the belief that a corporation should be good despite the financial consequences. Based on this concept, businesses are not driven by profit maximisation alone, but by the pursuit of ultimate happiness in this life and in the Hereafter. Second, Islamic guidance enshrined by its principle of justice brings about a balance between the individual's rights and their duties and responsibilities towards others and between self-interest and altruism. Lastly, the concept of reward is broadened by incorporating within its reward in this world and the Hereafter. This provides a strong and self-propelling motivation for good, just behaviour, without denying one's natural instinct for personal gain.

The aforementioned principles and guidelines necessitate Islamic banks operating differently from conventional banks. The *Shari'ah* acts as an internal control over Islamic banks alongside secular legislation. Such internal control should make Islamic banks more sensitive towards CSR and environmental risk management than conventional banks.

4.2.3 Justice in Islam

Islam is a religion that emphasises justice. Graafland et al. (2006) relate the principles of justice in Islam to several types of business activity. First, justice includes the fulfilment of promises, pacts and contracts. Therefore, Muslims should be honest, sincere and truthful in their business dealings, and ensure exactness in terms of promised products and

specifications. Second, justice encourages equal treatment in labour management. Hiring people and wage payment should be based on merit and competencies. Finally, justice in Islam also includes the equitable distribution of wealth. In the *Quran* there are several verses that discuss justice:

> *"We sent aforetime Our messenger with clear signs and sent down then The Book and the Balance (of right and wrong), that mankind may establish justice" (Quran 57:25).*
>
> *"Allah commands justice, the doing of good (equity), and charity to kith and kin, and He forbids all shameful deeds and injustice and rebellion: He instructs you, that you may receive admonition" (Quran 16:90).*

Besides the above, Islam promotes justice and the equal treatment of all living beings. Based on the principles of justice, Muslims need to be fair, not only amongst themselves but also in their dealings with others and even with their enemies (Zinkin, 2007).

The concept of vicegerency also implies that human beings are equal, except on the basis of piety and good character (Dusuki, 2008). As vicegerents in this world, the concept of justice is important as humans are not only responsible to God but also to society and the natural environment. Thus, they must not only consider every act and decision for their own self-interest but also for society and the natural environment. Kamla et al. (2006) indicated that human beings' responsibility towards nature is not only related to benefits for themselves, it is a comprehensive responsibility which includes society and future generations, and extends to the valuation of nature itself, irrespective of man's or other creatures' use of it. Based on this concept, Islamic organisations are expected to be more proactive in natural environmental management than conventional organisations. Do they consider Islamic principles in their CSR practices? This study endeavoured to answer this question as previous research by

Zinkin (2007) found that Muslims' score on CSR practices was lower than that of other religious groups.

For Dusuki (2008), human interactions should be based on trust, equity and justice. The right attitude of human beings is not to serve only one's own or the national 'self-interest', but to cooperate with others to fulfil basic needs, to develop the entire human potential, and to enrich human life as a whole.

In economic activities, in order to achieve social justice in society, Islam provides a foundation for establishing socio-economic justice and therefore social responsibility. For example, Islam imposes obligatory payment of income and wealth (*zakat*), philanthropic trusts (*waqf)*, alms and charity (*sadaqah*), and interest free loans (*Qard al Hassan*). To ensure socio-economic justice, *zakat* is compulsory in Islam and is one of its five pillars. Non-fulfilment of this requirement is a sin and results in punishment in the Hereafter. Economic competition is encouraged as long as it is healthy, raises efficiency, and helps promote human well being.

According to Abeng (1997), there are six matters of justice that need to be fulfilled by Islamic business organisations in daily business activities:

1. Fulfilment of promises (pacts and contracts, verbal and written).
2. Exactness in weights and measures (specifications) in all business related items, including work, wages and payment, and labour movement.
3. Truthfulness, sincerity and honesty.
4. Efficiency, for example, jobs should be carried out without any lapse or omission, with best planning, and to the best of one's ability and competency.

5. Selection of merit.
6. Investigation and verification. These are essential because they constitute a prelude to right and ethical conduct.

Based on the concept of justice, Beekun and Badawi (2005) divided stakeholders in Islam into three main categories based on their priority in a business. First are those who are directly and substantially affected by the success and failure of the business. Owners and employees come under this category. The second category refers to those who are affected by the success and failure of the business and its activities, such as suppliers, customers and government. In the third category are those who are subject to the externalities of the business. The environment and community are grouped under the third category.

4.2.4 Benevolence *(Ihsan)* Concept

The concept of benevolence in Islam complements the concept of justice in Islam. Beekun and Badawi (2005) defined benevolence in Islam as to an act which benefits persons other than those from whom the act proceeds without any obligation. The *Quran* clearly states the requirement of justice and benevolence:

> *"Verily Allah Enjoins justice and worshipping none but Allah alone and Al-Ihsan and giving help to kith and kin (i.e. all that Allah has ordered you to give them such as wealth, visiting, looking after) and forbids Al-Fahsa (i.e all evil deeds such as illegal sexual acts, disobedience to parents, to kill a life without right) and Al-Munkar (all that is prohibited by Islamic law) and Al-Baghy (All kinds of oppression). He admonishes you, that you may take heed" (16:90).*

Al Qurtubi (1966, cited by Beekun and Badawi, 2005) classified justice as mandatory and benevolence as being beyond the mandatory. To adhere to the concept of justice, a person's inner intentions and feelings should be consistent with his/her declared words and actions.

The concept of benevolence beyond the concept of justice requires the person's inner intentions and feeling to be better than his or her outward actions.

4.2.5 Principles of the *Maslahah*

Dusuki (2008) stated that the *Maslahah* is a juristic device used in Islamic legal theory. Laldin (2010) stated that the *Maslahah* is a second source of the *Shari'ah* in Islam. The *Shari'ah* gives consideration to the *Maslahah* as a source of law in order to accommodate natural development and social changes and needs. It represents one of the essential sources for dealing with issues and matters for which there is no explicit indication in the *Quran* or the *Sunnah*.

Laldin (2010) stated that the objective of enacting *Shari'ah* rules based on the *Maslahah* is to achieve fairness and justice by achieving benefits and removing hardships. It is important in order to promote public good and prevent social evil or corruption (Laldin, 2010). In the business context, *ijtihad* based on the *Maslahah* is essential, especially for regulators and corporate governance organs, since it requires them to provide standards, parameters, regulations and policies for the benefit of society (Laldin, 2010).

Laldin (2010) also indicated that the *Maslahah* in Islam can be differentiated into two main categories. First is the public *Maslahah,* that is, anything that benefits the whole society or the majority, for instance, saving property from any form of harm or transgression, including flood, theft, or unfair contracts. In contrast, the private *Maslahah* is anything that benefits individuals and the society to which they belong.

Besides being public and private, the *Maslahah*, can be differentiated based on weight. Al-Shatibi (1997) quoted by Dusuki (2010) and Laldin (2010), stated that Shatibi, a prominent scholar, classified the *Maslahah* into three main categories: (1) *dharuriyat* or essentials; (2) *hajiyat* or needs; and (3) *tahsiniyat* or complementaries.

Dharuriyat are essentials and basic needs in life and are important to ensure a society runs smoothly and all aspects of life function properly. *Dharuriyat* must be protected as they are fundamental for life. For example, the basic requirements in life are electricity, water and food. They are the basic needs for survival and any disruption to them will lead to total disruption.

Hajiyat supplement *dharuriyat*. If *hajiyat* are neglected this will not lead to total disruption but may lead to hardship and distress in human life. For example, the *Shari'ah* validates forward buying (*salam*) and lease and hire (*ijarah*) in business transactions because these two transactions are important to facilitate business transactions and, if neglected, may lead to hardship in business.

Tahsiniyat refers to those interests that, if realised, would lead to refinement and perfection in the customs and conduct of people at all levels of achievement (Laldin, 2010). Complementariness is important, as it will lead to a peaceful life and harmony of human society. For example, Islam makes *zakat* payment compulsory for social and economic justice in society. Islam also encourages charity that is beyond the level of *zakat.*

4.2.6 Application of Weight in the *Maslahah* to CSR

Dusuki and Abdullah (2007a) viewed the concept of weight in the *Maslahah* as a guide for moral judgement on the part of managers and other stakeholders, particularly in solving conflicts that may arise when pursuing CSR. The concept of weight in the *Maslahah* is depicted in a pyramid form. It functions as a framework to provide managers with three levels of judgement to resolve the ethical conflicts that inadvertently emerge while applying CSR programmes and initiatives. Every level constitutes a different degree of importance. The bottom level (*dharuriyat*) is the most fundamental responsibility to be fulfilled, then the second level (*hajiyat)* followed by the top level (*tahsiniyat*). The pyramid moves upward and the degree of decision-making will be less fundamental as the level rises. The pyramid's three levels are not mutually exclusive; rather all levels are inter-related and mutually dependent.

The *Maslahah* pyramid can be applied to the decision-making process in CSR. On the first level, businesses are expected to strive to preserve and protect their stakeholders' essential needs. For example, in order to obtain a high profit, businesses must ensure that all activities comply with Islamic principles. Any activities that may endanger people's lives and cause environmental degradation must be avoided. As regards the employer-employee relationship, businesses must protect employee welfare by paying salaries on time and providing a safe working environment.

After fulfilment of the fundamental level, businesses may strive for the second level, the complementaries. In this stage, the provision of continuous training and development, bonuses and promotions, is considered to be an extension of the fundamental responsibility. In terms of the environmental, businesses may become involved in activities that contribute

to better environmental management, such as implementing recycling activities and conducting an internal environmental campaign for better awareness among employees. These activities are less important and have least impact if neglected.

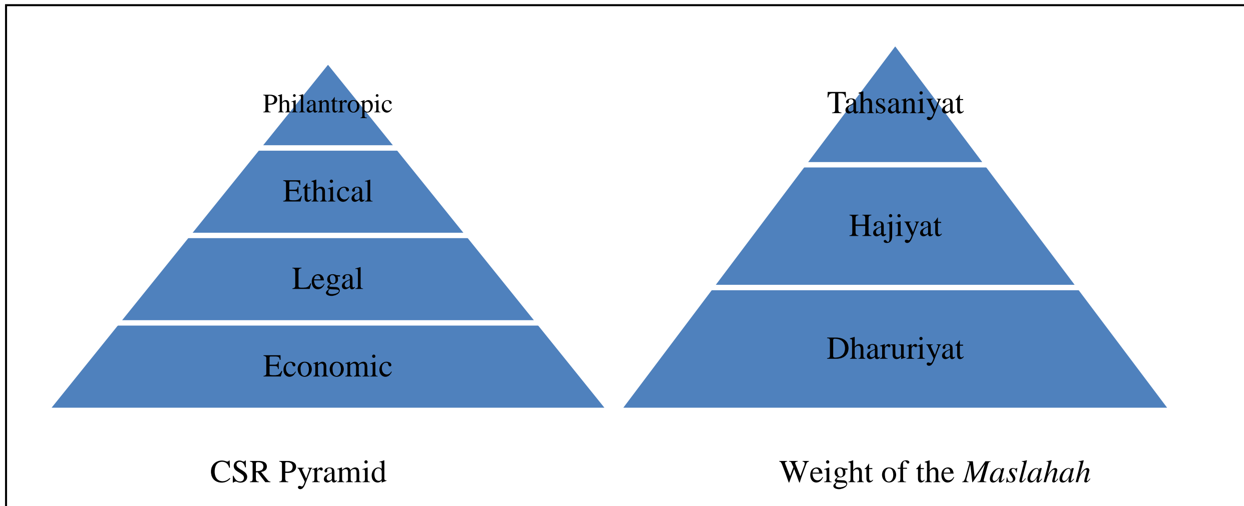
For the highest level of embellishment, businesses are expected to become involved in CSR activities that lead to improving and attaining perfection in public life. For example, involvement in activities that are encouraged in Islam such as donations, charitable acts, and philanthropic trusts (*waqf*), may contribute to a better social development of society. The embellishment will lead to the perfection of the community and social order.

Overall, the *Maslahah* pyramid provides a basic guide for businesses to manage their CSR activities based on prioritisation and to develop their CSR management strategy. The weight of the *Maslahah* also provides guiding principles and strategy development for CSR management.

4.3 The Weight of the *Maslahah* and the CSR Pyramid

Carroll (1979) depicted the concept of CSR in the shape of a pyramid. The CSR pyramid provides a comprehensive view of and framework for how businesses should act towards CSR. Based on the CSR pyramid (see Figure 4.1), CSR responsibilities are divided into four main categories: (1) economic responsibilities; (2) legal responsibilities; (3) ethical responsibilities; and (4) philanthropic responsibilities. Carroll (1979) also referred to four main characteristics of the CSR pyramid: (1) these four categories are not mutually exclusive; (2) they are not a continuum, with economic concerns at one end and social concerns at the other; (3) they are neither cumulative nor additive; and (4) they are ordered in the figure only to suggest their fundamental role in the evaluation of importance.

Figure 4.1: CSR Pyramid and Weight of the *Maslahah*



As per the CSR pyramid, the weight of the *Maslahah* provides (see Figure 4.1) a comprehensive framework for how businesses should view CSR from the Islamic perspective. Dusuki (2010) stated that the weight of the *Maslahah* can be useful for CSR in three ways: (1) it provides a framework for making decisions and a mechanism for adapting to change; (2) it delineates the role of businesses in terms of their CSR; and (3) it offers guidelines for moral judgement for businesses in solving conflicts that may arise when pursuing CSR.

As per the CSR pyramid, the weight of the *Maslahah* is also depicted based on a pyramid with three levels of judgement (*dharuriyat, hajiyat and tahsaniyat*). The CSR pyramid depicts four types of responsibility, each with different magnitude of responsibility (Carroll, 1979). The weight of the *Maslahah* also reflects different degrees of importance in terms of responsibility fulfilment (Dusuki and Abdullah, 2007a). Both models are not mutually exclusive, rather all levels are inter-related and mutually dependent (Carroll, 1979; Dusuki and Abdullah, 2007a).

The CSR pyramid assumes that all four kinds of responsibility have always simultaneously existed for business organisations, and all business activities, actions or decisions are embodied in the four classes of CSR (Carroll, 1979). The CSR pyramid provides a framework for what might be regarded as important among the four CSR responsibilities. However, the weight of the *Maslahah* pyramid reflects the different degrees of importance in-terms of CSR fulfilment. The bottom level is the most essential, as it constitutes the most fundamental responsibility to be fulfilled, compared to the complementaries and embellishments.

Besides the above, Carroll (1979, p. 500) pointed out that the CSR pyramid does not identify the degree of specific responsibility in each category: rather it provides a classification scheme for the kinds of social responsibility businesses are expected to have. For example, if a manufacturer of toys decides to make toys that are safe it would at the same be exhibiting economic, legal, and ethical responsibilities. In contrast, in the weight the *Maslahah* pyramid, the bottom level is the most important, for example, business have a fundamental responsibility to avoid any activities that may cause disruption and chaos in people's lives, even through pursuing them may contribute to higher profits (Dusuki and Abdullah, 2007a).

For Carroll (1979), his CSR pyramid provides a comprehensive CSR framework for businesses, since it presents various responsibilities that society expects businesses to assume. Each of the CSR categories deserves the same consideration and can be used to justify why CSR is important (Carroll, 1991). On the other hand, the weight of the *Maslahah* pyramid implies that businesses need to engage in and manage their CSR activities according to priority. For example, businesses must not focus on attaining the embellishments while jeopardising the essentials (Dusuki and Abdullah, 2007a).

Finally, the weight of *Maslahah* pyramid is based on the *Shari'ah*. It reflects the holistic view of Islam, which presents a complete and integrated code of life encompassing all of its aspects (Dusuki and Abdullah, 2007a). The *Maslahah* is one of the elements to achieve the objective of the *Shari'ah* and, therefore, must always be discussed and understood within the *Shari'ah's* framework and parameters (Laldin, 2010).

The discussion above has drawn attention to similarities and differences between the CSR pyramid and the weight of the *Maslahah* pyramid view of CSR. The CSR pyramid is the main model since it describes how businesses should react to CSR issues and has received more attention in CSR studies as indicated in chapter two (section 2.3). Few studies have applied the CSR pyramid in non-Western culture. This study therefore explores the relationship between racial groups and religious affiliations and CSR orientations using the CSR pyramid proposed by Carroll (1979).

4.4 Islam and the Natural Environment

The above section shows that the CSR concept is not a new concept in Islam. Islamic principles provide a complete foundation for better CSR implementation in business organisations, especially among Islamic business organisations such as Islamic banks. Many Islamic concepts or principles in the *Quran* and in the words and actions of the Prophet, such as the *Tawhid* (Unity of God), *Khilafah* (vicegerency), *Umma* (community), *Adl* (justice), *Ihsan* (kindness), *Hikma* (wisdom), and *Tawadu* (modesty), also carry substantive implications concerning the relationship between humankind and the natural environment (Kamla et. al., 2006). How important the natural environment is in Islam can be seen from the *Quranic* verses that discuss natural environment issues. Green is a colour particularly

associated with the Prophet Muhammad, and one of the names of Paradise is "The place of greening" (*al-khuDaira'*).

The concepts of *Tawhid* and vicegerency are also important to explain the Islamic view towards the natural environment. The concept of *Tawhid* implies the unity and equality of all God's creations. Kamla et al. (2006, p. 249) described the concept of *Tawhid* as follows:

> *"The concept implies the unity and equality of all God's creations in the worship of God and their equality as partners in terms of the due respectful recognition of the existence of all and the due appreciation of interdependency and interconnectedness between all."*

Humans as vicegerents have three main responsibilities: first is their responsibility to Allah, second is their responsibility to other humans, and third is their responsibility to the natural environment. Such responsibilities imply that human responsibility is not limited to Allah and other human beings, but extends to management of the natural environment. Thus, protection of the natural environment is not a new concept, law or idea in Islam. For example, the *Quran* states:

> *"No creature is there crawling on the earth, no bird flying with its wings, but they are nations like unto yourselves. We have neglected nothing in the book; then to their Lord they shall be mustered Quran" (6:38).*

The natural environment exists not only for human benefit. The Quran states that human beings should maintain the delicate balance that exists between the natural environment and themselves in order to ensure all resources are used in an appropriate manner:

> *"Verily, all things have We created in proportion and measure" (Quran 54: 49).*

And

> *"The sun and the moon run on their fixed courses (exactly) calculated with measured out stages for each, and the stars and the trees both prostrate*

themselves to Allah and the heaven: He has raised it high, and He has set up the balance. In order that you may not transgress balance and Observe the weight with equity and do not make the balance deficient" (Quran 55:5-9).

The above *Quranic* verses state that everything has been created by God based on exact proportions, measurements, and a delicate balance. Therefore, humans as vicegerents must ensure all resources are used in an appropriate manner and the delicate balance is maintained between the natural world and humankind. If humans abuse or exhaust resources, the natural world as a whole will suffer.

Entrusted with stewardship of the natural environment by God, Muslims are expected to respect it and protect it from abuse (Williams and Zinkin, 2005). Humans have the right to use the natural environment within the limits set forth by Islamic law or the *Shari'ah* as the following verse from the Quran shows:

"And remember when He made you successors after people and gave you habitations in the land, you build for yourselves palaces in plains, and carve out homes in the mountains. So remember the graces from Allah, and do not go about making mischief on the Earth" (7:74).

Water, land and forest must always be carefully conserved and managed to ensure human survival and harmony in the world (Khalid, 2002; Islam, 2004). Based on the concept of justice in Islam, natural resources belong to all inhabitants, and, therefore, businesses are not allowed to exploit them for their private benefit because doing so is an injustice to other claimants such as indigenous people and animals.

From the above, it can be concluded that the view of the natural environment from the Islamic perspective is holistic, since Islam refers to a fundamental link between the environment and human needs. This concept is not new, but is discussed in *Quranic* verses written many

centuries ago. It was therefore considered important in this study to examine Islamic organisations' actual natural environmental management practice by investigating bank managers' (individual Muslims) and Islamic banks' (Islamic organisation) attitude to corporate social responsibility.

4.5 Chapter Summary

Corporate social responsibility has been defined in this chapter from the Islamic perspective, which differs from the Western view in five areas (Ahmad, 2003, p. 195-197 cited in Zinkin, 2007). First, the economy is not regarded as something independent; the concept of Unity (*Tawhid*) makes this impossible. Second, although Islam recognises the importance of market mechanisms, it regulates their workings to prevent market failure that is socially disruptive and in violation of norms of justice and fairness. Third, although self-interest is the driver, it must be linked to an overall concept of justice. Distributive justice and social security are inbuilt components of Islam through voluntary charity (*sadaqah*) and the state managed obligatory poor-due (*zakat*). Fourth, although private property and private enterprise are inalienable rights, they are transformed by the moral filter that property in all its forms is a trust (*amanah*). Therefore, property rights are subject to moral limits and are a means to achieving an ethical Islamic way (*Maqasid-Al-Shari'ah*) rather than ends in themselves. Fifth, Islam rewards capital, but not on a fixed income basis (interest is forbidden) – choosing an 'equity-based, risk sharing, and stake-taking economic system' instead of a debt-based system. Finally, economic activity is filtered through a moral lens of what is good or permissible (*halal*) and what is harmful or forbidden (*haram*), and is subject to institutional arrangements or sanctions in the form of an ombudsman (*hisbah*).

As regard the natural environment, this chapter has shown that main concepts in Islam, such as vicegerency, *Tawhid*, and justice, provide scope for natural environmental management and protection. Moreover, the discussions in this chapter provide an improved framework for studying the application of environmental management in Islamic organisations.

Based on the foregoing discussions, Muslim managers and Islamic banks should show religion-informed environmental management practices, in contrast with managers affiliated to other religions and working in conventional, secular-oriented banks. However, actual performance might differ from the CSR framework provided by Islamic principles. To ascertain whether Muslim managers and Islamic banks are more proactive in natural environmental risk management, this study examined differences in Islamic and conventional banks' natural environmental risk management in project financing.

The next chapter will focus on Islamic banks and the rationale for selecting Malaysia as the study location. Basic concepts and operational principles that differentiate Islamic banks from conventional banks will be presented. Islamic corporate social responsibility and its implementations for Islamic banks will also be discussed. The development of the Equator Principles (EPs) as a voluntary code of conduct and their adoption by the banking industry to demonstrate its proactive role in environmental management will also be described in detail.

CHAPTER FIVE

Islamic Banking, Malaysia's Financial System and Environment

5.1 Introduction

Islamic banking has been in the market for almost fifty years, since its inception during the 1960s. Since that time, Islamic banking has rapidly developed and is no longer a strange concept. The products and services provided have been well accepted, not only among Muslim countries but also non-Muslim countries. This chapter discusses the characteristics of Islamic banking shows and how it differs from conventional banking. The religious characteristics that acted as a foundation for the establishment of Islamic banking and their influence on corporate social responsibility are explained in the first part of this chapter. The study then explores the relationship between Islamic banks and CSR.

The second part of the chapter focuses on Malaysia as the location of the study. The development of Malaysia's banking system and the subsequent development of a dual banking system is also discussed. The dual banking system that exists in Malaysia facilated the comparison between Islamic and conventional banks which was undertaken to investigate whether the natural environmental risk management of Islamic banks was better than that of conventional banks and the Islamic principles that act as a foundation for Islamic banks' CSR activities were actually being translated into their daily banking operations.

The chapter also discusses the development of natural environmental management in the banking sector, paying particular attention to the Equator Principles (EPs), a voluntary code of conduct developed by banking institutions to show their commitment to conserving the

natural environment. Other codes of conduct, such as the World Bank's lending policy and United Nations' Environmental Programme, are also discussed in this chapter.

5.2 Islamic Banking

Most of the literature on Islamic banks asserts that, basically, they perform functions similar to those of conventional banks. However, their approach is different (Ahmad, 2000; Chapra, 2000; Warde, 2000; Henry and Wilson, 2004; Iqbal and Molyneux, 2005; Dusuki and Abdullah, 2007b; and Iqbal and Mirakhor, 2007). Kahf (1999, p. 445) commented as follows:

> *"Although some writers would describe Islamic banks as more than mere financial institutions, the fact remains that an Islamic bank is actually much like a conventional bank, in that it is a full-service financial intermediary. By definition an Islamic bank abides by the Islamic law, called the Shari'ah. A bank's commitment to the Islamic law is expressed only in the definition of its modes of financing and its contractual relations with suppliers of funds."*

Lewis and Algaoud (2001, p. 2) defined an Islamic bank as:

> *"A financial institution that provides a service to its customers free from interest, and the giving and taking of interest is prohibited in all transactions."*

Dar and Presley (2000, p. 7) stated:

> *"Like conventional banks, an Islamic bank is an intermediary and trustee of other people's money with the difference that it shares profit and loss with its depositors. This difference introduces an element of mutuality in Islamic banking, making its depositors as customers with some ownership rights in it. However, in practice most Islamic banks have an organisational set-up similar to their conventional counterparts."*

Nathan and Ribiere (2007) pointed out that the banking operations of Islamic banks are based on Islamic principles. Thus, Islamic banks can be differentiated from conventional banks in three major aspects: (1) foundation; (2) management; and (3) products. Lewis and Algaoud

(2001) and Nathan and Rebiere (2007) highlighted five major elements that give Islamic banking and finance its distinctive religious identity: (1) *Riba* is prohibited in all transactions; (2) business and investment are undertaken on the basis of *halal* (legally permitted activities); (3) transactions should be free from *gharar* (speculation or uncertainty) and *maysir* (gambling); (4) *zakat* is to be paid by the bank to benefit society; and (5) to ensure that all activities are in line with Islamic principles, a special *Shari'ah* board supervises and advises the bank on the propriety of transactions.

5.2.1 Islamic Banking Business Characteristics

Riba or interest is the common factor that differentiates Islamic banking from conventional banks. One of the reasons for the establishment of Islamic banks was to avoid interest in banking transactions (Samad and Hassan, 1999). Much of the literature states that one of the major reasons for the establishment of Islamic banking was to provide an interest free banking system (Khan, 1987; Ariff, 1988; Gerrard and Cunningham, 1997; Samad and Hassan, 1999; Dar and Presley, 2000; Lewis and Algaoud, 2001; Rosly and Bakar, 2003; Dusuki and Abdullah, 2007b; Nathan and Ribiere, 2007).

Interest in Islam is defined as predetermined return on capital (Nienhaus, 1986). For Lewis and Algaoud (2001), interest refers to the addition to the amount of the principal of a loan according to the time for which it is loaned and the amount of the loan. Rosly and Bakar (2003) indicated that interest may occur as a contractual increase arising from a loan, whether in money or barter. With *riba*/interest, there is no risk of loss (Gerrard and Cunningham, 1997). Ahmad and Hassan (2007) defined *riba* based on the *Shari'ah* and *Fiqh* perspectives. *Riba* in the *Shari'ah* technically refers to the premium that must be paid by the borrower to the lender along with the principal amount as a condition for the loan or for an extension in

its maturity. In the *Fiqh*, *riba* means an increase in one or two homogenous equivalents being exchanged without this increase being accompanied by a return.

Ariff (1988) and Ahmad and Hassan (2007) pointed out that prohibition of interest is mentioned in four different revelations in the *Quran*. First, the *Quran* states that interest will deprive the one taking it from the wealth of God's blessings. Second, imposing interest is wrongful and inappropriate. Third, Muslims are enjoined to avoid interest for the sake of their own welfare and, last, a clear distinction is established between interest and trade. The prohibition of interest is also cited in the *Hadith* (the sayings of the Prophet).

Interest is prohibited in Islam due to its negative effect on society and the economic system. Interest is viewed as an act of exploitation and injustice and as such is inconsistent with Islamic notions of fairness and property rights (Lewis and Algaoud, 2001). Siddiqi (1983) discussed the serious consequences of bank financing based on interest. A business may incur losses arising from difficulties in repaying both the principal and the stipulated interest, and have to make up the deficiency from its assets. This is why the concept of interest is related to injustice. Siddiqi (1983, p. 25) stated:

> *"If the results of the enterprise are uncertain due to the nature of the world, the supplier of capital should be guaranteed a fixed positive return rather than the burden of uncertainty, in the form of loss, falling entirely on the entrepreneur."*

The same situation is faced by the lender (depositor) in a conventional bank, especially when the return on their deposit, which has been channelled by the bank to entrepreneurs, is not commensurate with the actual performance of the investment (Lewis and Algaoud, 2001; Dusuki and Abdullah, 2007b). Thus, the prohibition of interest is Islam's response to

arresting social imbalances arising from inequitable distribution of income created by the credit system.

Given the above, Islamic banks deliver a set of distinctive products in the financial market (Gerrard and Cunningham, 1997; Samad and Hassan, 1999). As an alternative, profit and loss sharing (PLS) contracts has been introduced to substitute for interest in banking activities. Profit and loss sharing (PLS) contracts is predominantly based on the *mudarabah* (profit-sharing) and *musharakah* (joint venture) concepts of the Islamic contract (Chong and Liu, 2010). There is a partnership between the Islamic bank and its depositors on the one side and between the bank and its investment clients on the other. An Islamic bank does not charge interest but participates in the yield resulting from the use of funds, and the depositors share in the profits of the bank according to a predetermined ratio (Lewis and Algaoud, 2001). Hasan and Dridi (2010) summarised the relationship between Islamic banks and their customers compared with conventional banks and their customers as follows:

Table 5.1 Risk Sharing and Risk Transfer

Islamic Banks	**Conventional Banks**
Sources of Funds Investors (Profit sharing investment account) holders share the risk and return with Islamic banks. The return of the investment is not guaranteed and depends on the bank's performance.	**Sources of Funds** Depositors transfer the risk to the bank, which guarantees a pre-specified return.
Uses of funds Banks share the risk in PLS contracts.	**Uses of funds** Borrowers are required to pay interest independent of the return on their project. Banks transfer the risk through securitisation or credit default swaps. Financing is debt-based.

Sources: Hasan and Dridi (2010)

Ariff (1988) contended that profit sharing can help allocate resources efficiently as the profit sharing ratio is influenced by market forces so that capital will flow into those sectors which offer the highest profit-sharing ratio to investors. At the same time, PLS contracts lead to a more efficient allocation of capital as the return on capital and its allocation depend on the productivity and viability of the project (Chong and Liu, 2010). Accordingly, Islamic bank activities through PLS contracts can contribute to achieving a just, fair and balanced society as envisioned by Islamic economics (Dusuki and Abdullah, 2007b).

In addition to the above cited advantages, Chong and Liu (2010) offered the following:

1. Through the PLS paradigm, the assets and liabilities of Islamic banks are integrated in the sense that borrowers share profits and losses with the banks, which, in turn, share profits and losses with the depositors.
2. The risk sharing feature of the PLS paradigm, in theory, allows Islamic banks to lend on a longer-term basis to projects with higher-return profiles and thus to promote economic growth.
3. The PLS paradigm creates greater market discipline. Islamic banks are required to put more effort into distinguishing good customers as they have more to lose than conventional banks. Depositors are required to choose their banks more carefully and to monitor the banks more actively to ensure that their funds are being invested prudently.

Islamic banks must also be free from *gharar* and *maysir*. *Gharar* refers to speculation and uncertainty. To avoid *gharar* transactions, every contract in Islamic banking must be well defined and without ambiguity (Chong and Liu, 2010). For example, the sale of fish from the ocean that has not yet been caught is prohibited. One of the reasons for the prohibition of

gharar is to protect the weak from being exploited. Due to the *gharar* term in contracts, one party cannot exploit another party and one party cannot acquire profit if the other party does not.

According to Imam and Kpodar (2010), *maysir* refers to uncertainties which are not part of everyday life, such as gambling or going to the casino. Entrepreneurship can also be interpreted as a form of gambling, however, unavoidable risk is permitted. *Maysir* (gambling) and *gharar* are inter-related. Where there are elements of *gharar*, elements of *maysir* are usually present (Institute of Islamic Banks and Insurance, 2011). For example, *maysir* exists in a contract between the policy holder and insurance company when the policy holder contributes a small amount of premium in the hope of gaining a larger sum. The policy holder loses the money paid for the premium when the event that has been insured for does not occur. The company will be in deficit if the claim is higher than the amount contributed by the policy holder.

Islamic banking also differs from conventional banking as it must ensure the entire operations of the business comply and are in accordance with the *Shari'ah* regulations (Khan, 1987; Ariff, 1989; Lewis and Algaoud, 2001; Rosly and Bakar, 2003; Ahmad and Hassan, 2007; Nathan and Ribiere, 2007; Dusuki, 2008; Hassan and Latiff, 2009; Chong and Liu, 2010; Hasan and Dridi, 2010; Ullah and Jamali, 2010). Therefore, Islamic banks only allow the financing of *halal* (legal) activities. For example, they are not supposed to lend to companies or individuals involved in activities deemed to have negative impacts on society, such as projects that have a negative impact on the natural environment and are illegal under Islamic law. This would include, for instance, financing construction of a plant to makes alcoholic

beverages or a business that is involved in gambling activities (Dusuki and Abdullah, 2007a; Nathan and Rebiere, 2007; Imam and Kpodar, 2010).

Islamic banks are also obliged to pay *zakat*. Lewis and Algaoud (2001) described the *zakat* payment as a religious levy and as almsgiving by an Islamic institution that is beneficial to society. The *zakat* payment is a mechanism to achieve justice, equality, and a minimum standard of living in society (Imam and Kpodar, 2010). Additionally, the zakat payment enhances productivity in economic activities. For example, Rosly (1989) stated that the *zakat* payment acts as a penalty on banks for not mobilising investable funds for productive use. If there is less money in circulation this will lead to lower production, high unemployment, and reduced incomes.

Islamic banks can also be differentiated from conventional banks based on their management structure. From the management perspective, Islamic banks are under a different corporate governance structure since they are obliged to appoint a board comprising Islamic scholars called the *Shari'ah* Supervisory Board (SSB) (Nathan and Ribiere, 2007). The objectives of the SSB are to ensure Islamic banks operate in conformity with the *Shari'ah* and to minimise risk (Rammal, 2006). If the terms agreed in a contract do not effectively comply with Islamic jurisprudence they are not valid under Islamic law. SSB members' existence ensures the audit systems in Islamic banks encourage them to strictly follow and abide by Islamic principles. Any divergence from Islamic principles can expose Islamic banks to non-*Shari'ah* compliance and heavy penalties. Accordingly, with regard to CSR management issues, especially natural environmental risk management, Islamic banks are expected to show more comprehensive and active management.

In general, the characteristics and differences between Islamic banks and conventional banks are as Table 5.2. This table is based on work carried out by Ahmad and Hassan (2007) and Dusuki (2008) who examined in detail the characteristics of and differences between Islamic banks and conventional banks.

Table 5.2: The Characteristics of and Differences between Islamic banks and Conventional Banks

	Islamic Banks	**Conventional Banks**
1.	Are based on the principles of the Islamic *Shari'ah.* Functions and operations are guided by sources of the *Shari'ah,* namely the Quran and the Sunnah (traditions of the Prophet Muhammad p.b.u.h)	Based on man-made principles. Functions and operations are guided by secular principles and not based on any religious doctrines and values
2.	Investment based on risk sharing between the provider of capital (investor) and the user of funds (entrepreneur)	The investor is assured of a predetermined rate of interest
3.	Profit maximisation is allowable but subject to *Shari'ah* restrictions	Profit maximisation without any restriction
4.	*Zakat* obligation	No *zakat* obligation
5.	Participation in partnership business is the fundamental function of the banks	Lending money and getting it back with interest is the fundamental function of the banks
6.	The banks have no provision to charge any extra money from defaulters	Banks can charge additional money (compound rate of interest) in the case of default
7.	The PLS paradigm of the banks' operation makes the banks pay greater attention to developing project appraisal and evaluations	Since income from advances is fixed, banks attach little importance to developing expertise in project appraisal and evaluations
8.	Islamic banks give greater emphasis to the viability of projects	Banks place greater emphasis on the credit-worthiness of clients
9.	The bank and client relationship is considered to be between partners, investors and traders.	The bank and client relationship is considered to be between creditors and debtors.

10.	Islamic banks need to show social and economic responsibility by paying *zakat* (a compulsory religious levy) out of their income	There is no requirement to perform charitable acts.
11.	Islamic banks are prohibited from participating in economic activities which are unethical and prohibited by the *Shari'ah* such as financing businesses involving alcohol, prostitution, pork, environmental pollution, etc.	There is no such restriction

Source: Dusuki (2008) and Ahmad and Hassan (2007)

From the above, it can be concluded that Islamic banks differ from conventional banks in three main areas: (1) principles; (2) products; and (3) management. In terms of principles, the main difference concerns *riba*. *Riba* is prohibited in Islam and, because of this, Islamic banks have introduced profit and sharing (PLS) contracts whereby they do not charge interest but participate in the yields resulting from the use of funds and depositors share in the profits of the banks according to a pre-determined ratio. PLS contracts therefore create a different relationship between customers and Islamic banks. Customers play an active role as they are partners in the banking business. Moreover, as stakeholders, they are more sensitive to banks' activities, especially with regard to natural environment issues. As a result, Islamic banks are expected to have stricter natural environmental risk evaluation procedures than conventional banks in project financing and to show more proactive CSR and natural environmental management. The next section will focus on Islamic banks' commitment to CSR.

5.3 Islamic Banks and Corporate Social Responsibility (CSR)

The establishment of Islamic banks was due to criticism of conventional banks charging interest on their banking activities. The practice of interest has been reported to have a

negative effect on the development of the socio-economic system (Siddiqi, 1983; Ariff, 1988; Lewis and Algaoud, 2001; Ahmad and Hassan, 2007). Chong and Liu (2010) state that the prohibition of interest or *riba* in Islam can be viewed as part of Islam's general vision of a moral economy.

Thus, Islamic banking was introduced as an alternative to conventional banking. Islamic banks have a strong responsibility to society, to establish a fair distribution of income, justice in the economy, and efficient capital mobilisation. These requirements clearly suggest that Islamic banks should display a strong fundamental sense of social responsibility towards society. The present study's examination of the corporate social responsibility of Islamic banks was therefore important in order to establish whether their CSR practice is in accord with the spirit of their establishment.

Islamic banks' commitment to CSR can be decoded through the philosophy underlying their establishment. According to Dusuki and Abdullah (2007b), Islamic banking rests on three main philosophies which distinguish it from its conventional counterpart. First, Islamic banking strives for a just, fair and balanced society, as envisioned by Islamic economics. Second, Islamic banking is constructed upon the principles of brotherhood and cooperation, and a system of equity sharing and stake taking. Last, as a system grounded in the ethical and moral framework of the Islamic law of the *Shari'ah*, Islamic banking is characterised by ethical norms and social commitments.

Ahmad and Hassan (2007) have indicated that one of the missions of Islamic banks is to work towards the establishment of an Islamic society and to create a deepening of the religious spirit among the people. Islamic banks' existence is based on the religious view and spirit.

Thus, Islamic banks must ensure that their activities adhere strictly to the rules of the Islamic *Shari'ah*. They must ensure that all actions and business activities reflect Islamic principles. For these reasons, Ahmad and Hassan (2007) have contended that Islamic banks' obligations towards society are greater than those of conventional banks for the following three main reasons:

1. An Islamic bank has a certain philosophical mission to achieve. According to Islamic principles, Allah is the creator and ultimate owner of all resources. Humans and institutions have a vicegerency role to play in society. Therefore, Islamic banks are not free to do as they wish, rather they have to integrate moral values with economic action.
2. An Islamic bank has to provide credit to those who have talent and expertise, thereby strengthening the economic foundations of society.
3. An Islamic bank should aim to create harmony in society based on the Islamic concept of sharing and caring in order to achieve economic, financial and political stability.

The activities and operations of Islamic banks are not only based on government rules and regulations but, at the same time, must comply with the *Shari'ah* law. Therefore, Islamic banks' permissible activities are limited compared to those of conventional banks which are not subject to such restrictions, instead being obliged to comply solely with legislation and not with additional religious obligations. Any activities that contradict Islamic values and principles must be avoided. Thus, Islamic banks should not invest in companies that violate human rights and damage the natural environment (Ullah and Jamali, 2010). Moreover, Islamic banks are not allowed to finance any enterprise involved in activities relating to pork, pornography, tobacco, gambling, and alcoholic liquor (Nathan and Ribiere, 2007). As a

consequence, Islamic banks bring ethical values and corporate social responsibility to banking practices simply because they are required to abide by Islamic law and the *Shar'iah,* which are loaded with moral values (Kahf, 1999; Dusuki and Abdullah, 2007b).

While the above principles restrict Islamic banks' activity, they support Islamic banks' core values and activities that cultivate entrepreneurship, trade and commerce, and bring societal development or benefit (BNM, 2010). Khan (1987) indicated that these core values are one of the major principles underlying Islamic banking. Thus, the contribution of Islamic banks to CSR practice is important.

The *zakat* payment obligation also shows the commitment and contribution of Islamic banks to CSR. As has been discussed in previous sections in this chapter, the *zakat* payment is an important tool for redistribution of income. Moreover, it contributes to better and more efficient economic development of the country. Thus, Islamic banks that are driven by religious philosophy should, theoretically, evidence more ethically-founded CSR policies than conventional banks given the additional religious prerequisites to their activities.

As previously discussed, the concepts of profit and loss sharing (*mudarabah*) and joint venture (*musharakah*) ensure that Islamic banking transactions are interest free transactions and comply with the *Shari'ah's* requirements. However, Chong and Liu's (2010) study on Islamic banking in Malaysia suggested that Islamic banking, as it is practised today in Malaysia, tends to deviate substantially from the profit and loss (PLS) paradigm for the following reasons:

1. Only 0.5% of Islamic banking financing is based on PLS (*mudarabah* and *musharakah*). Islamic banking financing is still based largely on non-PLS modes of

financing (*murabahah,* etc.). Even though non-PLS modes of financing are permissible under the *Shari'ah*, these types of financing ignore the spirit of the usury prohibition.

2. While 70% of deposits are based on the *mudarabah* concept, Chong and Liu (2010) found that Islamic deposits are not really interest-free, but are similar to conventional bank deposits. Islamic bank deposit PLS practices are closely pegged to the deposit rate setting practices of conventional banks.

Since the aforementioned Chong and Liu (2010) study suggests that current Islamic banking activities deviate from the Islamic spirit, and their implementation and practice are no different from those of conventional banking activities, a study of the current practice of Islamic banking was important to identify if differences exist between Islamic banks and conventional banks. In this way the correlation between theory (compliance with religious norms) and practice can be ascertained. It was also important to study if and how Islamic teachings and views have impacted upon Islamic banking activities.

Ullah and Jamali (2010) contended that Islamic ethical principles provide a broader framework for CSR and should motivate Islamic banks to actively pursue it. Islamic banks should also have a greater affinity to CSR because they are guided by strong religious/ethical principles and obligated to adhere to these principles.

Importantly, Islamic principles must be translated into action and actual practice in Islamic banks' activity. If not, such principles and guidance become theoretical only. A recent study by Chong and Liu (2010) found that Islamic banking practices in Malaysia do not much differ from those of conventional banks and therefore concluded that Islamic banks exist in

theory only. In natural environmental management, Sairally (2007) reported that natural environmental issues appear to be of minor concern, therefore, the present study is important in order to identify actual environmental risk management in the Malaysian banking sector, especially among Islamic banks. The rapid development of Islamic banks in the world also requires an instructive examination of their CSR practices. It has been argued by Dusuki and Abdullah (2007a, p.145) that Islamic banks should play a leading role in CSR implementation and environmental risk management:

> *"Islamic banks need to play a leading role in social services such as the development of human resources, protection of the environment, promotion of human rights and constructive participation in community development programmes. Indeed, the Islamic banking system has an in-built dimension that promotes ethics and social responsibility, as it resides within a financial trajectory underpinned by religious injunctions. These religious injunctions interweave Islamic financial transactions with genuine concern for ethical and socially responsible activities and simultaneously prohibit involvement in illegal activities or those which are detrimental to social and environmental well being."*

Ahmad and Hassan (2007) discussed the impacts and consequences of Islamic banking on socio-economic dimensions. First is the impact on savings and investment; second is the impact on the rate and pattern of growth; third is the impact on allocative efficiency; fourth is the impact on the stability of the banking system; and, finally, is the impact on the stability of the economic system.

Its dual banking system made Malaysia an excellent location for a comparison of Islamic and conventional banks' implementation of CSR practices. At the same time, liberalisation of the financial market in Malaysia allowed the study to make comparisons between local and foreign banks.

5.4 The Development of Islamic Banking

Islamic banking is an emerging industry (Sugema et al., 2010). It has grown tremendously since its inception in the market place in the 1960s (Lee and Ullah, 2008; Ullah and Jamali, 2010). Islamic banks have recorded annual growth between ten to fifteen per cent every year (Sole', 2007; Chong and Liu, 2010; Sugema et al., 2010). Their assets which, were reported to be around US$250 billion in 2004 (Chong and Liu, 2010; Ullah and Jamali, 2010) had reached US$ one trillion in 2010 (BNM, 2010).

The rapid development of Islamic banking is also due to the number of Islamic banks in Muslim countries such as Malaysia, Pakistan, and Egypt. Moreover, Islamic banking is not confined to Islamic countries, but is also well accepted in countries where Muslims are in minority (Sole', 2007). An Islamic bank known as the Islamic Finance House was established in Luxembourg in 1978, the first Islamic bank in the Western world. There are also Islamic banks in Denmark, Australia, and Japan. Hong Kong and Shanghai Bank Corporation (HSBC), Citibank, University Bank and Devon Bank offer Islamic banking products in the United Kingdom and the United States of America (USA). Islamic banking currently exists in more than 50 countries worldwide (Chong and Liu, 2010). It includes about 300 financial institutions and 250 mutual funds that comply with Islamic principles (Sole', 2007).

The early development of Islamic banking in Malaysia began when an attempt was made to establish an interest free bank in the mid-1940s (Khan, 1987; Lewis and Algaoud, 2001). This was unsuccessful, but the *Tabung Haji* (Pilgrimage Fund) was established in the late 1950s for the purpose of helping those who wanted to accumulate savings to make the costly pilgrimage trip to Makkah (Kahf, 1999). The fund became a fully-fledged interest free

investment bank in 1962 (Khan, 1987; Kahf, 1999; Lewis and Algaoud, 2001), however, its role is somewhat limited (Lewis and Algaoud, 2001). The success of the *Tabung Haji* provided the main impetus for establishing the Islamic bank in Malaysia (Ariff, 1988).

Besides Malaysia, Islamic banking has, as previously indicated, developed in other Muslim countries. For example, in Egypt the first Islamic bank was established in 1963 known as the Mitt Ghamr Savings Bank (Khan, 1987; Ariff, 1988; Kahf, 1999; Lewis and Algaoud, 2001). The Mitt Ghamr Savings Bank was at that time considered to be the most modern experiment in Islamic banking (Chong and Liu, 2010). The same move followed in other countries, with the first attempt to establish Islamic banks in Pakistan also in the 1950s (Khan, 1987; Lewis and Algaoud, 2001).

The 1970s witnessed the rapid development of Islamic banks. During this time, the Nasir Social Bank was established in Egypt and declared the first interest-free commercial bank (Ariff, 1988). According to Ariff (1988), several other Islamic banks were established during this period in the Middle East, such as the Dubai Islamic Bank (1975), the Faisal Islamic Bank of Sudan (1979), the Faisal Islamic Bank of Egypt (1977), The Bahrain Islamic Bank (1979), and the Philippine Amanah Bank (1973). Since then, Islamic banks have increased in number and are well accepted in Muslim countries. Recently, Iran, Sudan and Pakistan have begun to establish full Islamic banking operations. In other countries, such as Bangladesh, Egypt, Indonesia, Jordan, and Malaysia, Islamic banking co-exists with conventional banking (Chong and Liu, 2010). The success of the establishment of the Islamic Development Bank in 1975 in Jeddah in the Kingdom of Saudi Arabia paved the way for the establishment of Islamic financial institutions throughout the world (BNM, 2010).

The growth and development of Islamic banks are expected to continue. Moreover, the contribution of Islamic banks to better implementation of CSR, especially in terms of environmental risk management, is important and crucial. Therefore, this study, investigated the actual behaviour of Islamic banks in Malaysia with regard to environmental risk management, especially in project and credit financing, as the Islamic banking industry influences economic and social development through its environmental risk management policy.

5.5 Malaysia’s Financial System and Islamic Banking in Malaysia

Malaysia is synonymous with the early development of Islamic banks. It has been stated that Malaysia led other countries in the early establishment of Islamic banks in 1940 (Khan, 1987; Lewis and Algaoud, 2001). In 1962, Malaysia’s government established the Pilgrim’s Management Fund, which became a fully-fledged interest free non-bank financial institution. The Pilgrim’s Fund was established to act as a finance company to help Malaysians save for performing the Hajj (The pilgrimage to Mecca and Medina), and to invest the savings of would be pilgrims in accordance with Islamic Law (Lewis and Algaoud, 2001).

The success of the Pilgrim’s Fund led Malaysia’s Government to establish other Islamic banks. The Islamic Banking Act 1983 (IBA), was enacted for Islamic banks to come into existence and the Government Investment Act 1983 was also enacted to allow the government to introduce the Government Investment Issue (GII) based on Islamic principles. As a result of these two initiatives, the Bank Islam Malaysia Berhad (BIMB) was established in July 1983, the first Islamic bank licensed under the Islamic Banking Act. In order to provide a conducive environment for the BIMB, it was agreed at that time to give the BIMB a

lead period of ten years before the establishment of another Islamic bank. This was to enable the bank to focus fully on the development of Islamic banking (BNM, 1999).

Today, after twenty-eight years in the market, the BIMB has shown remarkable development as the first Islamic bank in Malaysia. The bank was listed on Malaysia's stock exchange after nine years in operation (17 January 1992). As at 2009, the BIMB's assets stood at RM27.5 billion, with RM1.73 billion paid up capital. This is considered a great achievement compared to its initial paid up capital of only RM80 million. The BIMB has 100 branches throughout the country and currently offers fifty innovative and sophisticated Islamic banking products and services. This achievement shows the ability and potential of Islamic banks to operate parallel with conventional banks, not only in Malaysia but also throughout the world.

On 4th March 1993, the Bank Negara Malaysia (BNM) (The Central Bank of Malaysia) introduced the Skim Perbankan Tanpa Faedah (SPTF) (Interest-Free Banking Scheme). The main objective of this scheme was to disseminate Islamic banking on a nationwide basis with as many players as possible within the shortest period possible. The scheme allowed conventional banking institutions to offer Islamic banking products and services using their existing infrastructure, including staff and branches. On 1st December 1998, the BNM replaced the SPTF with the Islamic Banking Scheme (IBS) (BNM, 2011a).

Under the IBS, the framework, responsibility and function of Islamic banking under conventional banks were reviewed and upgraded. In 1999, there were 54 banking institutions participating in the IBS, of which 24 were commercial banks, 18 were finance companies, 5 were merchant banks, and 7 were discount houses (BNM, 2002). Malaysia's Islamic banking

market was further strengthened with the establishment of a second fully-fledged Islamic bank, the Bank Muamalat Malaysia Berhad (BMMB), in October 1999.

For the new millennium, in 2000, the BNM announced the Financial Sector Master Plan (FSMP) to set out the future direction of the financial system over the next ten years (BNM, 2002). To stimulate greater competition and to accelerate greater international integration, consideration would be given to issuing Islamic bank licenses to qualified foreign Islamic bank players present in the global Islamic banking industry (BNM, 2002). In 2004, three new Islamic bank licences were issued to Islamic financial institutions from the Middle East to enhance the diversity and depth of players in the Malaysian financial system (Chong and Liu, 2010).

Islamic banking development policies have been further strengthened by conventional banks being allowed to establish Islamic bank subsidiaries. Through this new policy, all local banks under the IBS were converted into Islamic subsidiaries. The established new subsidiaries have increased the focus on the Islamic banking business of conventional banks as they are considered to be different entities under separate board and management structures.

This policy had increased the total number of licensed Islamic banks in Malaysia to 16 in 2008. This policy is not restricted to local banks as in 2008 the same policy was applied to locally-incorporated foreign banks. For example, HSBC Bank established its new Islamic subsidiary known as HSBC Amanah in 2008. Currently, based on the latest report published by BNM (2011b), there are seventeen (17) licensed Islamic banks, comprised of twelve (12) local banks and five (5) foreign banks. Table 2A in Appendix 2 provides a list of Islamic Banks.

Given the above development, Islamic banking and finance are making a vital contribution to Malaysia's economic development and growth. Based on the BNM's financial stability report of 2010, total assets of the Islamic banking sector amounted to RM350.8 billion and accounted for over twenty per cent (20%) of the overall banking system in terms of assets, financing, and deposits (BNM, 2010). Malaysia has consequently become one of the most developed Islamic banking markets and systems in the world (BNM, 2011a; Chong and Liu, 2010).

The banking system in Malaysia comprises Islamic banks alongside conventional banks. Islamic banks and conventional banks are governed by different Acts. Islamic banking is governed by the Islamic Banking Act 1983, and conventional banking by the Banking and Financial Institution Act 1992. These two Acts allow Malaysia to implement both banking systems (a dual system) at the same time under the supervision of the BNM (Rosly and Bakar, 2003; Chong and Liu, 2010). Thus, the selection of Malaysia as the study location and its dual banking system enabled the researcher to compare Islamic and conventional banks' natural environmental management practices.

Malaysia was also selected because it is a multi-racial country. Malays, Chinese and Indians make up 60%, 30% and 10% of the population, respectively. The population can also be divided based on religion. According to the statistical report published by the Department of Statistics, Malaysia (2010), 61.3%, 19.8%, 9.2% and 6.8% of the population are Muslims, Buddhists, Christians and Hindus, respectively. Other religions are practised by 3.4% of the population. Malaysia's multi-racial and multi-religious culture enabled this study to explore the relationship between banks' managers' personal culture and attitude towards natural environmental management. The selection of Malaysia as the study location also enabled the

study to present a model of how multi-racial and multi-religious societies are likely to react to natural environmental risk management practices and policies within financial institutions, as well as to broader legislative architecture put in place by the government. In a wider context, observations made and recommendations made as a result of this study of Malaysia, bearing in mind its diverse cultural and religious identify, may provide a useful template for application in other similarly constituted, diverse countries.

Malaysia's banking system also contributed to the uniqueness of this study since it is divided into Islamic banking and conventional banking, and further into local and foreign banks. Local banks can be divided into Islamic banks or conventional banks. Interestingly, conventional banks are allowed to have Islamic bank subsidiaries. For example, Maybank Group Limited has a conventional banking operation known as Maybank Berhad and an Islamic banking operation known as Maybank Islamic. The situation is the same for foreign banks. For example, HSBC (Malaysia) Ltd conducts conventional banking business, but also has a subsidiary known as HSBC Amanah (Malaysia) Limited that conducts business from the Islamic banking perspective. Further, there are fully-fledged Islamic banks such as Bank Islam Malaysia Berhad and fully-fledged foreign Islamic Banks such as the Al-Rajhi bank and Kuwait Finance House. Such phenomena make Malaysia's banking system unique and provided an interesting context for this study as respondents came from a variety of backgrounds. Malaysia's different racial and religious groups further enhanced the richness of the data collected for this study. Tables 2B and 2C in Appendix 2 provide a list of conventional banks and investment banks, respectively.

5.6 The Impact of Banks' Activities on the Natural Environment

At first glance, banks activities and those of corporations do not have any effect on the environment. They do not produce hazardous chemicals or pollution in the air, on land, or in water. However, through their lending activities, banks are indirectly linked to activities that contribute huge damage to the natural environment (Cowton and Thompson, 2000). In addition, environmental risk can pose a dual threat to their loan portfolio. For example, environmental regulations can impact on a company's cash flow by affecting markets for its products. Moreover, banks often take land as security for their loans, and its value can be significantly reduced where it is found to have been contaminated because of polluting activities. The Fleet Factor case in the USA illustrates this. An environmental issue not only reduced the value of collateral but the bank was also held liable for clean up costs at a site owned by a defaulting client, since it was adjudged to have been in a position to influence the company's business decisions (Cowton and Thompson, 2000).

Hill (2007) has also pointed out that the financial sector has been heavily criticised in recent years due to extensive environmental and social degradation linked to the funding of development projects. However, banks can try to avoid lending in ways that expose them to environmental risk. In a more proactive vein, banks can, through their business relationships, make a positive contribution to the environment by influencing their borrowers, not do business with companies involved in activities known to harm the environment and turn down new applications and terminate existing relationships because of environmental concerns.

Coulson (2009) and Watchman et al. (2007) discussed the attitude of financial institutions and NGOs towards environmental management. Financial institutions take a moderate

approach that tries to mitigate harm to the environment through their lending activities. The Equator Principles (EPs) were introduced to deal with the mitigation process. However, NGOs such as Friends of the Earth (FoE) contend that banks should avoid projects that create a risk of causing harm to the environment. This is reflected in the 'Collevecchio Declaration' that was released in 2003. The Collevecchio Declaration has been endorsed by 200 civil society groups worldwide. It calls on financial institutions to commit to six principles of environmental governance.

The Equator Principles (EPs) are a manifestation of the financial industry's response to pressure from government, governmental agencies, stakeholders and NGOs to accept responsibility for assessing and monitoring the environmental and social impact of financing major projects. The EPs serve as an internal control over banking activities by providing guidelines on how banks should conduct natural environmental management. The EPs were initiated by major players in the banking industry from developed countries such as the UK and USA. The question therefore arises: are the EPs useful in developing countries such as Malaysia? The following sections focus on their historical development, guidelines, advantages and disadvantages. Subsequent sections will look at other laws for social and environmental protection, the United Nations Environmental Programme, and environmental risk assessment in credit evaluation.

5.6.1 Equator Principles (EPs)

The Equator Principles (EPs) were originally announced on June 4, 2003. The EPs comprise a set of guidelines for managing social and environmental issues related to the financing of projects. They consist of a common and coherent set of environmental and social policies and guidelines that can be applied globally and across all industrial sectors.

The Equator Principles are the financial industry's response to external and internal pressures from governments, governmental agencies, socially responsible investment funds, international advocacy groups, and NGOs, to fulfil its corporate social responsibility (CSR) obligation by accepting responsibility for assessing and monitoring the environmental and social impacts of financing major projects. Pressure exerted on financial institutions by stakeholders for sustainable and responsible banking has been led by several prominent socially responsible investors, such as F&C Asset Management, Insight Management, and the Calvert Group of Funds. NGOs which have exerted pressure include organisations like *Banktrack*, the World Wildlife Fund for Nature (WWF), and Friends of the Earth (FoE).

The EPs comprise a voluntary set of guidelines for promoting social and environmental responsibility in project financing. That is to say, the Principles specifically address the negative effects of project financing. Wright and Rwambizambuga (2006); Richardson (2005); and Scholtens and Dam (2007) classified EPs as a third party code of conduct. Therefore, banks adopt and implement these Principles voluntarily and independently.

The EPs provide a framework, based on International Financial Corporation (IFC) safeguard policies, which commit each of the Equator Banks to develop its own individual policies, practices and procedures to ensure proper assessment and evaluation of social and environmental issues in project financing. The banks pledge to apply the EPs' framework to all projects with a capital cost above US$10 million, in all industries globally, and commit not to provide loans directly to projects where the borrowers are unable to comply with the EPs' environmental and social policies.

5.6.1.1 Historical Development of the Equator Principles (EPs)

Misbach (2004) has stated that in the 1990s there was a dramatic change in the composition of financial flows. Private financial institutions outstripped governmental and multilateral development financing as they provided finance for the building of large dams, oil pipelines, and large infrastructure projects, which had previously been financed by the World Bank and other multilateral development banks. Wright and Rwambizambuga (2006) reported that between 1990 and 1997, the number of commercial banks financing infrastructures in developing countries increased nine-fold, and the annual amount of project finance deals exploded from less than US$5 billion to over US$50 billion.

This scenario attracted the attention of NGOs, especially when the World Bank rejected the financing of projects due to environmental and social concerns, for example, the OCP-Pipeline in Ecuador, the Three Gorges dam in China, and the Ilusu dam in Turkey. The ABN Amro Bank experienced problems when financing a mining project in Papua New Guinea that severely contaminated the local water supply (Scholtens and Dam, 2007). In 2001, the Rainforest Action Network (RAN) began campaigning against Citigroups' funding of old growth logging projects and an oil pipelines through an Ecuadorian nature reserve (Richardson, 2005).

Coulson (2009) has contended that the above situations urged financial institutions to establish environmental thresholds. In addition, the absence of adequate public regulation at an international level, differing environmental legislation, and inconsistency in global standards led to banks' global policies being implemented differently in each operating country. As a result, banks had to act in unison to find a solution to the problem of lack of consistent environmental governance and to defend their market position. According to

Scholtens and Dam (2007), such action began when ABN Amro approached the IFC with concerns that there were no established principles to guide lending decisions when it came to social and environmental risk, concerns that had arisen during the course of its financing of a mining project in Papua New Guinea.

As a result, ten commercial banks and the IFC held a meeting in London in October 2002 to discuss environmental and social issues in project financing. Four banks, ABN Amro, Barclays, WestLB, and IFC, presented case studies on past projects which had attracted controversy because of environmental and social issues. The meeting led to the decision to develop a framework to deal with environmental and social issues for consideration by other banks and then produce a set of guidelines on environmental and social risk in project financing.

In the draft version, guiding principles were labelled the Greenwich Principles. The draft version was sent out for comments by other banks, the IFC, NGOs, and clients (Scholtens and Dam, 2007). Finally, on 4th June 2003, ten leading banks from seven countries announced the adoption of the EPs, a voluntary set of guidelines developed by banks for managing social and environmental issues related to project financing.

In 2006, the EPs were revised, addressing several of the deficiencies and critiques which had undermined the effectiveness of the first version. The US$50 million benchmark was reduced to US$10 million. The EPs were also applied to expansions or upgrades of existing projects and not just to new projects since changes to the scale or scope of projects had the potential to create significant social and environmental impacts or significantly change the nature or degree of the existing impact (Allens Arthur Robinson, 2006). The revised version

of the EPs also addressed widespread concern regarding lack of transparency in the original Principles; it included a commitment to periodic reporting.

5.6.1.2 The Equator Principles' Guidelines

The EPs are a voluntary set of guidelines for promoting social and environmental responsibility in project financing especially in emerging markets (Misbach, 2004; Amalric, 2005; Scholtens and Dam, 2007; and Coulson, 2009). These Principles act as a framework for developing internal practices and policies. The EPs are based, in large part, on the policies and guidelines of the International Finance Corporation (IFC), a member of the World Bank Group. The EPs also emphasise a commitment to environmental assessment based on compliance with host country laws, regulations and permits applicable to the project, specific World Bank and IFC guidelines, IFC Safeguard Policies and IFC Pollution Prevention and Abatement Guidelines for the relevant industrial sector (Coulson, 2009). The EPs are applicable to all projects with a capital of US$10 million or more.

In the first step, banks will categorise a project into one of three groups: high (A), medium (B), or low (C) in environmental or social risk as a precondition for financing. The customer is required to supply environmental impact assessment (hereinafter EIA) if the project is category A or B, taking into account issues such as pollution prevention, sustainable development, involuntary resettlement, and socioeconomic impact.

For categories A and B, the customer is also required to prepare an Action Plan (AP) and implement an Environment Management System (EMS). The AP may range from a brief description of routine mitigation measures to a series of documents, such as a resettlement action plan, indigenous people plan, emergency preparedness and response plan, or a

decommissioning plan. The EMS will incorporate social and environmental assessment, a management programme, organising capacity, training, community engagement, monitoring, and reporting. There will be compulsory expert reviews and an independent expert review of the EIA, AP, and EMS, in order to assess compliance with the EPs.

5.6.1.3 Why a Bank May Adopt the Equator Principles

From the macroeconomic perspective, Scholtens and Dam (2007) stated that financial institutions are likely to adopt the EPs because perceived benefits exceed the associated cost. In line with recent CSR theory, (Bansal and Roth, 2000; Baron, 2001; McWilliams and Siegel, 2001; Bagnoli and Watts, 2003; Heal, 2005) similarly suggested that firms engage in profit-maximising CSR based on anticipated benefits from their activities. If a bank does not engage in CSR, the non-market costs in the form of negative externalities will potentially be charged back to the firm, such as consumer boycotts, environmental scandals, employee actions, NGO pressures, negative publicity, and lawsuits.

Chapter two section 2.6, focused on how stakeholders affect the implementation of CSR. Specifically in project financing, there is one pressure group known as *BankTrack* that monitors and tracks the operations of the private financial sector and their effects on the environment. One of the objectives of *BankTrack* is to educate the civil society about how financial sector activities such as project financing affect people and the environment. Additionally, *BankTrack* works together with other NGOs to form a strong network to influence bank activities in project financing.

Saunders and Allen (2002) stated that the EPs increase assessment and evaluation in project financing, reduce reputational risk, and enhance the security and reliability of a project.

Moreover, since the EPs are seen as embedded in reputational risk management, other benefits will be obtained. First, banks will gain corporate benefit and reputation associated with the EPs as they are recognised as defining the best practices in project financing. Second, the EPs can help to differentiate an individual firm's reputation from the malpractices of other banks and boost its credibility relative to critics. Last, adoption of the EPs can be perceived as a form of pre-emptive action motivated by the anticipation that irresponsible practices may attract the attention of domestic regulators (in the form of intrusive legislation and environmental audit), and civil society groups (Wright and Rwambizambuga, 2006).

According to Amalric (2005), Equator banks or high reputation risk banks use the EPs as a strategy to achieve a level playing field with their less exposed competitors. Differences in terms of reputational risk explain why banks in developed countries are more likely to sign-up to the EPs. For example, ABN Amro, Barclays, Citigroup, The Royal Bank of Scotland, and WestLB have widespread activities and are based in countries with strong NGOs. For Wright and Rwambizambuga (2006), the high rate of adoption of the EPs among banks headquartered in Western Europe and North America illustrates how the EPs primarily function as tools for maintaining and enhancing corporate reputation in institutional environments where it is threatened. If this were not so, the strategic motivation for adopting them would decrease and the gap between developed and developing countries' implementation of natural environmental management would also likely decrease.

Adoption of the EPs may also arise from the specific nature of project financing. Project financing requires loan syndication where a lead arranger brings together a group of banks that together provide the finance needed for a project. For example, Misbach (2004)

indicated that 21 banks had signed-up to the EPs and these banks represented 70% of the market share in project financing. Since main signatories to the EPs are major players in project financing, their participation attracts that of other banks who may potentially lose business if they do not adopt them.

Adoption of the EPs also leads to better social and environmental risk management in project financing. Amalric (2005) indicated that social and environmental risk can affect financing in two ways. First, it may shorten the life expectancy of project financing since a project that faces local resistance may have to delay construction and normal operations; and, second, in project financing, banks have a high credit risk due to limited recourse to revenue other than that generated by the project, together with a lower collateral arrangement. For these reasons, in project financing, banks have to undertake costly and in-depth environmental and social risk assessment, but with the adoption of EPs, the social and environmental risk is delegated to a third party which is more efficient and at the same time shifts the cost of screening and managing social and environmental risks to the project sponsor/customer.

The adoption of the EPs also serves to counter the criticism of large development projects. In 1998, the World Bank and NGOs launched a multi-stakeholder initiative known as 'The World Commission on Dams'. In its final report, the World Commission on Dams (2000) did not dismiss the possibility that large dams can be beneficial for sustainable development, but defined stringent conditions under which this would be the case. It notably drew attention to the importance of public acceptance for key decisions, and the carrying out of a comprehensive assessment of other alternatives to the building of dams. Further, in 2000, the World Bank published the Extractive Industries Review (EIR) which insists on sustainable development. However well designed and implemented a project may be, it is unlikely that it

will make a positive contribution to sustainable development unless that review's conditions are in place.

Based on the above, it becomes clear that the purpose of the EPs is to provide banks with an entry into debates on the sustainable development effectiveness of large projects. Wright and Rwambizambuga (2006) also indicated that the adoption of the EPs acts as a signalling device for demonstrating positive credentials with the aim of strengthening corporate reputation and organisational legitimacy. There are many other reasons why banks have signed up to the EPs: protection of reputation, management commitment, preservation of the business from potential loss of retail customers, creation of a level playing field by adopting an industry standard for social and environmental assessment, creating a virtual circle in project financing activities, good corporate governance, and reducing political risk. The Freshfields Bruckhaus Deringer Report (2005), referred to ten reasons: reputation, business as usual, high level of commitment, stakeholder and NGO activism, market share, competition, industry standard, virtual circle, sustainable development, and financial risk rating.

Watchman et al. (2007) defined the EPs as a detailed set of enforceable legal forms which can be classified as a voluntary framework of ten broad principles applicable to project finance transactions. Scholtens and Dam (2007) also described the EPs as self-regulation in the form of a code of conduct. Richardson (2005) also viewed the EPs as a voluntary code of conduct adopted by commercial and investment banks for environmentally responsible project financing, and prescribing norms to regulate polluters' or resource users' behaviour in relation to their interaction with the environment. The EPs can also be considered a voluntary code developed by third parties which organisations are invited to implement. For

Richardson (2005), this voluntary approach is often described as corporate social responsibility (CSR) or business self-regulation.

Wright and Rwambizambuga (2006) referred to third party codes of conduct as codes of conduct developed by an external group and adopted by multiple firms. They can be categorised as ‘principle codes’ or those that are mainly aspirations and typically lack specific implementation provisions; ‘commitment codes’ or those that formulate aspirations and specify intended actions or behaviour; and ‘punitive codes’ or those that operate in a quasi legal fashion in corporate practices and specify intended actions and specific sanctions for non-compliance.

The contents and aims of codes of conduct vary greatly. Codes can be distinguished as performance based and process oriented or a combination of both. Performance based codes dictate a substantive goal for the improvement of participants’ environmental performance, such as the reduction of waste. Process oriented codes concern the procedures by which businesses manage their interactions with the environment without setting specific targets for environmental performance. They may include, for example, expectations for participants to publicly report on their environmental activities. Codes of conduct also differ based on their regulatory functions and policy scopes. Some perform several regulatory functions, such as rule making (e.g. target setting), administration (e.g. reporting and monitoring), and enforcement. Voluntary codes can be considered voluntary to the extent their adoption is not formally obliged by the authorities.

5.6.1.4 Advantages and Disadvantages of the EPs for Signatories and Affected Third Parties

Richardson (2005) categorised the advantages of voluntary codes of conduct based on three perspectives: (1) the regulatory perspective; (2) the government perspective; and (3) the industry perspective. Codes of conduct create incentives and procedures that induce entities to act in certain ways and to engage in internal reflection about what form that behaviour should take. They promote reflection and learning within subject organisations and thereby a positive cultural change in management and organisational business. Priest (1998) added that codes of voluntary conduct can be quickly and easily adjusted to meet changing circumstances, in contrast to the relatively slow and ponderous legislative process of government.

For governments, the EPs are useful for reducing regulatory loads as implementation and monitoring costs become more internalised in the participating business. Banks that initiate the EPs have a greater knowledge of management practices and innovative possibilities within their area than other parties, such as government and NGOs. Additionally, voluntary codes of conduct such as the EPs are cost saving because they are based on negotiation rather than litigation. Codes of conduct that come from industry may also lead to higher levels of compliance.

From the industry perspective, Richardson (2005) referred to three advantages. First, adoption of the EPs leads to access to technical assistance, financial aid, and professional certification. For example, Wright and Rwambizambuga (2006) showed that adoption of the EPs allows more checks in project assessment and also brings consistency and standardisation to bank procedures in project financing. Second, implementing the EPs will

reduce banks' exposure to costly environmental liabilities and lead to enhanced relationships with stakeholders. Third, adoption of the EPs' implementation allows banks to improve their profile among customers, financial sponsors, and various stakeholders; for example, Nedbank was the first African Bank to adopt the EPs on 10 Nov 2005 and because of this adoption Nedbank has become the partner bank of choice for other Equator Banks in African deals (Wright and Rwambizambuga, 2006).

Adoption of codes of conduct such as the EPs may be used to reduce public, governmental and NGOs' criticism of project financing. Their adoption of the EPs suggests banks have a strong commitment to avoiding social and environmental risk. However, Priest (1998) stated that industry members might seek self-regulation to avoid more stringent forms of direct regulation. They may use the self-regulatory structure to hide the reality of their lack of regulatory enthusiasm and protection of their own interests.

Codes of conduct such as the EPs may, nevertheless, create favouritism in the project financing industry. The main adopters of the EPs are major banks that have strong capital and resources. They are also from developed countries as confirmed by Priest (1998) that are dominated by longer or long-established firms. Such circumstances may have negative consequences for developing countries. For example, major banks in project financing may be unwilling to allow small banks from developing countries a greater role in the industry due to their non-adoption of the EPs. Thus, this code of voluntary conduct may act as an anti-competitive device by limiting entry.

Priest (1998) pointed out that self-regulation differs from government regulation. Government laws are subject to a number of accountability regimes, such as ministerial

responsibility, judicial review, oversight by an ombudsman, and the transparency of decision-making necessitates access to relevant information. In contrast, voluntary codes of conduct such as the EPs are carried out without those activities and there is reliance on industry members who have other business interests to monitor compliance with them. The disciplinary committees and those individuals who are responsible for setting the direction for organisations tend to be volunteer members from the same industry. There is no central arbitral body capable of investigating complaints or punishing offenders (banks which break the rules), in the form of fines.

Lawrence and Thomas (2004) and Hill (2007) indicated that transparency, accountability and the methods by which projects are implemented and monitored according to the EPs are criticised because signatories cannot be held accountable for failing to comply. There is nevertheless, a legal redress and dispute resolution mechanism for dissatisfied third parties. Lawrence and Thomas also argued that the environmental assessment addresses various environmental and social criteria, but is based only on members' satisfaction. As regards transparency, banks are obliged to refrain from disclosing information about clients and the fiscal details of the funded project. Such lack of transparency is still a major concern and signatories fail to publish reports as per NGOs' requirements.

Hill (2007) argued that there is no governance structure in place to monitor the compliance of Equator Banks. *BankTrack* in their report in 2006 stated that the EPs have failed to provide a definitive means for affirming that all endorsing banks meet and implement the same minimum standards described in the EPs' framework. Such framework also fails to address internal governance issues and improve coordination among institutions endorsing the EPs.

Howard et al. (2000) and King and Lenox (2000) found self-regulation subject to adverse selection. It attracts lower quality firms to participate. Lenox and Nash (2003) contended that self-regulation without a mechanism for measuring and enforcing compliance with programme objectives will attract poor performing firms to join in order to gain the signalling and insurance benefits of membership without putting forth the required effort. King and Lenox (2000) argued that industry self-regulation will fail without sanctions. Lenox and Nash (2003) also suggested that negligent members must willingly accept punishment since those in violations may simply leave the programme, and the only explicit sanction available is expulsion. Therefore, for self-regulatory codes of conduct such as the EPs to work effectively, structures must be established to monitor individual firm compliance with programme objectives and procedures put in place for the removal of negligent firms from the programme.

The EPs also lack mechanisms to ensure that endorsing banks properly integrate their requirements into their operational systems; incentives are lacking to adopt the principles, and there is no oversight or consistency in how policies and systems are implemented from bank to bank. Many banks and other observers have expressed their concern that the approach allows some banks to free-ride (Chan-Fishel, 2005).

Scholtens and Dam (2007) stated that the EPs might produce two types of free riding as indicated by Gurningham and Sinclair (1999). First, while all parties agree to the terms and conditions of the EPs, some parties do not comply with them whereas others maintain high standards. Firms that do not comply are able to reap the reputation benefits of being an adopter of the code and conduct without incurring the compliance cost. Second, free riding occurs when some firms in the industry refuse to adopt the self-regulation and this practice

may jeopardise the effectiveness of the initiative. Therefore, to overcome free riding problems, monitoring, transparency and formal control over actual performance of signatories to the EPs are required in order to increase the EPs' effectiveness, and enhance public acceptance.

The dominant approach of Western theory such as "One size fits all" , that a good manager in the UK will also be a good manager in other countries, and that effective UK management practices will be effective anywhere, appears to apply to social and environmental management such as the EPs. However, whether the Principles fit developing countries is questionable. Newman and Nollen (1996) demonstrated that financial performance is higher when management practices in the work unit are concurrent with national culture. Moreover, developing countries' characteristics differ from those of developed countries. Blackman (2008) gave several reasons for doubting that voluntary codes of conduct can be effective in developing countries: (1) because of weak regulatory pressure, voluntary regulatory instruments are unlikely to perform well in countries where mandatory regulation is weak; (2) because many of the non-regulatory factors which reputedly motivate firms to participate in and comply with voluntary regulation, such as customers' pressure and NGOs' pressure, are lacking; and (3) pressures are relatively anaemic in developing countries.

Given the above doubts that voluntary codes of conduct can be effective in developing countries, this study looked at an alternative perspective to deal with natural environmental management issues in the banking industry. It explored natural environmental management from the religious perspective since Islamic paradigms would appear to provide an internal control with which to deal with the internal environmental. At the same time, it attempted to answer the question: what are the differences between conventional banks' and Islamic

banks' approaches to environmental issues? The next section will focus on other laws for social and environmental protection.

5.6.2 Other Frameworks for Social and Environmental Protection

According to Hill (2007), the World Bank led the way for the incorporation of environmental and social policies into lending decisions in the late 1980s, when it reformed its lending policies and began focusing on increasing transparency and accountability. In 1997, the World Bank announced an innovative set of guidelines aimed at responsible lending and sensitivity towards environmental and social welfare. These guidelines required borrowers to attend consultations, conduct monitoring, and report on their progress in meeting these requirements. This development strengthened in 1998 when the IFC formally adopted these policies and, as a result, they became the foundation for the IFC's work in environmental and social areas and for the assessment of IFC compliance and accountability. The change in the attitude of the World Bank and IFC had a dramatic influence on private sector lending. The guidelines used by the IFC are used by Equator Banks in project financing implementation (Hill, 2007).

Government laws for social and environmental protection are provided by each country but such laws have different standards and variable implementation quality. For example, a developing country has less stringent implementation rates than a developed country. Blackman (2008) reported that policy makers in developing countries face an array of barriers to enforcing mandatory regulations, including weak institutions, incomplete legal foundations, and limited will.

Sinclair (1997) and Stoeckl (2004) argued that the attraction for self-regulation results from a 'natural tendency' amongst individuals and organisations to prefer to act on their own initiatives rather than be forced into a particular course of action. Also, firms facing a choice between self-regulation and government-imposed regulation may choose self-regulation because government regulations are more costly and inflexible (Lenox and Nash, 2003).

In Coulson's (2009) study of European banks, participants felt international standards were hard to enact in practice. In their view, different legislative environments obstructed consistent global standards and led to banks' global policies being implemented differently in each operating country. Banks were arguably being forced to act in unison to find solutions to the problem of environmental governance and defend their market practice.

5.6.3 United Nations' Environmental Programme

In 1992 at the Rio Earth Summit, some 30 banks worldwide signed a code of conduct called 'A Statement by Banks on Environmental and Sustainable Development'. The Statement was prepared at the instigation of the United Nations' Environment Programme (UNEP), and is a code of conduct containing principles that banks should follow if they are to take cognisance of environmental issues in the running of their business.

Presently, over 200 banks are signatories to the Statement, including banks from developed, transitional and third world economies. Richardson (2005) has described the UNEP as a catalyst for bringing environmental issues to the attention of the global financial market. According to Cowton and Thompson (2000, p. 168):

> *"The Statement publicly recognised that sustainable development must rank amongst the highest priorities of banks, that banks are an important contribution towards its achievement and therefore that the signatories will endeavour to*

ensure that their policies and business actions promote it. The Statement commits signatories to pursue common principles of environmental protection by using best practices of environmental management in their internal operations and integrating environmental risk into the normal checklist for risk assessment and management."

Carrier and West (2009) contend that the Summit gave rise to the idea of integrating conservation with development projects, and this involves bringing the surroundings and the development project harmoniously together. Since financial institutions finance projects, how this can be achieved without harming the environment is of primary importance.

5.7 Environmental Risk Assessment and Credit Evaluation

Banks (1997), Bessis (1998), and Greuning and Bratanovic (2000) state that banking business as per the normal course of business activity is exposed to various types of risk. These at any point in time may include credit risk, legal risk, operational risk, liquidity risk, and market risk. Thus, in order to succeed in a stiff competitive market, each bank must consider all dimensions of risk in its daily operation and business. Different departments within a bank are generally responsible for monitoring and managing a given set of risks. For example, the legal department is responsible for aspects of legal risk and the credit department is accountable for credit risk.

Duffie and Singleton (2003) described five types of risk as follows: (1) credit risk - the risk of changes in value associated with unexpected changes in credit quality; the risk that the borrower will fail to repay the interest or principal on a debt at the appointed time; (2) legal risk – the risk that changes in regulations, accounting standards, tax codes or the application of any these will result in unforeseen losses or lack of flexibility; (3) operational risk - the risk of fraud, system failures, trading errors, and other internal organisational risks; (4)

liquidity risk - the risk that the costs of adjusting financial positions will increase substantially or that a firm will lose access to financing; and (5) market risk - the risk of unexpected changes in prices or rates.

Since this study has focused on the credit evaluation process, credit risk will be discussed in this section. Donaldson (1989, p. 1) defined credit risk as follows:

> *"The risk of loss because of a borrower failing to meet its obligations. Failure may reflect financial problems and ultimately bankruptcy; or an unethical or near fraudulent refusal to meet obligations which are morally due, but not legally enforceable."*

Bessis (1998) stated that credit risk is also the risk of a decline in the credit standing of counterparty. It may not imply default, but means that the probability of default increases. Hence, credit risk for Bessis (1998) can be divided into three risks: (1) default risk; (2) exposure risk; and (3) recovery risk. Default risk is the probability of the event of default, for example, missing a payment obligation, breaking a covenant, and entering a legal procedure. Exposure risk is generated by the uncertainty prevailing over future amounts at risk, and recovery risk refers to uncertainties of recoveries in the event of default. Type of risk depends upon the type of default and numerous factors such as the third party guarantee and collateral offered by the borrowers.

Effective credit risk management is most important for the survival of banking businesses and is also the major single cause of bank failures (Greuning and Bratanovic, 2000). Because of the potentially dire effects of credit risk, it is very important that banks have a comprehensive credit evaluation process. Bessis (1998) described the credit evaluation process as covering

the decision-making process, before the decision is made, and the follow-up of credit commitments, plus all monitoring and reporting processes.

Basically, implementation of the credit evaluation process consists of customer management and product risk management (Banks, 1997). Customer management allows banks to evaluate individual customers while product risk management allows banks to quantify, and manage their credit exposure and potential credit losses. Successful implementation of the credit evaluation process is important to minimise overall credit losses. Accordingly, credit officers (bank personnel/credit specialists) play a vital role as their capability to accurately assess customers will assist banks in avoidingexposure to credit risk.

Bessis (1998), Greuning and Bratanovic (2000) and Saunders and Allen (2002) emphasised the importance of the expertise of banks' credit specialists, their subjective judgement, and weighting of certain key factors in the decision to grant credit. The key factors usually considered in the credit evaluation process are known as the five Cs (Saunders and Allen, 2002). The credit officer analyses these five key factors, subjectively weights them, and then reaches a credit decision. The five Cs are: (1) character; (2) capital; (3) capacity; (4) collateral; and (5) condition. Table 5.3 presents a brief explanation of each factor.

Table 5.3: Explanation of the five Cs

Factor	Explanation
Character	A measure of the reputation of the borrower, its willingness to repay, and its repayment history.
Capital	The equity contribution of owners and its ratio to debt.
Capacity	The ability to repay, which reflects the volatility of the borrower's earnings.
Collateral	In the event of default, a banker has claims on the collateral pledged by the borrower.
Condition	The state of the business cycle; an important element in determining credit risk exposure, especially for cycle dependent industries.

As in the credit evaluation process, bank lending principles remain centred upon financial risk management that may affect the present value of their loan portfolio (Thompson 1998). In this study, environmental risks were considered among the main factors for credit evaluation purposes along with the five Cs as the study aimed to investigate how bank managers ascertained and evaluated environmental risk in their project financing decisions. How cultural and organisational differences influenced the implementation of natural environmental management was also investigated.

Generally, many scholars have proposed that banks are confronted with three types of environmental risk: (1) direct risk; (2) indirect risk; and (3) reputational risk (Coulson and Dixon, 1995; Thompson, 1998; Cowton and Thompson, 2000; Thompson and Cowton, 2004). Thompson and Cowton (2004) state that a direct risk can occur when a bank takes possession of land as collateral. The value of the land can be significantly reduced if it is found to have been contaminated as a result of polluting activities and the bank may incur direct legal liability for cleaning up contamination that has been caused by an insolvent borrower.

Indirect environmental risk can lead to simple loan default and cause the bank to incur loss and reduction in revenue (Thompson and Cowton, 2004). Borrowers involved in this type of risk have to eliminate their products or incur legal penalties, or may experience reduced demand for their products. These factors in turn will reduce their revenue and increase the probability of loan default which will indirectly affect the lending bank's revenue. Coulson and Dixon (1995) state that in circumstances where both direct and indirect environmental risks arise, banks face the prospect of paying twice for the same liability of the borrower.

Finally, reputational risk refers to how bank involvement in credit financing can adversely affect its reputation (Thompson, 1998). Reputational risk arises due to a bank's indirect involvement in environmental degradation which will render the bank susceptible to public criticism, adverse customer reaction, negative media coverage, and pressure from NGOs. Given the aforementioned environmental risk factors, it was appropriate for this study to investigate the extent to which Malaysia's banks take natural environmental risk factors into account in the credit evaluation process. Thompson (1998) suggested that one way that banks can limit their exposure to environmental risks is through credit evaluation policy.

In this study, bank employees in the corporate banking department dealing with the project financing credit evaluation process were used as respondents since project financing activity is associated with large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, the environment and telecommunications infrastructure. The nature of project financing activity exposes banks to high and complex natural environmental risk for two reasons. First, most project financing is provided to industries typically associated with a high potential for adverse environmental impacts such as the extractive, oil, energy and transportation

industries. Second, as individual projects are often very large, they can have a substantial ecological footprint and thereby significantly impact on natural resources and the environment (Wright and Rwambizambuga, 2006).

5.8 Chapter Summary

This chapter has focused on several main issues in Islamic banking: (1) the characteristics and practices of Islamic banks; (2) the differences between Islamic and conventional banks; (3) the development of Islamic banks throughout the world; and (4) the development of Islamic banks in the Malaysian context. The chapter also discussed the advantages of Islamic banks compared to conventional banks. Actual implementation of CSR among Islamic banks was also discussed.

To understand natural environmental management in the banking sector, its development was discussed in this chapter. Such discussion showed that the banking industry has played a proactive role in environmental management by establishing the Equator Principles. These Principles are a voluntary code of conduct in project financing, whose adoption by banks shows they are favourably disposed to natural environmental management and sustainable development. Adoption of the EPs by the financial industry suggests its commitment to natural environmental management in project financing.

In the next chapter the research methodologies, including the research paradigm, research methods and data analysis, are described in detail. The advantages and disadvantages of each method chosen will also be discussed.

CHAPTER SIX

Research Framework and Methodology

6.1 Introduction

In the previous chapter, the research focused on the Malaysian financial system and cultural context within which this study was carried out. This chapter documents the various considerations relating to the methodology.

The chapter is divided into two main parts. The first part discusses the research paradigm, quantitative and qualitative methods, data collection method, and the questionnaire's design. The advantages and disadvantages of each method selected are presented. The second part of the chapter discusses the statistical methods used to analyse the data obtained in the study. The chapter concludes with a summary of the methodology employed.

6.2 Research Paradigm

This section discusses the research paradigm. Neuman (2000) indicates that the research paradigm is associated with different traditions in social theory and diverse research techniques. For Neuman (2000), a general paradigm can be defined as a whole system of thinking which includes basic assumptions, the important questions to be answered or puzzles to be solved, the research techniques to be used, and examples of what good scientific research looks like.

Lukka (2010) defined a paradigm as the set of practices that define a scientific discipline during a particular period. Paradigms are about several things, most notably, about what is to be studied, what kind of research questions are to be formulated in relation to the subject

under study, what methods should be used, and how the data obtained from them should be interpreted.

In research, paradigms are important as a set of assumptions, concepts, values, and practices that constitute ways of viewing reality. Paradigms provide focus, orchestrate effort, and help the researcher to accumulate knowledge about the issue of interest (Malmi, 2010). Paradigms also act as the basic belief system or worldview that guides the investigator, not only in choices of method but also in ontologically and epistemologically fundamental ways (Guba and Lincoln, 1994). Paradigm choice is by and large a reflection of how the researcher views the world (ontology) and believes that knowledge is created (epistemology).

McKerchar (2008) and Weber (2004) stated that there are, traditionally, two core research philosophical paradigms, referred to as positivism and interpretivism. These two paradigms are philosophically opposed, although it has been recognised since the 1970s that a continuum exists between them in which other paradigms can exist. Table 6.1 explains the differences between positivism and interpretivism.

Table 6.1 Broad Explanations of Positivism and Interpretivism

Metatheoretical Assumptions	Positivism	Interpretivism
Ontology	Person (researcher) and reality are separate. (Dualistic)	Person (researcher) and reality are inseparable (life-world).
Epistemology	Objective reality exists beyond the human mind.	Knowledge of the world is intentionally constituted through a person's lived experience
Research Object	Research object has inherent qualities that exist independently of the researcher.	Research object is interpreted in light of meaningful structure of a person's (researcher's) lived experience
Method	Statistics, content analysis	Hermeneutics, phenomenology
Theory of Truth	Correspondence theory of truth: one to one mapping between research statements and reality.	Truth as intentional fulfilment: interpretation of research object matches lived experience of object.
Validity	Certainty: Data truly measures reality	Defensible knowledge claims.
Reliability	Replicability: research results can be reproduced.	Interpretive awareness: researchers recognise and address implications of their subjectivity.

Source: Weber (2004).

Positivism is an epistemological position that advocates the application of natural sciences methods to the study of social reality and beyond. The paradigm is based on a number of principles, including the principle of phenomenalism, the principle of deductivism, the principle of objectivity, and the clear distinction between scientific statements and normative statements (Bryman and Bell, 2003). Krauss (2005) also added that for the positivist paradigm, the object of study is independent of the researcher; knowledge is discovered or verified through direct observations or measurement of a phenomenon. Facts are established through the meaning attached to the phenomenon studied and the research interest in the subject of study to obtain data.

Positivism predominates in science and assumes that science quantitatively measures independent facts about apprehensible reality. That is to say, the data and its analysis are value free and data do not change because they are being observed. Thus, researchers view a "one way mirror" (Healy and Perry, 2000). Positivists use a deductive mechanism to test the formulation of theory. The study findings are compared with prior findings to ascertain whether they fit or not existing knowledge. If not, theories must be revised to obtain a better result and conclusion.

Interpretivism is an alternative to the positivist orthodoxy that has been held for decades. It is predicated upon the view that strategy is required that respects the differences between people and objects, and therefore, the social scientist is required to group the subjective meaning of social action (Bryman and Bell 2003). For Schwandt (1994), the interpretive method steers the researcher into the general direction of where instances of a particular kind of inquiry can be found. It merely suggests a direction along which to look rather than provides a description of what to see.

Baker and Bettner (1997) defined the interpretive approach as an attempt to describe, understand and interpret the meanings that human actors apply to the symbols and the structure of the settings in which they find themselves. In their view, the methodological approach that addresses the positivist methodological perspective and emphases quantitative methods is incapable of addressing accounting's complex social ramification, since the assumption underlying interpretive research is that knowledge is gained or at least filtered through social construction such as language, consciousness, and shared meanings (Rowlands 2005). However, interpretive research enables researchers to examine the metaphorical

dimension of accounting and thereby gain an understanding denied by the more limited scope of the mainstream research perspective (positivism).

The research paradigm of this study was positivism. Neuman (2000) summed up positivism in social science as an organised method for combining deductive logic with precise empirical observations on individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity.

The ontological position of the present study was objectivism, that is to say, there was a separation between the researcher and the subject of the study. For this purpose, the researcher had to be capable of studying the subject without influencing it or being influenced by it (Guba and Lincoln, 1994). Bryman (2008) stated that social phenomena and their meanings have an existence that is independent of the social actors. This implies that social phenomena and the categories that we use in everyday discourses have an existence that is independent from the social actors. In this study, banks were viewed as organisations having a constraining force that acts on their employees. Banks develop natural environmental management policies in project financing and, at the same time, exert pressure on their employees (credit managers) to conform to their requirements. The degree to which this pressure exists differs from bank to bank, thus, we tended towards the view that an organisation has a reality that is external to the individuals who inhabit it (Bryman, 2008).

Bryman (2008) stated that the epistemological issue gives rise to not only the question of what is or should be regarded as acceptable knowledge in a discipline, but also the question of whether or not the natural science model of the research is suitable for the study. Positivism advocates the application of the methods of the natural sciences to the study of

social reality and beyond. The adoption of positivist inquiry led this researcher to use a quantitative research approach. This approach was chosen based on the purposes of the study, the nature of the study, and the concepts to be examined. Neuman (2000, p. 66) stated:

> *"Positivist researchers prefer precise quantitative data and often use experiment, surveys, and statistics. They seek rigorous, exact measures and objective research and they test hypotheses by carefully analysing numbers from measures."*

The next section discusses quantitative and qualitative methods. Justification for the selection of quantitative research in the study is presented.

6.3 Quantitative and Qualitative Methods

Bryman and Bell (2003) defined the qualitative method as a research strategy that usually emphasises words rather than quantification in the collection and analysis of data. Its research strategy is intuitivist, constructivist, and interpretivist. Creswell (2003) stated that the collection procedures in qualitative research involve four basic types: observations, interviews, documents, and audiovisual. Several authors, for example, Mason (1996), May (2001), Patton (2002), Creswell (2003), and Silverman (2005) have discussed the application of the various qualitative research methods.

Mason (1996) and Gephart (2004) stated that qualitative research looks for common elements, and is grounded in a broadly "interpretivist", "naturalist" approach that focuses, for example, on social meaning, interpretations, and practice. Secondly, qualitative research also generates flexible and sensitive data from the social context. It emphasises on the understanding of the social world through an examination of the interpretation of that world by participants (Bryman and Bell, 2003). Qualitative research also involves understanding

complexity, detail, and context. It aims to produce rounded understanding because of rich, contextual and detailed data.

Gephart (2004) indicated that qualitative research is important for many reasons. It provides an alternative that is difficult to achieve with quantitative research, and can provide a basis for understanding social processes that underlie management. Qualitative research can also provide memorable examples of important management issues and concepts that have enriched the field. Finally, qualitative research has the potential to harmonise research and theory by highlighting the human interactions and meanings that underlie relationships among variables.

In contrast, the quantitative research method is referred to as a research strategy that emphasises quantification in the collection and analysis of data, entails a deductive approach to the relationship between theory and research, incorporates the practices and norms of the natural scientific model (positivism), and embodies a view of social reality as an external objective reality (Bryman and Bell, 2003).

According to Bryman (2001), the main advantage of quantitative research is that the findings can be generalised beyond the confines of the particular context in which the research was conducted. Moreover, data collected from a large sample size is the best representative of the study population. The standardisation under which a survey is conducted in terms of how questionnaires are designed, administered and analysed, also permits replications in quantitative research (May, 2001). A replication of research that produces the same result with different groups at different times will increase confidence in the findings.

However, qualitative and quantitative approaches have their limitations. Bryman and Bell (2003) indicated that quantitative research fails to distinguish people and social institutions from 'the world of nature'. The measurement problems and the reliance on instruments and procedures hinder the connection between research and everyday life, and the relationships between variables create a static view of social life that is independent of people's lives. As for qualitative research, it is hard to associate this with generalisation because of the small numbers of respondents involved in the research. Qualitative research findings cannot therefore be generalised to the whole society. Bryman and Bell (2003) also referred to main disadvantages of qualitative research as being subjective, replication, and transparency problems.

6.4 Justification for the Selection of the Quantitative Method

As discussed in section 6.2, the adoption of positivist inquiry led the researcher to use a quantitative research approach. This approach was chosen based on the purposes of the study, the nature of the study, and the concepts to be examined. The aim of the study was to collect and assemble data on natural environmental risk management in the banking sector which could be generalised to explain human behaviour. May (2001) indicated that positivist research is able to generalise from observations on social phenomena and to make statements about the behaviour of the population as a whole. Using the quantitative method would also allow the study to explain natural environmental management in the banking sector in terms of cause and effect. The quantitative method was also more appropriate in this study for testing of hypotheses and generalisation.

In the study, the researcher had confidence in the capability of the quantitative approach to measure the relationships between independent variables and dependent variables. The

quantitative approach would also be a more appropriate and reliable way to understand the nature of relationships among variables as well as to provide a rich contextual basis for interpreting and validating the results. Bryman and Bell (2003) pointed out that as it is important to examine associations between variables, the quantitative approach provides a systematic and standardised method for gauging variation. This study's main focus was on the implementation of natural environmental management in Malaysia's banking sector. Using the quantitative method would enable the researcher to measure the reaction of a large sample of people to a limited set of questions. This process would further facilitate comparison and aggregation of the data (Patton, 2002).

The quantitative method would also facilitate generalisation of the study's findings. In addition, collecting a large amount of data from a survey questionnaire would provide wide coverage and also result in a comprehensive picture of environmental management in the Malaysian banking sector. Additionally, the standardisation under which the survey was conducted in terms of how the questionnaire was designed, administered and analysed, would permit replication in quantitative research (May, 2001). The quantitative method has been utilised by Scholtens and Dam (2007) to obtain secondary data; by Rikhardsson and Holm, (2008) in their experimental design study, by Epstein and Roy (2007) to obtain data from survey questionnaires, and by Weber et al. (2008) in a survey study. The adoption of a quantitative research approach in this study was consistent with the tradition developed by previous researchers and supported its selection as a research strategy to study environmental management.

6.5 Data Collection – Survey

6.5.1 Survey Research

Bryman and Bell (2003) indicated that survey research comprises a cross-sectional design in relation to which data are collected predominantly by questionnaire or by structured interview on more than one case (usually a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually more than two), which are then examined to detect patterns of association.

Surveys are one of the most frequent and popular methods employed in social research (Ghauri and Gronhaug, 2002). It is the best approach to collect data from large or even a very large number of people. May (2001) classified the survey method under four headings: factual, attitudinal, social psychological, and explanatory. The factual survey aims to gain information from individuals concerning their material situation rather than attitudes or opinions. An attitudinal survey is a survey used to gain data on attitudes, while a social psychological survey is used to measure the relationship between attitude and behaviour. An explanatory survey is specifically designed to test hypotheses that are derived from theories.

6.5.2 Advantages of the Survey Method

May (2001) state that application of the survey method allows the researcher to make generalising claims about the study population. It also provides a quantitative or numeric description of trend, attitudes, or opinions of a population by studying a sample of that population. From sample results, the researcher generalises or makes claims about the population (Creswell, 2003). Application of the survey method in this study would help to achieve an objective of the study, that is, to identify the level of natural environmental risk

management in the banking sector in Malaysia. Additionally, the survey method would increase the quantity of responses. A self-completion questionnaire would maximise the number of questionnaires returned and therefore a high response rate would be achieved. The questionnaire survey is also more flexible than other methods. Respondents have more time to thinks about their responses and to respond to questionnaire items.

Thomas (2004) indicated that there are various methods of delivering and administering the questionnaire survey: telephone interview survey, internet survey, face-to-face interview survey, and self-completion mailed survey. Thomas (2004) also pointed to the strengths and weaknesses of each method (see Table 6.2 below).

Table 6.2: Strengths and Weaknesses of Different Survey Methods

	Interview	Mail	Telephone	Internet
Response rate	High	Medium/Low	High	Medium/Low
Response quality	High	Medium	High	Medium/High
Sample size	Small	Large	Medium	Medium High
Dispersed groups	Poor	Good	Good	Good
Unit cost	High	Low	Medium	Medium/high

Source: Thomas (2004)

This study involved bank managers that dealt directly with project financing activities in financial institutions (usually under the corporate banking department). For that reason, questionnaires were distributed through human resource departments to ensure they were only distributed to bank staff involved in project financing. This was one of the most practical ways of reaching inaccessible groups or geographically dispersed managers (Thomas, 2004). Application of the survey method would also allow a large sample to respond in this study and this would increase the representativeness of the sample to the study population and quality of response (Creswell, 2003; Thomas, 2004).

Data collection through a questionnaire survey is also cost effective. It does not require travelling to a site as compared to interviews. The cost entailed is only for the cost of duplicating, mailing, and providing stamped self-addressed envelopes for return. It is also less time consuming than the interview approach. Moreover, the questionnaire survey can be administered in a relatively short time. Given that time and cost were main constraints in this research, the questionnaire survey was the most appropriate data collection method.

As well as the advantages of selecting the questionnaire survey method for this study, the researcher always bore in mind the weaknesses of this method, for example, low response rate, greater risk of missing data, the researcher's inability to prompt and probe questions, and that respondent are non-identifiable. Respondents also have no reference when they get confused or do not understand questions in the questionnaire. Because of this, questions may be misunderstood and respondents may produce inaccurate or falsified answers (Bryman and Bell, 2003). Thomas (2004) also pointed out that those who answered the questionnaire cannot be identified nor their personal circumstances when they did so. Besides the aforementioned, Thomas (2004) stated that obtaining representative samples is the greatest challenge in the questionnaire survey method. Surveys typically rely on samples of the population as sources of data. To the extent that researchers wish to generalise from survey results, the degree to which their samples are representatives of the population from which they are drawn is crucial.

In the present study, in order to increase participation rate, a personalised covering letter was attached to the questionnaire survey. A copy of this covering letter is reproduced in Appendix 3. This highlighted the importance of the study as well as the benefits of participating in the survey. Respondents were also assured anonymity and confidentiality to

increase their confidence in participating in the study. Additionally, the researcher attached a letter of support from the researcher's supervisor at Cardiff University and a letter of recommendation from the Dean of the Universiti Sains Islam Malaysia, the researcher's sponsor. The covering letter, support letter, and recommendation letter were all attached to the mailed questionnaire to further stimulate response. An offer of a summary of the survey results was also included as an incentive for participation. Thomas (2004) has stated that this incentive is one of the most effective ways to increase participation rate in a questionnaire survey.

Questionnaires were sent to respondents according to the department and name advised by a bank's management. This also ensured that respondents were actually involved in the project financing business. As the questionnaire was concerned about credit management and focused on credit managers' daily routine and responsibility, it was hoped this would further increase their interest in participating in this survey as the survey was related to their work and experience. A questionnaire distributed through management showed their support for this study and also increased the participation rate. Finally, a pre-stamped self-addressed envelope was provided with each questionnaire to facilitate its return.

After taking into consideration the strengths and weaknesses of different survey methods, this study adopted the self-administered questionnaire approach using a mail survey for the following reasons. First, the mail survey has been employed extensively in studies on environmental management and banking-related issues; second, the method would enable the researcher to reach a large number of respondents who could answer the survey at a time most convenient to them; and third, the mail survey approach would overcome the time and financial constraints of the researcher.

6.6 Sampling Process

6.6.1 Research Population

Banking institutions were identified as providing primary target respondents, i.e. senior managers, managers and executives. Tables 2A, 2B and 2C in Appendix 2 show there are 55 banking institutions in Malaysia, which include 23 Commercial banks, 17 Islamic banks, and 15 Investment banks. Of these 55 banking institutions, 36 gave permission for their staff to participate in the survey. Their profiles are shown in chapter seven, section 7.2.

6.6.2 Sampling Frame

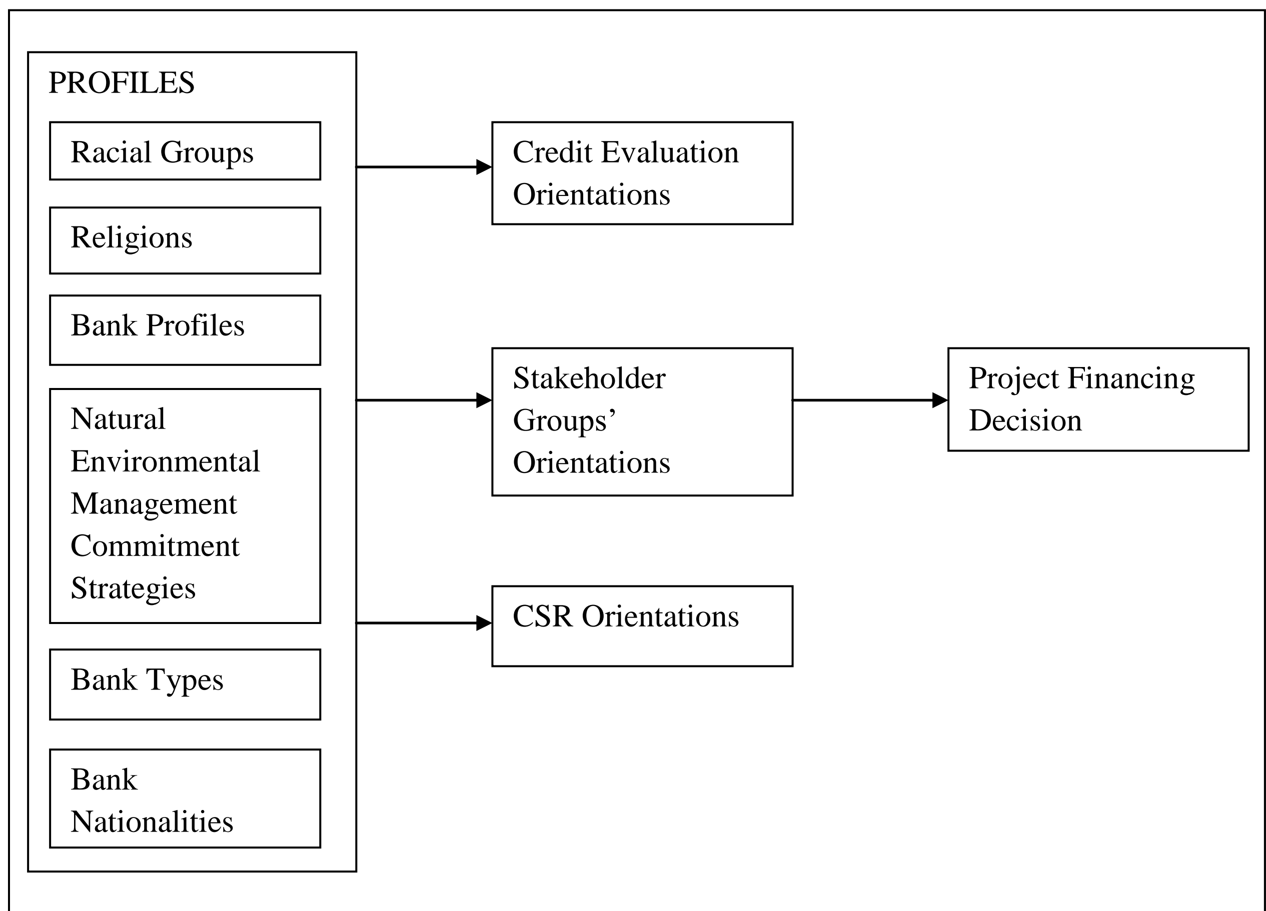
In this study, the ideal sampling frame would have been a list of all bank employees directly involved in project financing assessment in their daily operations. The availability of such a list would have enabled the researcher to sample the population using random sampling to avoid bias. However, it was impossible to obtain such a list as banks were reluctant to allow the researcher access to information about their staff due to strict internal policy. All banks in Malaysia are bound by a duty of secrecy as prescribed in the Banking and Financial Act (BAFIA) 1989, and the Official Secrets Act (OSA) 1972.

To overcome this problem, the researcher approached human resource departments and corporate communication departments to find out how many staff in the corporate banking department were usually involved in project financing activities. Based on the information given by human resource departments and corporate communication departments, the study's total population was 1,080 relevant bank staff, comprising managers, senior managers, executives and chief executive officers. Therefore, 1080 questionnaires were distributed to the respective staff at the 36 participant banks.

6.7 Conceptual Framework of the Study

The study focused on current natural environmental risk management practices in the banking sector, particularly project financing activities. Three main factors that might influence project financing decision were considered as main variables: (1) credit evaluation orientations; (2) stakeholder groups' orientations; and (3) CSR orientations. At the same time, the study endeavoured to investigate how the different profiles of banks' managers influenced their perceptions of credit evaluation orientations, stakeholder groups' orientations, and CSR orientations, and their project financing decisions. Accordingly, the following sub-sections discuss the major variables included in this study. Figure 6.1 shows the major variables investigated and examined in the study.

Figure 6.1: Conceptual Framework of the Study



6.7.1 Profiles

Six profile variables were examined to investigate how they influenced respondents' perceptions of and attitude towards credit evaluation orientations, stakeholder groups' orientations, and CSR orientations. Racial groups was the first profile variable to be investigated. It was divided into Malay, Chinese and Indian. The study aimed to investigate whether differences in racial groups influenced bank managers' perceptions of and attitudes towards project financing evaluation.

Second, the study considered the religious affiliations of banks' managers and its influence on their perceptions of credit evaluation orientations, stakeholder groups' orientations, and CSR orientations. Major religions in Malaysia are Islam, Christianity, Buddhism and Hinduism. The study aimed to investigate whether religious affiliations influenced bank managers' project financing decision.

Third, the study considered the influence of bank categories on managers' perceptions of and attitudes towards credit evaluation orientations, stakeholder groups' orientations, and CSR orientations. Banks were divided into seven categories: (1) local conventional bank; (2) fully-fledged Islamic bank; (3) Islamic bank subsidiary of local conventional bank; (4) Islamic bank subsidiary of foreign conventional bank; (5) foreign Islamic bank; (6) foreign conventional bank; and (7) Investment bank. This is due to the uniqueness of Malaysia's banking sector that allows conventional banks and foreign conventional banks to have fully-fledged Islamic banks as subsidiaries. Dividing banks into these seven categories allowed the researcher to investigate the performance of a conventional bank and its Islamic bank subsidiary separately.

Fourth, the study considered the environmental management commitment strategies of banks in order to investigate natural environmental management in the banking sector. Through cluster analysis, environmental management commitment strategies were divided into: (1) reactive; (2) defensive; (3) pro-active. It was important to identify how current natural environmental management was influenced by differences in perceptions of and attitudes towards credit evaluation orientations, stakeholder groups' orientations, and CSR orientations.

The study then investigated differences in bank types by classifying all banks into one of two main groups: (1) conventional banks and (2) Islamic banks, in order to obtain an overall view of both bank types' presence in the banking sector. Both bank profiles and bank types represented differences in organisations that may have influenced managers' perceptions of and attitude towards natural environmental management in project financing.

The last profile variable was bank nationalities which were divided into two main categories: (1) local bank and (2) foreign bank. This profile variable was used to identify how differences in economic development may have influenced natural environmental risk management in credit financing, since most foreign banks are from the USA and UK which are developed nations.

6.7.2 Credit Evaluation Orientations

Credit evaluation orientations referred to how bank managers viewed the importance of various types of risk in project financing. Variables included in credit evaluation orientations were conventional risks, such as financial risk, customer risk, management risk, and collateral risk. The study also endeavoured to investigate the natural environmental risk in banks'

managers' evaluation, whether environmental issues were among the factors that were considered in credit evaluation, and how such factors differed according to racial groups, religions, bank profiles, environmental management commitment strategies, bank types and bank nationalities. For this purpose, the following hypotheses were proposed:

> *There are significant differences in credit evaluation orientations among managers affiliated to H1 (a): racial groups, H1 (b): religions, H1 (c): bank profiles, H1 (d): environmental management commitment strategies, H1 (e): bank types and H1 (f): bank nationalities*

6.7.3 Stakeholder Groups' Orientations

Stakeholder groups' orientations were used to study how bank managers' views on different stakeholder groups influenced their project financing credit evaluation. Ten variables groups were used for the investigation: (1) government; (2) customers; (3) employees; (4) global community; (5) local community; (6) environmentalist group; (7) mass media; (8) Investors; (9) natural environment; and (10) environmental policies of other banks. For stakeholder orientations the following hypotheses were proposed:

> *There are significant differences in perceptions of stakeholder groups' orientations among managers affiliated to H2 (a): racial groups, H2 (b): religions, H2 (c): bank profiles, H2 (d): environmental management commitment strategies, H2 (e): bank types and H2 (f): bank nationalities*

6.7.4 CSR Orientations

CSR orientations in this study were based on Carroll's (1979; 1991) pyramidal division into four main categories: (1) economic responsibility; (2) legal responsibility; (3) ethical

responsibility; and (4) philanthropic responsibility. The study sought to investigate whether economic responsibility was placed higher than the other three categories as in Carroll's CSR pyramid and how CSR orientations influenced project financing decision. Accordingly, the following hypotheses were proposed:

> *There are significant differences in CSR orientations among managers affiliated to H3 (a): racial groups, H3 (b): religions, H3 (c): bank profiles, H3 (d): environmental management commitment strategies, H3 (e): bank types and H3 (f): bank nationalities*

6.7.5 Project Financing Decision

In order to investigate project financing decision-making, the study developed six project financing scenarios in order to examine how differences in respondents' profiles, credit evaluation orientations, stakeholder groups' orientations, and CSR orientations influenced their decision whether to approve or reject project financing based on the scenarios given (see Appendix 4, Part B Section C). Hence the following hypotheses were proposed:

H4: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario one.

H5: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario two.

H6: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario three.

H7: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario four.

H8: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario five.

H9: Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario six

6.8 Questionnaire Design

According to Ghauri and Gronhaug (2002), the appearance, layout, length and even the colour of the paper used have an influence on whether questionnaires will be properly responded to or not. The guidelines in developing a good questionnaire have been discussed by various scholars. For example, Ghauri and Gronhaug (2002) proposed twelve guidelines for constructing a good questionnaire. Bryman and Bell (2003) suggested eleven specific rules when designing questions, a very important step in survey research, especially where the postal survey is concerned. Thomas (2004) stated that good questionnaire design and layout are important, as these will have an important impact on response rates. Thus, questionnaires should be visually attractive, look short, look interesting, be easy to complete, and be easy to return. The development of the questionnaire design in this study therefore considered the above factors in order to ensure rich and relevant data could be elicited from the questionnaire.

In this study, only one set of questionnaires was distributed to respondents since only a bank's managers/executives are directly involved in project financing credit evaluation. The questionnaire distributed to banks was so designed as to address the practical aspects of credit evaluation criteria and environmental management awareness. A copy of the questionnaire is provided in Appendix 4.

6.8.1 Questionnaire Content

Part A: Personal information and bank information. This part elicited information about respondents' personal background, such as gender, age, race, religion and position. Questions about their employer bank's characteristics were also asked, such as bank types and total assets. The main objective of this section was to obtain a profile of respondents and the bank where they were working. This section was also important because the data and information provided in this section would be used for data analysis purposes.

Part B: Environmental commitment and awareness. Part B aimed to elicit respondents' general awareness and implementation of environmental management in their employing institutions. This part was divided into three sections; A, B, and C. Section A asked about respondents' employer bank's environmental commitment and how environmental management was implemented in their project financing evaluation. Section B asked about factors that influenced respondents' credit appraisal. This part sought to differentiate between environmental risk factors and conventional risk factors in credit evaluation. The last section, section C, sought to elicit respondents' general attitude towards project financing. In this part, a simple financing phenomenon and conflict in project financing evaluation were presented to respondents to evaluate.

Part C: Stakeholder issues in environmental risk management. This part was important in the study's analysis as the study sought to investigate the relationship between stakeholder groups' orientations, credit evaluation orientations, and CSR orientations. This part comprised two main sections: section A and section B. Section A focused on stakeholder groups and their impact on environmental risk management in project financing. Section B

focused on corporate social responsibility orientations discussed by Carroll (1979 and1991). The questions were based on Magnain and Ferrel (2000 and 2001).

6.8.2 Pilot Testing

According to Bryman and Bell (2003), the objective of conducting a pilot study is not solely to ensure that survey questions operate well, but to ensure that the research instrument as a whole functions well. A pilot study is more crucial for self-completion questionnaires as there is no interviewer present to clear up any confusion. A pilot study enables the researcher to identify and detect any weaknesses of the questionnaire before conducting the actual study. Thus, piloting aims to see if the questionnaire works and whether changes need to be made (May, 2001). Commenting on pilot testing, Thomas (2004, p. 121) stated:

> *"A trial run with the survey questionnaire is essential before launching the main study, using a small sample of the population. Ten to twenty cases is likely to be sufficient, but even the feedback one person can provide is extremely valuable in revealing flaws in the questionnaire."*

In accordance with the aforementioned suggestions and issues, the questionnaire went through a number of development stages before being finally distributed. Pilot testing of the questionnaire was carried out in December 2009. Twenty (20) questionnaires were circulated to lecturers at the Faculty of Economics and Commerce, University Sains Islam Malaysia, and twenty (20) were circulated among ten bank managers employed by an Islamic bank and ten employed by a conventional bank through the researcher's personal contacts.

Based on feedback, several modifications were made to the wording and scaling of certain questions, the questionnaire was shortened, complex questions were deleted, and sensitive questions were reworded. The final version of the questionnaire based on inputs gathered during the pilot study is to be found in Appendix 4.

6.8.3 Administration of the Questionnaire Survey

Contacts were made with the human resources departments of the 36 banks that had agreed to participate in the study. To increase the response rate, three covering letters accompanied each questionnaire. One was from the researcher explaining the nature and importance of the study and requesting the questionnaire be completed; second was a support letter from Cardiff University, and another from University Sains Islam Malaysia requesting respondents' cooperation.

To increase respondents' willingness to participate in this survey, attached to each questionnaire was a form that stated that any information in a respondent's reply would be treated with the strictest confidence. Respondents were also offered a copy of the results to show their participation in the survey was appreciated.

The researcher allowed two weeks for target respondents to reply to the questionnaire. He then went to each human resource department by prior arrangement to collect completed questionnaires. Those target respondents who had not replied were sent a reminder via the human resource department and given a further two weeks in which to reply to the questionnaire survey. Ultimately, of the 1080 questionnaires distributed, 225 were returned as usable for research purposes, a response rate of 21%. This response rate is acceptable in Malaysian studies: for example, Ramasamy and Ting (2004) reported a response rate of 31%, and Ahmad and Rahim (2005) and Dusuki (2008) reported a response rate of 11.6% and 48.5% respectively. In a review of Malaysian studies in CSR, Dusuki (2008) reported response rates ranging between 20% and 30%.

6.9 Data Analysis Methods

6.9.1 Univariate Analysis

The term univariate analysis refers to the various ways of analysing and presenting information relating to a single variable (Bryman and Cramer, 2005; Tabachnick and Fidell, 2007). Bryman and Cramer (2005) stated that univariate analysis is useful when researchers are confronted with a bulk of data and faced with the task of summarising the information that has been amassed. Moreover, univariate analysis is useful to detect a pattern in a variable and to present collected data to an audience

In this study, univariate descriptive statistics were used to: (a) provide a preliminary analysis of data transcription errors and distribution patterns (e.g: normality of the data); (b) to provide a profile analysis of the samples in the survey; and (c) to provide a descriptive analysis of response.

6.9.2 Bivariate Analysis

According to Tabachnick and Fidell (2007), bivariate analysis assesses the degree of relationship between two variables. In this study, bivariate analysis was used to make a comparison between groups such as gender, religion, and type of organisation. The main bivariate analysis carried out in this study was Analysis of Variance (ANOVA). Issues and applications of ANOVA are briefly discussed in the following section.

6.9.3 ANOVA

ANOVA is used to compare two or more means to see if there are any statistical significant differences among them (Tabachnick and Fidel, 2007). Pallant (2007) described Analysis of

Variance as an extension of the t-test that compares the score of two dependent groups or conditions only. Analysis of Variance compares variance variability in scores between different groups with the variability within each of the groups. In this study, one way ANOVA was applied to test the hypotheses concerning differences in environmental management among respondents affiliated to different religions, racial groups, and bank types.

Differences between variances are evaluated as ratios, where the variance associated with differences is the numerator and the variance associated with error is the denominator. The ratios between these two variances form the F distribution, a key characteristic in ANOVA analysis (Tabachnick and Fidell, 2007). A large F ratio indicates there is more variability between the groups than there is within each group.

In interpreting ANOVA analysis, it is important to ensure that the homogeneity assumption has not been violated (Coakes and Steed, 2003). For this study, Levene's test for homogeneity of variance was used to test whether the variance in scores was the same for each group. In SPSS analysis, if the number is greater than ($p > 0.05$), the assumption of homogeneity of variance is not violated. If the significant value is less than ($p < 0.05$), this means that the variances for the groups are not equal (i.e., the equal variance assumption is untenable), and comparisons between groups will be made based on Brown – Forsythe's F ratio which does not assume equal variance.

In ANOVA analysis, Pallant (2007) stated that a significant F-test indicates that we can reject the null hypothesis, which indicates that the population means are equal. However, he does not tell us which of the population groups significantly differs from the other groups. As an

alternative, a post-hoc test was conducted to identify the differences between groups. As per Pallant (2007), post-hoc tests were useful in this analysis as the tests were designed to help protect against the likelihood of a type 1 error. Additionally, this study wished to make a comparison involving a specific group.

6.9.4 Factor Analysis

Tabachnick and Fidell (2007) defined factor analysis as a statistical technique applied to a single set of variables in order to discover which variables in the set form coherent subsets that are relatively independent of one another. Variables that are correlated with one another but largely independent of other subsets of variables are combined into factors. Factors are thought to reflect underlying processes that create the correlations among variables.

Factor analysis was deemed appropriate for this study because one of the objectives of factor analysis is to reduce a large number of observed variables to a smaller number of factors. Factor analysis was used to reduce or summarise data relating to credit evaluation orientations and stakeholder groups' orientations. Factor analysis was also used to validate respondents' ability to distinguish between two variables.

Before conducting factor analysis in this study, a number of requirements had to be met. According to Pallant (2007), there are three main steps involved in conducting factor analysis: (i) assessment of the suitability of the data; (ii) factor extraction; and (iii) factor rotation and interpretation.

For assessment of the suitability of the data, there are two main issues to consider in determining whether a particular data set is suitable for factor analysis: sample size and the

strength of the inter-correlation among the variables. For sample size, Tabachnick and Fidell (2007) viewed a sample size of 50 as very poor, 100 as poor, 200 as fair, 300 as good, 500 as very good, and 1000 as excellent. However, Pallant (2007) also pointed out that some authors not only emphasise sample size but also ratio of cases to items. Indeed, Tabachnick and Fidell (2007) suggest that five cases for each item are adequate. For this study, we had 225 cases, and our ratio of cases to items was more than five.

For the factorability of data, the Kaiser – Meyer – Oikin (KMO) value and Bartlett's Test of Sphericity are used. The Kaiser – Meyer – Oikin (KMO) value indicates the sampling adequacy and the Bartlett's Test of Sphericity tests for the presence of correlations among the variables (Hair et al., 1998). The value of the Kaiser – Meyer – Oikin (KMO) test, as discussed by Hair et al. (1998), ranges from 0 to 1 and is interpreted with the following guidelines: 0.80 or above, meritorious; 0.70 or above, middling; 0.60 or above, mediocre; 0.50 or above, miserable, and below 0.50 unacceptable. Thus, for this study, a KMO value of 0.60 or above was used as the minimum value for factor analysis as suggested by Tabachnick and Fidell (2007) and Pallant (2007). Additionally, in order to proceed with factor analysis, Bartlett's Test of Sphericity should be significant (that is, $p < 0.05$).

For the second step, factor extraction, Pallant (2007) indicated that a variety of approaches can be used to identify (extract) the number of underlying factors or dimensions. Among these are principal component, principal factor, image factoring, maximum likelihood factoring, alpha factoring, unweighted least square, and generalised least square. For this study, Principal Component Analysis was used. The objective of Principal Component Analysis is to extract maximum variance from the data set with each component (Tabachnick and Fidell, 2007). The application of Principal Component Analysis in this study was

important as the data generated from this analysis would be used in other analysis (e.g MANOVA). Its application would also facilitate interpretation of the results. Additionally, Principal Component Analysis is the best solution for a study that is primarily interested in reducing a large number of variables down to a smaller number of components (Tabachnick and Fidell, 2007).

To determine the number of factors to retain, Kaiser's criterion and Cattell's scree test were used to assist in the decision. According to Pallant (2007), only factors with an Eigenvalue of 1.0 or more should be retained for further investigation. Cattell's scree test involves plotting each of the Eigenvalues of the factors and inspecting the plot to find a point at which the shape of the curve changes direction and becomes horizontal.

6.9.5 Multivariate Analysis of Variance (MANOVA)

Multivariate Analysis of Variance (MANOVA) is the multivariate extension of the univariate technique for assessing the differences between group means (Hair et al., 1998). Pallant (2007) stated that Multivariate Analysis of Variance (MANOVA) is useful when there is more than one dependent variable. In this case, MANOVA compares the groups and identifies the mean differences between the groups. MANOVA has the power to detect whether the groups differ along a combination of factors (Tabachnick and Fidell, 2007).

Tabachnick and Fidell (2007) indicated that there are number of advantages of MANOVA over univariate analysis of variance (ANOVA). First, by measuring several dependent variables, MANOVA improves the chance of discovering what it is that changes as a result of different treatments and their interactions. Second, the advantage of using MANOVA is that

it ‘controls’ or ‘adjusts’ for the increased risk of type 1 error. Third, the use of MANOVA may reveal some differences that cannot be identified in separate ANOVA.

For the MANOVA analysis to produce a meaningful result, there are a number of assumptions associated with MANOVA. The first assumption relates to multivariate normality. According to Tabachnick and Fidell (2007), multivariate normality implies that the sampling distributions of the means of the various dependent variables are all linear.

The second assumption relates to sample size. As a general guideline, as stated by Tabachnick and Fidell (2007), Pallant (2007) and Hair et al., (1998), a sample size of about 20 in the smallest sample cell should ensure robustness. However, for research that has a constraint on data collection such as the survey, many authors agree that, at the minimum, the sample in each cell must be greater than the number of dependent variables included (Hair et al. 1998; Coakes and Steed, 2003; Pallant, 2007; Tabachnick and Fidell, 2007).

The third assumption relates to the homogeneity of the variance – covariance matrices of the dependent variables across the group. Hair et al. (1998) stated that the requirement of homogeneity is a strict test because instead of equal variances for a single variable in ANOVA, the MANOVA test examines all elements of the covariance matrix of the dependent variables. Box’s M Test of Equality of Covariance Matrices was used to assess this assumption. Pallant (2007) stated that if the significant value is larger than 0.001, the data have not violated the assumption. This significant value is important to measure the robustness of MANOVA, especially if the sample sizes are unequal (Tabachnick and Fidell, 2007). If an unequal sample size records a significant Box’s M test at $p < 0.001$, the following is suggested:

1. Look at the size of variance and co-variance for all variables

2. If variables with larger samples produce larger variances and covariances, the differences should be assessed using a lower value of significant level (e.g. use 0.03 instead of 0.05).
3. If larger variance is found in the smaller group sizes, then reverse the above. Increase the significant level.

Tabachnick and Fidell (2007) also suggested using Pillai's Trace criterion instead of Wilks' Lambda to evaluate multivariate significant.

6.9.5.1 Criteria for Significant Testing

There are a number of statistics to choose from in order to identify whether there are statistically significant differences among groups on a linear combination of the dependent variables. The four most popular are: Roy's Largest Root; Wilks' Lambda (also known as the U statistic); Hotelling's Trace; and Pillai's Trace (Hair et al. 1998). Tabachnick and Fidell (2007) and Pallant (2007) recommend Wilks' Lambda for general use; however, for problem data such as small sample size, unequal N values, violation of assumption, Pillai's Trace is more robust. Thus, in this study, Pillai's Trace and Wilks' Lambda were used as criteria for significant testing.

6.9.5.2 Follow up Analysis

When MANOVA turns out to be significant, it is necessary to examine at univariate level which dependent variables are responsible for statistically significant MANOVA results. For this purpose, univariate ANOVA is conducted. The procedures and statistical issues related to ANOVA have been presented in section 6.9.3

6.9.6 Cluster Analysis

According to Everitt (1993), cluster analysis refers to a technique that seeks to separate a set of data into its constituent groups or clusters. Cluster analysis allows the researcher to categorise a large number of cases into a smaller subset of clusters. In this study, cluster analysis was used to group together respondents' different types of natural environment management commitment strategies. In cluster analysis, respondents were divided into several categories that were useful in further analysis (MANOVA) in this study.

Hair et al. (1998) stated that cluster analysis is an objective methodology for quantifying the structural characteristics of a set of observations. It has a strong mathematical format instead of statistical techniques. Therefore, in cluster analysis, the requirements of normality, linearity and homocedasticity are paid less attention to than in other statistical methods.

Hair et al. (1998) referred to two assumptions that need to be considered in cluster analysis. First, representativeness of the sample used. In this case, the researcher must ensure that the sample used in the study is truly representative of the population under study. Second is multicolinearity. In cluster analysis, those variables that are multicolinear are implicitly weighted more heavily. For this reason in this study, the variables used in cluster analysis were thoroughly examined before proceeding with cluster analysis.

The main basic step in cluster analysis deals with partitioning the data set to form clusters. Hair et al. (1998) indicated that the most commonly used clustering processes can be categorised as: (1) hierarchical; and (2) non-hierarchical. The hierarchical procedure involves the construction of a hierarchy of treelike structures. On the other hand, the non-

hierarchical procedure assigns objects to clusters once the number of clusters to be formed has been specified (Hair et al. 1998).

In this study, hierarchical cluster and the agglomeration of Ward's method were chosen for cluster analysis. These analysis methods have been selected for use in previous research by (Henriques and Sadorsky, 1999; Buysse and Verbeke, 2003; Menguc and Ozzane, 2005). Hierarchical clustering also allows the researcher to produce a variety of clustering solutions (Coakes and Steed, 2003).

6.9.7 Ordinal Regression Analysis

Ordinal regression is a statistical method that allows the researcher to build models, generate predictions, and evaluate the importance of various predictor variables in the case where the dependent or target variable is ordinal in nature. Ordinal regression allows the researcher to model the dependence of a polytomous ordinal response on a set of predictors, which can be factors or covariates (SPSS, 2007).

In this study, ordinal regression was used to predict respondents' responses to six project financing problems. Respondents' response options for each project financing problem were: reject, marginally reject, do not know, marginally approve and approve. The study endeavoured to investigate how respondents' responses to the six project financing problems were influenced by racial groups, religions, bank types, bank nationalities, banks' natural environmental management commitment strategies, credit evaluation orientations, stakeholder groups' orientations, and CSR orientations (SPSS, 2007).

There are three major components in an ordinal regression model:

1. Location component

The portion of the equation which includes the coefficients and predictor variables is called the location component of the model. It is used to calculate the predicted probabilities of membership in the categories for each case.

2. Scale component

   It is an optional modification to the basic model to account for differences in variability for different values of the predictor variables.

3. Link function

   The link function is a transformation of the cumulative probabilities that allows estimation of the model. Five link functions are available, summarised in Table 6.3 below.

Table 6.3: Five Link Functions and Typical Application

Function	Typical application
Logit	Evenly distributed categories
Complementary log-log	Higher categories more probable
Negative log-log	Lower categories more probable
Probit	Latent variable is normally distributed
Cauchit (inverse Cauchy)	Latent variable has many extreme value

In this study, six project financing scenarios were used as dependent variables, racial groups, religions, bank types, bank nationalities and banks' natural environmental commitment strategies were used as factor variables; and credit evaluation orientations, stakeholder groups' orientations, and CSR orientations were covariates in the analysis. The objective of the analysis was to determine the best predictor variables for each project financing problem.

Ordinal regression analysis was used in this study for the following reasons. First, it is because of the scaling used in the questionnaire. There were five ordinal scales used in this study for respondents to decide whether to approve or reject the project financing scenario

given. Second, there were no theoretical or priori assumptions regarding the importance of each independent variable. Conducting ordinal regression would allow the researcher to examine the contribution of each independent variable in order to find the best regression model. Last, conducting ordinal regression would allow the researcher to identify the direction and magnitude of the linear relationship between independent variables and the independent variables.

In ordinal regression, several tests need to be considered for model evaluation as follows (SPSS, 2007):

a. Test of Parallel Lines

   The test of parallel lines is used to assess whether the assumption that the parameters are the same for all categories is reasonable. The test compares the estimated model with one set of coefficients for all categories to a model with a separate set of coefficients for each category. The parallel lines test is non-significant in a well fitting model or where a probability value is more than 0.05 ($p > 0.05$).

b. Model Fitting Information

   The Model Fitting test gives the overall test of the model based on the difference between the researcher's specified model and the null (intercept-only) model. A well fitting model is significant by this test or where a probability value is less than 0.05 ($p<0.05$).

c. Goodness of Fit

   These statistics are intended to test whether the observed data are inconsistent with the fitted model. If the significant value is large ($p > 0.05$), it can be concluded that the data and the model predictions are similar and we have a good model.

d. Pseudo R-Squared (R^2)

Pseudo R^2 methods are used to estimate the coefficient of determination. There are three types of pseudo R^2 known as: (1) Cox and Snell, (2) Nagelkerke; and (3) McFadden. The model with the largest R^2 statistics is best according to this measure.

e. Parameter Estimates

The parameter estimates summarise the effect of each predictor. The signs of the coefficients for covariates and relative values of the coefficients for factor levels can give important insights into the effects of the predictors of the model. For covariates, positive and negative coefficients indicate a positive (inverse) relationship between predictors' outcome. For factors, a factor level with a greater coefficient indicates a greater probability of being in one of the 'higher' cumulative outcome categories. The sign of a coefficient for a factor level is dependent upon that factor level's effect relative to the reference category.

In this research, several statistical methods were utilised, namely: (1) cluster analysis, (2) factor analysis, (3) MANOVA/ANOVA and (4) ordinal regression analysis. Cluster analysis was used to identify natural environmental management commitment strategies and to cluster respondents into homogeneous groups so that comparisons could be undertaken based on the cluster groups. Cluster groups were used in MANOVA and ordinal regression analysis to identify how these groups or clusters influenced credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and decisions in project financing.

Factor analysis was also used in this study for data reduction purposes. For example, ten stakeholder groups were used in the study to measure their influence on the implementation of natural environmental management. Using factor analysis, these ten groups were

subsequently formed into three groups. In other words, factor analysis was used to determine the extent to which variables that were inter-correlated could be grouped together so that they could be treated as one combined variable or factor, rather than a series of separate variables (Hair et al., 1998). Factor analysis was also used to validate respondents' ability to distinguish various variables. For example, in stakeholder theory, stakeholders can be divided into several categories such as primary stakeholder, secondary stakeholder, and regulatory stakeholder. Respondents' views on these separate stakeholder groups could be validated through factor analysis.

MANOVA analysis allowed the study to investigate the relationship between a set of dependent variables and a group of factor variables and to indicate whether the mean differences between them could have occurred by chance (Pallant, 2007). The dependent variables were (1) credit evaluation orientations, (2) stakeholder groups' orientations, and (3) CSR orientations. The study used MANOVA analysis to investigate how these three variables were influenced by six factors, namely: (1) racial groups, (2) religions, (3) bank profiles, (4) environmental management commitment strategies, (5) bank types and (6) bank nationalities. MANOVA results could inform whether there was a significant relationship between independent and dependent variables and provide the univariate results for each dependent variable separately (Pallant, 2007). A significant MANOVA analysis result would be followed by ANOVA analysis in order to identify which dependent variables were responsible for statistically significant MANOVA results.

Since one of the objectives of the research was to determine whether racial and religious factors influenced natural environmental risk management in project financing, ordinal regression analysis was utilised in addition to MANOVA and ANOVA analysis in order to

help the researcher to identify the direction and magnitude of the linear relationships between demographic factors, credit evaluation orientations, stakeholder orientations, CSR orientations and project financing decision behaviours. Ordinal regression was chosen as it allowed the study to measure factor and covariate variables simultaneously.

6.10 Chapter Summary

This chapter has discussed the research methodology employed in the study. It first discussed the research paradigm and strategies and then discussed the statistical techniques used to achieve the research objectives. The research paradigm/philosophical approach for a study is important as it leads to the selection of the research method used in a study. The research design was briefly explained, followed by a discussion of various research strategies. The chapter highlighted the survey techniques, sampling process, and questionnaire design. Finally, those statistical techniques most appropriate to meet the research objectives were discussed. The next three chapters will present the study findings. In chapter seven, respondents' and employer banks' profiles and data reduction analysis results will be presented.

CHAPTER SEVEN

Respondents' and Employer Banks' Profiles and Data Reduction Analysis Results

7.1 Introduction

This chapter is divided into two parts. The first part presents descriptive statistics relating to respondents in the study sample. The aim is to show respondents' gender, age, racial group, religion, work position, and type of employer bank, its nationality and total assets. The second part presents an analysis of respondents' evaluation of their employer bank's environmental commitment strategies, 11 credit evaluation orientation variables, and 10 stakeholder groups' variables, and their level of agreement with 16 statements designed to examine their employer bank's attitude to four corporate social responsibility orientations.

7.2 Respondents' and Employer Banks' Profiles

The first section of the questionnaire sought to obtain a personal profile of each respondent and their employer bank. Five questions elicited personal details from respondents and two elicited details about their employer banks. The first question focused on gender. From the responses received, 149 respondents were male and 76 were female. Male respondents comprised 66.2% of the sample and female respondents the remaining 33.8%. Table 7.1 shows respondents' gender profiles.

Table 7.1: Respondents' Gender Profiles

Range	Frequency	Percent
Male	149	66.2
Female	76	33.8
Total	225	100.0

The second question focused on age. Five options were presented to respondents: (i) 20 years or below; (ii) 21-30 years; (iii) 31- 40 years; (iv) 41-50 years; and (v) 51 years or above. It should be noted that the retirement age is fifty-eight in Malaysia. This question was important because it indirectly indicated respondents' number of years of work experience. All of the 225 respondents who participated in the study were 21 years or more. This was unsurprising as the questionnaire was answered by respondents in managerial positions or above. Usually, an executive is a degree holder, and degree graduates in Malaysia start work between 21-30 years, 8.4% of total respondents. Almost half of the respondents (101) were aged between 31-40 years, 44.9% of total respondents. Just over a third (84) were aged 41-50 years, 37.3% of total respondents. Finally, 21 respondents were 51 years or above, 9.3% of total respondents. Table 7.2 shows respondents' ages profiles.

Table 7.2: Respondents' Ages Profiles

Range	Frequency	Percent
21-30	19	8.4
31-40	101	44.9
41-50	84	37.3
51 years or above	21	9.3
Total	225	100.0

The third question elicited details regarding respondents' racial groups. They were presented with three options: Malay, Chinese or Indian. More than half (151) were Malay, 67.1% of total respondents. This finding was not surprising since the majority of staff working in Islamic banks are both Malay and Muslim, hence the large number of Malays participating in this survey. Just over a quarter of respondents (63) were Chinese, 28% of total respondents. A much smaller number of respondents were Indian, 4.9% of total respondents. The percentage of respondents in each racial group reflected the percentage of each racial group in Malaysia's population as a whole, i.e. Malays represent 54% of the Malaysian population, Chinese 25% and Indians 7.5%. Table 7.3 shows respondents' racial groups' profiles

Table 7.3: Respondents' Racial Groups Profiles

Racial Group	Frequency	Percent
Malay	151	67.1
Chinese	63	28.0
Indian	11	4.9
Total	225	100.0

The fourth question focused on respondents' religion. Major religions in Malaysia are Islam, Buddhism, Christianity, and Hinduism. Over half of respondents (154) were Muslim, 68.4% of total respondents. A much smaller number (42) were Buddhists, 18.7% of total respondents, 21 were Christians with 9.3% of total respondents, and 8 respondents were Hindus, 3.6% of the total sample. Table 7.4 shows respondents' religions profiles.

Table 7.4: Respondents' Religions Profiles

Religion	Frequency	Percent
Islam	154	68.4
Buddhism	42	18.7
Christianity	21	9.3
Hinduism	8	3.6
Total	225	100.0

The last personal profile question asked respondents to indicate their management or work position. Six options were presented to them: (i) Executive; (ii) Manager; (iii) Senior Manager; (iv) Chief Executive Officer (CEO); (v) Member of Board of Directors; (vi) Other

(s). Just under half (101) of respondents were managers, 44.9% of total respondents; 66 respondents were senior managers, 29.3% of total respondents; and 53 were executives, 23.6% of total respondents. Only five respondents, 2.2% of total respondents, were Chief Executive Officers or CEOs. Table 7.5 shows respondents' management/work position profiles.

Table 7.5: Respondents' Management/Work Position Profiles

Work Position	Frequency	Percent
Manager	101	44.9
Senior manager	66	29.3
Executive	53	23.6
CEO	5	2.2
Total	225	100.0

Next, respondents were asked details about their employer bank. They were first asked to indicate its bank type from seven options. Just under half of respondents (97) were employed by local conventional banks, 43.1% of total respondents. Forty-four respondents were employed by fully-fledged Islamic banks, 19.6% of the total sample. Smaller numbers were employed by investment banks and Islamic bank subsidiaries of local conventional banks, 25 (11.1% of total respondents) and 23 (10.2% of total respondents), respectively. Fifteen respondents (6.7% of total respondents) and 14 respondents (6.2% of total respondents) were employed by foreign Islamic banks and foreign conventional banks, respectively. Only 7 respondents (3.1% of total respondents) were employed by Islamic bank subsidiaries of foreign conventional banks. Table 7.6 shows respondents' employer banks' profiles.

Table 7.6: Respondents' Employer Banks' Profiles

Institution	Frequency	Percent
Local Conventional Bank	97	43.1
Fully-Fledged Islamic Bank	44	19.6
Investment Bank	25	11.1
Islamic Bank Subsidiary of Local Conventional Bank	23	10.2
Foreign Islamic Bank	15	6.7
Foreign Conventional Bank	14	6.2
Islamic Bank Subsidiary of Foreign Conventional Bank	7	3.1
Total	225	100.0

Banks were then divided according to type and nationality in order to distinguish between Islamic and conventional banks without considering bank nationality and to distinguish between foreign and local banks without considering the Islamic or conventional of the bank.

Table 7.7: Bank Types

Type of Bank	Frequency	Percent
Conventional Bank	140	62.2
Islamic Bank	85	37.8
Total	225	100

Table 7.7 shows 140 respondents (62.2% of total respondents) were employed by conventional banks and 85 respondents (37.8% of total respondents) were employed by Islamic banks.

Table 7.8: Bank Nationalities

Nationality	Frequency	Percent
Local Bank	189	86
Foreign Bank	36	14
Total	225	100

As regards bank nationalities, Table 7.8 shows 189 respondents (86% of total respondents) were employed by local banks and 36 respondents (14% of total respondents) were employed by foreign banks.

Respondents were asked to state their employer banks' total assets. This question was useful for indicating the size of a bank. Six categories were developed for response options based on companies' annual reports. Responses received indicated that almost half of the employer banks of respondents (106, 47.1% of the total sample) had total assets worth between RM 1 billion-RM 49 billion. Thirty-three respondents' employer banks (14.7% of the total sample) had assets ranging between RM50 billion and RM99 billion, while 32 respondents' employer banks (14.2% of the total sample) had assets of RM200 billion or more. The employer banks of 30 respondents (13.3% of total respondents) had assets ranging between RM100 billion-RM149 billion. The employer banks of 17 respondents (7.6% of the total sample) and 7 respondents (3.1% of the total sample) had assets ranging between RM150 billion-RM199 billion and less than RM1 billion, respectively. Table 7.9 shows respondents' employer banks' total assets.

Table 7.9: Respondents' Employer Banks' Total Assets

Total Assets	Frequency	Percent
RM 1 billion- RM 49 billion	106	47.1
RM 50 billion- RM 99 billion	33	14.7
RM 200 billion or more	32	14.2
RM 100 billion – RM 149 billion	30	13.3
RM 150 billion - RM 199 billion	17	7.6
Less than RM 1 billion	7	3.1
Total	225	100.0

7.3 Commitment towards Environmental Management

The second section (Part A) of the questionnaire focused on respondents' evaluation of their employer bank's environmental commitment and awareness. Part A contained ten statements related to environmental commitment, and respondents were asked to indicate their level of agreement with each statement on a five point scale ranging from (1) strongly disagree to (5) strongly agree. These questions allowed respondents to self-evaluate their employer bank's environmental commitment and revealed actual implementation of natural environmental practice in credit financing by banks' managers and executives, who being directly involved in credit assessment procedures, were the best people to explain their employer bank's internal policy towards the natural environment in credit financing evaluation. Henriques and Sadorsky (1999) and Menguc and Ozzane (2005) have stated that what a company is actually doing or has done in relation to environmental issues best describes its commitment to the natural environment. The questions in Part A section were based on previous literature (Hunt and Auster, 1990; Henriques and Sadorsky, 1999; Buysse and Verbeke, 2003).

Major Findings

The ten statements relating to environmental practices and management were analysed using SPSS. For this analysis, hierarchical clusters were chosen as we did not know the exact number of clusters. According to the literature discussed in chapter 3 section 3.3, various clusters ranging from two to seven clusters have been found in previous research. The optimum number of clusters identified by the re-formed agglomeration table produced and the dendogram using the Ward method are shown in Table 7.10.

Table 7.10: Re-formed Agglomeration Table

No of clusters	Agglomeration last step	Coefficient this step	Change
2	2393.964	1564.552	829.412
3	1564.552	1154.552	410.000
4	1154.552	1018.407	117.208
5	1018.407	948.539	122.578
6	948.539	895.994	58.155

As shown in the above table, there was a clear demarcation point between two and three. For this reason, three was chosen as the optimum number of clusters. Based on the cluster analysis, three cluster profiles were apparent. Table 7.11 shows the final mean values for the reactive, defensive and proactive cluster profiles.

Table 7.11: Final Mean Values for the Reactive, Defensive and Proactive Cluster Profiles

	Based on ten responses, 5 point Likert scale	Reactive	Defensive	Proactive
1	Guidelines and policies on environmental issues	2.45	3.55	4.91
2	Special department and staff that deal with environmental issues	2.05	3.19	4.86
3	Committees dedicated to dealing with environmental risk in credit assessment	2.05	3.33	4.82
4	Manuals detailing environmental procedures in credit assessment	2.03	3.24	4.77
5	Employees' training programmes on environmental procedures in credit assessment	2.09	3.16	4.73
6	A special financial product that rewards the environmental achievement of customers	2.23	3.08	4.32
7	Environmental information in external communications, such as bulletins, newsletters, annual reports	2.59	3.53	4.73
8	Environmental reviews or audits	2.14	3.16	4.68
9	A policy of refusing loans to companies with poor environmental records	2.46	3.11	4.82
10	Environmental risk procedure integrated into general risk management policy	2.23	3.31	4.73
	Number of firms	80	123	22

The robustness of the solution above was tested in two ways. First, one way Analysis of Variance (ANOVA) was used to test whether the cluster means were significantly different for all the variables (Hair et al., 1998; Buysse and Verbeke., 2003).

Table 7.12: ANOVA Results

		F	Sig
1	Guidelines and policies on environmental issues.	110.98	0.0001***
2	Special department and staff that deal with environmental issues.	154.936	0.0001***
3	Committees dedicated to dealing with environmental risk in credit assessment.	198.978	0.0001***
4	Manuals detailing environmental procedures in credit assessment.	186.997	0.0001***
5	Employees' training programmes on environmental procedures in credit assessment.	147.587	0.0001***
6	A special financial product that rewards the environmental achievement of customers	59.566	0.0001***
7	Environmental information in external communications, such as bulletins, newsletters, annual reports.	74.721	0.0001***
8	Environmental reviews or audits	131.447	0.0001***
9	A policy of refusing loans to companies with poor environmental records	75.227	0.0001***
10	Environmental risk procedure integrated into general risk management policy	134.770	0.0001***

*** $p < 0.001$

Based on one way Analysis of Variance (ANOVA), statistically there was a significant difference at the $p < 0.001$ level between each of the ten environmental commitment statements in the three cluster groups: (1) reactive (2) defensive and (3) proactive**.** For example, the guidelines and policies on environmental issues statement ANOVA result for the three cluster groups was: $F(2, 223) = 110.98$, $p < 0.001$. The ANOVA results for

statement numbers two to ten also indicated the same phenomenon as statement one. ANOVA results are presented in Table 7.12.

7.3.1 Characteristics of Clusters

Reactive

Table 7.11 shows that the mean score for each of the ten statements in the reactive cluster ranged between 2.03 and 2.59. *Environmental information in external communications, such as bulletins, newsletters, annual reports* had the highest mean score and *manuals detailing environmental procedures in credit assessment* had the lowest mean score. Its mean score of 2.03 was the lowest for all statements in the three clusters; however; its positive mean score indicated that managers affiliated to banks exhibiting a reactive strategy had some environmental strategies in their bank operations, even though such strategies may have been few. Henriques and Sadorsky (1999) found mostly negative mean scores in their reactive cluster and viewed this as indicative of no environmental strategies. In the present study, banks in the reactive cluster comprised seventy-one local banks and nine foreign banks. Thirty-six managers in the local bank group were from conventional banks, fifteen from fully-fledged Islamic banks, eleven from Islamic bank subsidiaries of local banks, and nine from investment banks. With regard to foreign banks, all nine managers were from foreign Islamic banks from Middle East countries. The findings explained the current status of natural environmental management in Malaysia's banking sector. Almost all of the respondents in reactive cluster were from local banks. No respondent working in a foreign bank from a developed country was in this cluster. This finding clearly showed a difference between local banks' and foreign banks' environmental management strategies.

Defensive

This cluster represented almost half of respondents, since it consisted of one hundred and twenty-three (123) managers. As per Buysse and Verbeke (2003), this environmental strategy is characterised by limited development in environmental management. For example, in this cluster, the mean score for each of the ten statements ranged between 3.08 and 3.55. In the defensive cluster, *guidelines and policies on environmental issues* had the highest mean score (mean = 3.55) and *special financial product that rewards the environmental achievement of customers* had the lowest score (mean = 3.08). As regards for respondents' employer banks' profiles, one hundred and thirteen managers in this cluster came from local banks and ten from foreign banks. With regard to local banks, sixty-one respondents came from local conventional banks, twenty-five from fully-fledged Islamic banks, eleven from Islamic bank subsidiaries of local banks, and sixteen from investment banks. As regards foreign banks, six respondents came from foreign Islamic banks and four from foreign conventional banks.

Proactive

Only twenty-two of respondents' employer banks' were classified in this cluster, the lowest number in a cluster. One of the main characteristics of this cluster was that it outperformed the environmental management practices of the other clusters. *Guidelines and policies on environmental issues* had the highest mean score of 4.91 and *special environmental product that rewards the environmental achievement of customers* had the lowest mean score of 4.32. One interesting finding was that seventeen of the twenty-two banks in this cluster were foreign banks. Of these, ten were foreign conventional banks and seven were Islamic bank subsidiaries of foreign commercial banks. Of the remaining five banks in this cluster, four were fully-fledged Islamic banks and one was the Islamic bank subsidiary of a local bank.

The findings clearly showed there was a difference between foreign and local banks' natural environmental management practices. In addition, Islamic local banks had better natural environmental management practices than local conventional banks.

Table 7.13: Bank Types under Different Clusters

	Banks	Reactive	Defensive	Proactive
1	Local Commercial Bank	36	61	0
2	Fully-Fledged Islamic Bank	15	25	4
3	Islamic Bank Subsidiary of Local Commercial Bank	11	11	1
4	Islamic Bank Subsidiary of Foreign Commercial Bank	0	0	7
5	Foreign Islamic Bank	9	6	0
6	Foreign Commercial Bank	0	4	10
7	Investment Bank	9	16	0
	Number of firms	80	123	22

7.4 Factor Analysis of Credit Evaluation Orientations

Responses to the 11 credit evaluation variables were studied by factor analysis to identify the interrelationships among these independent variables and to summarise the information into a smaller set of variables. To test whether factor analysis was appropriate for the credit evaluation variables, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett's Test of Sphericity were used. The results are shown in Table 7.14.

Table 7.14: Results for the KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity of 11 Credit Evaluation Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.736
Bartlett's Test of Sphericity	Approx. Chi-Square	790.133
	df	55
	Sig	0.0001

Table 7.14 shows the KMO measure of sampling adequacy for the credit evaluation variables had a value of 0.736. This indicated acceptable sampling adequacy according to Coakes and Steed (2003) and Pallant (2007), who stated that a value of 0.6 and above is an acceptable value. The credit evaluation variables were therefore deemed appropriate for factor analysis. Bartlett's Test of Sphericity also showed statistical significant (0.0001) supporting factorability of the variables.

Based on the results in Table 7.15, Principal Component Analysis (PCA) and Varimax Rotation with Kaiser's normalisation were conducted. Pallant (2007) states that in PCA, variables are transformed into a smaller set of linear combinations, with all of the variance in the variables being used. For this purpose, variables with an Eigenvalue of 1.0 or more were retained for further investigation (Pallant, 2007).

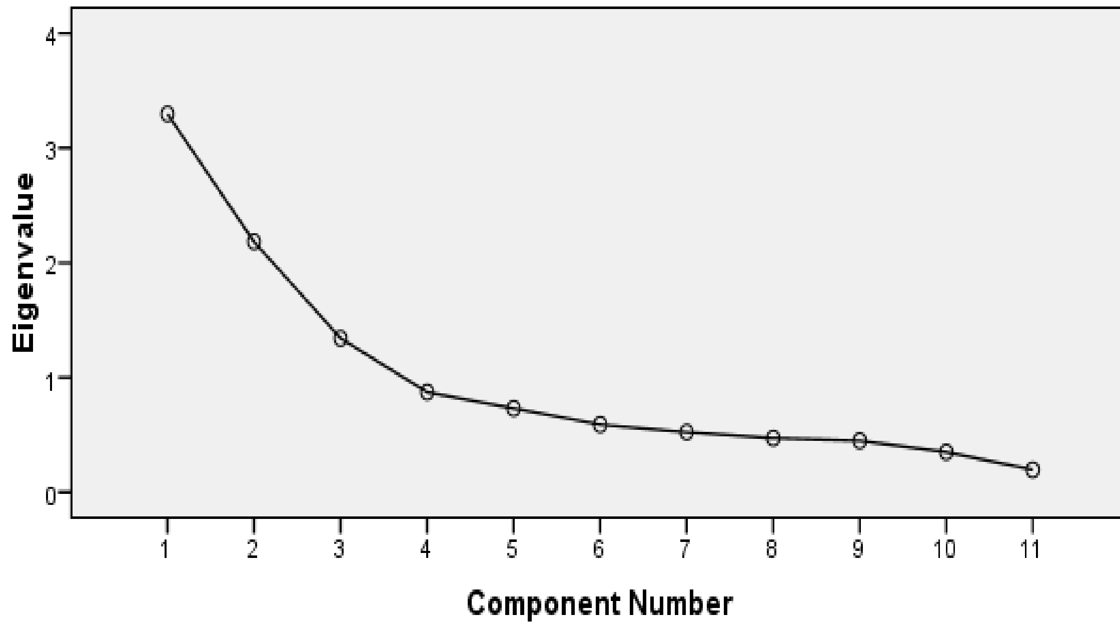
Table 7.15: Total Variance Explained for Credit Evaluation Variables

Factor	Initial Eigenvalues			Extraction Sum of Square Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.297	29.971	29.971	3.297	29.971	29.971
2	2.183	19.847	49.817	2.183	19.847	49.817
3	1.341	12.193	62.010	1.341	12.193	62.010
4	0.873	7.933	69.943			
5	0.730	6.636	76.579			
6	0.590	5.361	81.940			
7	0.523	4.755	86.695			
8	0.471	4.280	90.975			
9	0.448	4.070	95.045			
10	0.349	3.176	98.221			
11	0.196	1.779	100.000			

Extraction Method: Principal Component Analysis.

Table 7.15 shows there were three factors with Eigenvalues greater than 1 (3.297, 2.183 and 1.341). The initial analysis therefore resulted in a three factor solution. Thus, the 11 credit evaluation variables could be reduced to three factors. Factor 1 explained 29.97%, Factor 2 explained 19.85% and Factor 3 explained 12.19% of the pooled variance. Together, these three factors explained 62.01% of the total variance.

Figure 7.1: Scree Plot for Credit Evaluation Variables



The scree plot above (Figure 7.1), shows that the plot slopes steeply downwards from factor one to factor three, before moving slowly towards the horizontal line. An inspection of the scree plot also reveals a clear break after the third factor. Based on the scree plot, it was decided to retain three factors for further investigation.

Table 7.16: Rotated Component Matrix of Credit Evaluation Variables

Variable	Factor			Communality of each variable
	1	2	3	
X_2	0.802			0.630
X_6	0.740			0.696
X_1	0.726			0.658
X_3	0.700			0.659

X_5	0.636			0.597
X_8		0.844		0.571
X_9		0.839		0.587
X_7		0.659		0.725
X_{10}		0.595		0.738
X_4			0.750	0.402
X_{11}			0.675	0.560
Eigenvalue	3.297	2.183	1.341	
% of variance	25.689	23.400	12.921	
Cumulative %	25.689	49.089	62.010	

Extraction Method: Principal Component Analysis and Varimax Rotation with Kaiser Normalisation.

a. Rotation converged in 6 iterations

Variables:

X_1	Financial performance
X_2	Customer track record
X_3	Customer character
X_4	Collateral/Security
X_5	Management of the company
X_6	Customer creditworthiness
X_7	Ethical performance
X_8	Potential environmental impact of the financing
X_9	The environmental performance of the company

X_{10}	Business that complies with religious requirement
X_{11}	Political connections of the company

Table 7.16 shows all the variables under Factor 1, namely, *customer track record, customer creditworthiness, financial performance, customer character* and *management of the company* measure performance and profit in credit evaluation, therefore, Factor 1 was labelled a '*performance and profit*' measure. The variables under the second factor, i.e. *potential environmental impact of the financing, the environmental performance of the company, ethical performance* and *business that complies with religious requirement* are related to the environmental, ethical and religious perspectives, therefore, Factor 2 was labelled an '*environmental and ethical measure'*. Finally, the variables under Factor 3, i.e. *collateral/security* and *political connections of the company* resulted in it being termed an *'additional measure'*.

Based on factor analysis results, banks' managers categorised credit evaluation variables into a '*performance and profit'* measure, an '*environmental and ethical*' measure, and an '*additional*' measure. Factor loadings 0.5 or greater can be considered significant (Hair et al., 1998). Since Factor 1 '*performance and profit'* had the highest Eigenvalue and Variance (Eigenvalue = 3.3, Variance = 25.7%), it represented a more important measure in credit evaluation than Factor 2, an *'environmental and ethical'* measure (Eigenvalue = 2.2, Variance = 23.4%), and Factor 3, an *'additional'* measure (Eigenvalue = 1.34, Variance = 13.0%).

The findings suggest that bank managers regarded profit and return more important in project financing evaluation than the other measures. Variables grouped under Factor 2, i.e. *ethical*

performance, business that complies with religious requirement, potential environmental impact of the financing, and *the environmental performance of the company* suggest that banks' managers were unable to differentiate the environmental factor as a stand-alone factor in credit evaluation appraisal. The findings also imply that the additional measure was the least important in credit financing evaluation.

7.5 Factor Analysis of Stakeholder Groups' Orientations

Ten variables were used to measure banks' managers' perceptions of different stakeholder groups' capacity and ability to make banks adopt decisions in accordance with environmental demands. Factor analysis was used to identify the interrelationships among the independent variables and to summarise the information into a smaller set of variables. To test whether the variables were appropriate for factor analysis the, Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett's Test of Sphericity were applied. The results are as shown in Table 7.17.

Table 7.17: Results for the KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity the 10 Stakeholder Group Variables

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.807
Bartlett's Test of Sphericity	Approx. Chi-Square	722.746
	df	45
	Sig	0.0001

Table 7.17 shows the KMO measure of sampling adequacy produced a value of 0.807, which indicated acceptable sampling adequacy according to Coakes and Steed (2003) and Pallant (2007), who stated that a value of 0.6 and above is an acceptable value. The stakeholder

group variables were therefore deemed appropriate for factor analysis. Barletts' test of Sphericity also showed a statistical significant (0.0001), supporting factorability of the variables. Based on the results achieved in Table 7.17, Principal Component Analysis (PCA) and Varimax Rotation with Kaiser's normalisation were carried out. Variables with an Eigenvalue of 1.0 or more were retained for future investigation.

Table 7.18: Total Variance Explained for Stakeholder Group

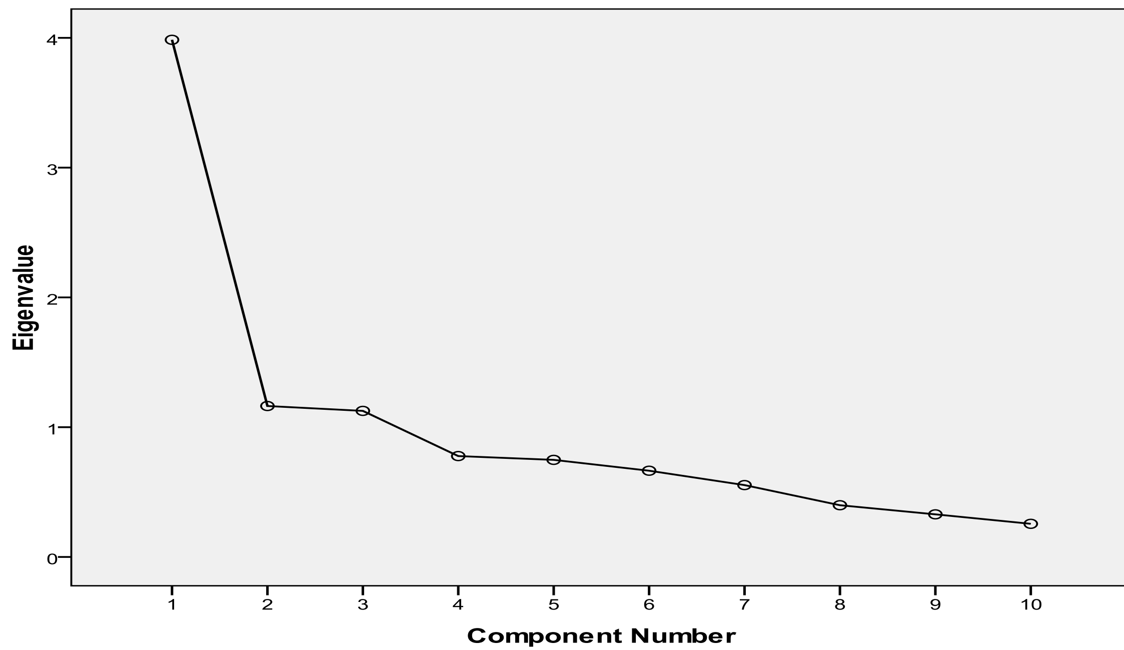
Factor	Initial Eigenvalues			Extraction Sum of Square Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.985	39.849	39.849	3.985	39.849	39.849
2	1.163	11.631	51.480	1.163	11.631	51.480
3	1.126	11.256	62.737	1.126	11.256	62.737
4	0.777	7.774	70.511			
5	0.748	7.481	77.992			
6	0.665	6.646	84.637			
7	0.554	5.538	90.175			
8	0.399	3.987	94.162			
9	0.328	3.284	97.446			
10	0.255	2.554	100.000			

Extraction Method: Principal Component Analysis

Table 7.18 shows there were three factors with Eigenvalues greater than 1 (3.985, 1.163 and 1.126). The initial analysis therefore resulted in a three factor solution. Thus, the 10 stakeholder group variables could be reduced to three factors. Factor 1 explained 39.849%,

Factor 2 explained 11.631%, and Factor 3 explained 11.256% of the pooled variance. Together, these three factors explained 62.737% of the total variance. This was also supported by the scree plot that showed a clear break after Factor 3. Based on the findings, it was decided to retain three factors for further investigation.

Figure 7.2: Scree Plot for Stakeholder Groups



The resulting varimax rotated factors are given in Table 7.19 below, together with the communality values of each variable, Eigenvalues, and percentage of explained variance.

Table 7.19: Rotated Component Matrix of Stakeholder Groups

Variable	Factor			Communality of each variable
	1 Secondary	2 Primary	3 Regulatory	
X_6	0.837			0.737
X_5	0.741			0.728

X_9	0.736			0.727
X_7	0.702			0.635
X_4	0.680			0.615
X_{10}	0.591			0.733
X_2		0.831		0.528
X_3		0.710		0.625
X_8		0.598	0.515	0.547
X_1			0.842	0.399
Eigenvalue	3.985	1.163	1.126	
% of variance	33.058	17.191	12.487	
Cumulative %	33.058	50.250	62.737	

Extraction Method: Principal Component Analysis and Varimax Rotation with Kaiser Normalisation.

a. Rotation converged in 5 iterations

Variables:

X_1	Government
X_2	Customers
X_3	Employees
X_4	Global community
X_5	Local community
X_6	Environmentalist groups
X_7	Mass media
X_8	Investors

X_9	Natural environment
X_{10}	Environmental policies of other banks

Table 7.19 shows all ten variables had a factor loading above 0.3 and were loaded onto three factors, secondary, primary, and regulatory. The Eigenvalues for the three factors were 3.99 for Factor 1, 1.16 for Factor 2, and 1.13 for Factor 3. These three factors explained 62.74% of the total variance. Specifically, Factor 1 had six significant loadings, Factor 2 had three significant loadings, and Factor 3 had one significant loading.

Table 7.19 shows a cluster of relationships among the following attributes of Factor 1: (X_6) *environmentalist groups,* (X_5) *local community,* (X_9) *natural environment,* (X_7) *mass media,* (X_4) *global community,* and (X_{10}) *environmental policies of other banks.* Factor 1 contributed around 33.06% of the reasons for banks to adopt decisions in accordance with environmental demands. Based on Eigenvalue and Variance (Eigenvalue: 3.99 and Variance: 33.058%), Factor 1 was the most important factor that influenced bank managers to adopt decisions in accordance with environmental demands. Factor 1 comprised a combination of the following: environmentalist groups, natural environment, mass media, local and global community, and environmental policies of other banks. Based on this combination, Factor 1 was labelled '*secondary stakeholder'*.

The implementation of environmental management in credit financing among bank managers in Malaysia is therefore predominantly influenced by secondary stakeholders. Mitchel et al. (1997), who classified stakeholders based on salience known as power, legitimacy and urgency, stated that stakeholder salience can vary over time and depends on the issues considered. Therefore, managerial perceptions are critical as they will ultimately determine

stakeholder salience (Buysse and Verbeke, 2003). The factor analysis results also showed the natural environment to be an important influence and recognised as a secondary stakeholder.

Factor analysis results in Table 7.19 also indicate that the variables which had loadings on the second factor were: (X_2) *customers,* (X_3) *employees* and (X_8) *investors*. The variables could be compositely grouped together under the heading of '*primary stakeholder*'. Factor 2 had an Eigenvalue of 1.16 and Variance of 17.19%. The third factor defining stakeholder influence was (X_1) Government. Thus, the name given to this factor was '*regulatory stakeholder*'. Factor analysis results revealed '*regulatory stakeholder'* to be the least important factor because it explained only 12.5% of the total variance for the variables in the data set.

Overall, the factor analysis results suggested that secondary stakeholders are the group with the greatest capacity and ability to make banks adopt decisions in accordance with environmental demands, either by means of economic rewards or punishment or by resorting to direct force or legal action, or by influencing the company's image. This finding also implies that environmentalist groups such as NGOs, the community, and mass media, have an important role in ensuring better implementation of environmental management in the banking sector in Malaysia. The implementation of environmental management was also influenced by other banks' environmental policies. Starik (1995) has contended that the natural environment should be considered a qualified stakeholder. Factor analysis results indicated that banks' managers recognised the natural environment as one of the qualified stakeholders in environmental-decision making. They also showed that the government, categorised as a regulatory stakeholder, is least important for environmental management in the banking sector.

7.6 Corporate Social Responsibility Orientations

To examine respondents' banks' attitudes to corporate social responsibility orientations, questionnaire statements were based on Maignan and Ferell (2000), Maignan (2001), and Aupperle et.al (1985). In their cross country research in Germany, France and the USA, Maignan and Ferrell (2000) based their evaluation of CSR orientations on Carroll's (1979) pyramid. Maignan and Ferrell's (2000) method was applied by Ramasamy and Yeung (2009) in their study which examined Chinese consumers' attitude to CSR, and used by Arli and Lasmono (2010) to investigate the Indonesian perspective. In the present study, sixteen questionnaire statements were developed relating to the four types of social responsibility introduced by Carroll (1979), i.e. economic, legal, ethical, and philanthropic responsibilities. Four questionnaire statements were developed relating to each of the four social responsibility types, making a total of 16 statements altogether. Respondents were asked to indicate to what extent they agreed or disagreed with each of the statements on a scale ranging from 1= strongly disagree to 5 = strongly agree.

The sixteen questionnaire statements were as follows:

Economic Responsibility

1. In banking, it is important to focus upon profitability; internal concerns and policies regarding the natural environment are distractions from this goal.
2. Immediate profit must be prioritised, even if this means sacrificing the natural environment.
3. Involvement in environmental management policies must be run parallel with the financial objectives of the bank.
4. Environmental management must be avoided if it affects financial performance.

Legal Responsibility

1. In banking, it is important to perform in a manner consistent with the expectations of the law in terms of following the spirit rather than the letter.
2. It is important that borrowers comply with various federal state and local authority regulations, and this is a matter of concern to the bank.
3. In environmental management, it is important for the bank to provide services that at least meet minimum legal requirements.
4. In banking business, it is important that a successful bank be defined as one that fulfils its legal obligations above all other considerations.

Ethical responsibility

1. A project that has a negative impact on the natural environment and human rights but complies with the law should be rejected because it fails to meet ethical standards.
2. It is important that a successful business be defined as one that fulfils its ethical obligations to the natural environment rather than one that pursues profitability alone.
3. It is important that good corporate citizenship be defined in terms of protecting the natural environment and not just complying with strict legal obligations.
4. It is important to recognise that corporate integrity and ethical behaviour go beyond mere compliance with laws and regulations.

Philanthropic responsibility

1. The bank should assist the environmental projects that enhance a community's quality of life.
2. It is important to assist forest conservation organised by NGOs through internal lending criteria and loan evaluation.

3. Development of ‘green’ lending policies, including lower interest rates for environmentally aware borrowers compared to mainstream borrowers, should be a priority for the bank.
4. It is important to show environmental preservation commitment by participating voluntarily in activities organised by NGOs and the local community.

In order to investigate respondents’ responses to the above, the mean score of each responsibility orientation was calculated by averaging the total points given by respondents for each statement that represented that CSR orientation. Each orientation was represented by four statements that evaluated respondents’ perception of their bank’s attitude to that orientation of CSR: (1) economic, (2) legal, (3) ethical and (4) philanthropic. The minimum score for each orientation was four (respondents strongly disagreed with each of the four statements in that orientation) and the maximum score was twenty (respondents strongly agreed with each of the four statements in that orientation).

Table 7.20: Mean Score for each of the Four Orientations

Orientations	Mean Score	Rank
Economic	4.07	1
Legal	3.88	2
Ethical	3.85	3
Philanthropic	3.80	4

Table 7.20 shows that managers agreed most with the economic responsibility statements since the economic responsibility orientation had the highest overall mean score (4.07), followed by the legal responsibility orientation (3.88), ethical responsibility orientation (3.85), and philanthropic responsibility orientation (3.80). This result is similar to Carroll’s (1979) original conceptualisation of CSR that ranked economic responsibility as the most

important, followed by legal, ethical, and philanthropic responsibilities. However, our study findings differ slightly from those reported by Dusuki and Yusuf (2008) who found the most important corporate social responsibility orientation to be the economic, followed by the ethical, legal and philanthropic responsibilities in their study conducted in Malaysia.

Our study findings may have been due to the fact that the banking sector is an important sector in Malaysia and is under the direct control of and enforcement by the government. A study by Singhapakdi et al. (2000) found that different legal environments influence the perceived importance of CSR. The Malaysian government's direct control of the banking sector through legislation explains the importance of the legal orientation found in our study.

Results in Table 7.20 do not show if each orientation significantly differed in importance from the other three. Therefore, a paired sample t-test was conducted to show if there was a significant difference between the four corporate social responsibility orientations. Pairing the four orientations (economic, legal, ethical and philanthropic), resulted in six pairs being tested for significant difference.

Table 7.21: Paired Sample t-test and Wilcoxon Signed Rank Test for CSR Orientations

Test for Orientation	t-value	df	Sig (2-tailed)	Wilcoxon Signed Rank Test
Economic Vs. Legal	3.752	224	0.0001**	0.0001**
Economic Vs. Ethical	3.466	224	0.001**	0.0001**
Economic Vs. Philanthropic	4.894	224	0.0001**	0.0001**
Legal Vs. Ethical	0.267	224	0.790	0.850
Legal Vs. Philanthropic	2.216	224	0.028*	0.036*
Ethical Vs. Philanthropic	2.331	224	0.021*	0.026*

* $p < 0.05$; ** $p < 0.01$

Table 7.21 shows there was a significant difference between all the paired orientations, except between the legal and ethical orientations. The economic orientation significantly differed from the other three orientations, pointing to its importance among the orientations. The paired sample t-test results suggested that banks' managers did not rank all CSR orientations equal in importance. The test further confirmed with non parametric test known as Wilcoxon Signed Rank[5] test that produce the same result as per Paired Sample t test. Table 7.21 shows there was a significant difference between the all the paired orientations except between the legal and ethical orientations. The findings are similar to those reported by Dusuki and Yusuf who conducted a (2008) study on CSR in ten private and public universities in Malaysia. They are also consistent with the importance attached to the performance and profit measure reported in section 7.4, where economic performance was highly emphasised for credit approval.

7.7 Chapter Summary

This chapter has presented the profiles of respondents participating in the study and their employer banks. Based on the profiles analysis, the majority of respondents were managers and senior managers directly involved in credit processing for project financing approval. This was important as it ensured the study obtained reliable information for data analysis purposes. Data reduction techniques, namely, cluster analysis and factor analysis, were used to reduce many variables into smaller sets of linear combinations for in-depth analytical investigation. The following chapter presents the Multivariate Analysis of Variance (MANOVA) results. The analyses of how racial groups, religions, bank profiles, natural environmental management commitment strategies, bank types and bank nationalities

[5] Pallant (2007) stated that Wilcoxon Signed Rank test as an alternative for Paired-Samples t-test.

influence credit evaluation orientations, stakeholder groups' orientations and CSR orientations are also presented in this chapter.

CHAPTER EIGHT

Multivariate Analysis of Variance (MANOVA) Analysis Results

8.1 Introduction

This chapter reports Multivariate Analysis of Variance (MANOVA) results using the Statistical Package for Social Sciences (SPSS) version 17. MANOVA was useful for assessing overall group differences across dependent variables (credit evaluation orientations, stakeholder groups' orientations, and CSR orientations). MANOVA was also chosen as this method protects against a type I error. An initial MANOVA analysis was conducted in order to identify any significant differences in (1) credit evaluation orientations; (2) stakeholder groups' orientations; and (3) attitude to CSR orientations among managers affiliated to different racial groups, religions, bank profiles, environmental management commitment strategies, bank types, and bank nationalities. Significant results obtained from MANOVA analysis were investigated further using univariate analysis of variance (ANOVA) to examine whether variations existed across different response categories and whether they were significant. A post-hoc test was then employed to examine paired mean comparisons resulting from the variance analysis.

8.2 Hypotheses for Credit Evaluation Orientations

This section will discuss MANOVA analysis of credit evaluation orientations and six independent variables, namely, racial groups, religions, bank profiles, environmental management commitment strategies, bank types, and bank nationalities. The analysis was important to identify how the differences in independent variables could influence credit

evaluation orientations. To achieve such identification, the following hypotheses were used for analysis purposes, see section 6.7.2.

H1 (a): There are significant differences in credit evaluation orientations among managers affiliated to different racial groups.

H1 (b): There are significant differences in credit evaluation orientations among managers affiliated to different religions.

H1 (c): There are significant differences in credit evaluation orientations among managers affiliated to different bank profiles.

H1 (d): There are significant differences in credit evaluation orientations among managers affiliated to different environmental management commitment strategies.

H1 (e): There are significant differences in credit evaluation orientations among managers affiliated to different bank types.

H1 (f): There are significant differences in credit orientations among managers affiliated to different bank nationalities.

8.2.1 Testing of Hypothesis H1 (a)

To test hypothesis H1 (a), Multivariate Analysis of Variance (MANOVA) was undertaken using the three credit evaluation orientations (performance and profit, environmental and ethical, and additional measure) as dependent variables and racial groups as an independent variable with three multiple levels: Malay, Chinese and Indian. Due to disparity in sample size among the three religious groups, Box's M test of homogeneity of variance-covariance assumption was used.

Table 8.1: Box's M Test of Equality of Covariance Matrices

Box's M	12.397
F	0.963
df 1	12.0
df 2	3135.694
Sig	0.482

The test turned out to be insignificant at the 0.1 level (Box's M = 12.397, F = 0.963, p = 0.482) (see Table 8.1). Therefore, there was no reason to believe that any variances between the three racial groups differed significantly.

Table 8.2: MANOVA Results for Credit Evaluation Orientations by Racial Groups

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.557	28.427	6.0	442.0	0.0001	0.278
Wilks' Lambda	0.450	35.984	6.0	440.0	0.0001	0.278

Pillai's Trace test and Wilks' Lambda test were used to assess the overall multivariate relationship. The MANOVA results are displayed in Table 8.2. The tests indicated that the relationship was significant (Pillai's Trace = 0.557, F (6, 442) = 28.427, p < 0.01; Wilks' Lambda = 0.450, F (6, 440) = 35.984, p < 0.01. Thus, it was decided that there were significant differences in credit evaluation orientations as perceived among managers affiliated to different racial groups and statistically significant MANOVA results were followed with ANOVA testing of each dependent variable to further examine the effect of racial groups on differences in attitude towards credit evaluation orientations among managers. Prior to interpreting the results, the data was checked for the homogeneity of

variance assumption using Levene's F test. This showed that performance and profit credit evaluation orientation and environmental and ethical credit evaluation orientation were significant at $p < 0.05$, indicating that the assumption for these variables was not met. Thus, Brown-Forsythe's one way ANOVA, which does not assume equal variance, was utilised for comparisons between groups for these dependent variables.

Table 8.3: ANOVA Results for Credit Evaluation Orientations by Racial Groups

Credit Evaluation Orientations	F	Sig
Performance and Profit	29.72	0.0001***
Environmental and Ethical	42.99	0.0001***
Additional	0.335	0.872

** $p < 0.05$; *** $p < 0.01$

One way ANOVA results are displayed in Table 8.3. Statistically, significant differences were found in two of the credit evaluation orientations, namely, performance and profit (Brown-Forsythe's $F(2, 13.037) = 29.72$, $p < 0.01$ and environmental and ethical ($F(2, 119.314) = 42.99$, $p < 0.01$), among managers affiliated to different racial groups. There were no significant differences in the additional measure credit evaluation orientation among managers affiliated to different racial groups. The means and standard deviation are reported in Table 8.4

Table 8.4: Descriptive Statistics for Credit Evaluation Orientations by Racial Groups

Credit Evaluation Orientations	Malay	Chinese	Indian
Performance and Profit	23.71(1.53)	23.64(1.73)	15.55(4.64)
Environmental and Ethical	13.79(2.69)	13.10(2.80)	19.64(1.21)
Additional	7.13(1.32)	6.98(1.43)	6.91(1.14)

Pairwise multiple comparison tests were conducted on significant findings to determine the differences in detail. Since both variables failed the Levene's F test for homogeneity of variance assumption, Tamhane's T2 method was used for comparison. For performance and profit credit evaluation orientation, a significant difference was found between Indian managers and Malay managers ($p = 0.0001$) and Chinese managers and Indian managers ($p = 0.001$). The cell means indicated that the Indian mean score was the lowest ($M = 15.55$) than the Chinese ($M = 23.64$) and Malay ($M = 23.71$) mean scores. The result suggested that Indian managers placed less emphasis on performance and profit than Malay and Chinese managers. With regard to the ethical and environmental credit evaluation orientations, a significant difference was also found between Indian managers and Malay managers ($p = 0.0001$) and Indian managers and Chinese managers ($p = 0.0001$). The cell means indicated that Indian had the highest mean score ($M = 19.64$) followed by Malay ($M = 13.79$) and Chinese ($M = 13.10$). The results suggested that Indian managers put more emphasis on the environmental and ethical than Malay and Chinese managers.

8.2.2 Testing of Hypothesis H1 (b)

To test hypothesis H1 (b), Multivariate Analysis of Variance (MANOVA) was undertaken using three credit evaluation orientations (performance and profit, environmental and ethical measure, and additional measure) as dependent variables and religions as an independent variable with four multiple levels: Islam, Christianity, Buddhism, and Hinduism. To check whether the homogeneity of variance and covariance assumption was met, Box's M test was run. The test produced no significant result at the $p > 0.05$ level (Box's $M = 28.803$, $F = 1.464$, $p = 0.093$), suggesting that the covariance matrices were roughly equal and the homogeneity assumption was tenable (see Table 8.5).

Table 8.5: Box's M Test of Equality of Covariance Matrices

Box's M	28.803
F	1.464
df 1	18.0
df 2	2940.89
Sig	0.093

Pillai's Trace test and Wilks' Lambda test were used to assess the overall multivariate relationship. As shown in Table 8.6, the MANOVA results indicated that religions had a significant impact on credit evaluation orientations at the $p < 0.01$ level (Pillai's Trace = 0.097, $F(9, 663) = 2.456$, $p < 0.01$; Wilks' Lambda = 0.905, $F(9, 553.139) = 2.468$, $p < 0.01$. The effect size for this relationship was 0.032 for both tests. Thus, hypothesis H1 (b) was supported since MANOVA results indicated that there were significant differences in credit evaluation orientations among managers affiliated to different religions and further testing was therefore needed.

Table 8.6: MANOVA Results for Credit Evaluation Orientations by Religions

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.097	2.456	9.0	663.000	0.009	0.032
Wilks' Lambda	0.905	2.468	9.0	533.139	0.009	0.032

A one way ANOVA testing of each dependent variable was conducted. Prior to interpreting the results, the data was checked for the homogeneity of variance assumption using Levene's F test. This showed that performance and profit credit evaluation orientation was significant at $p < 0.05$, indicating that the assumption for this variable was not met. Thus, Brown-Forsythe's one way ANOVA, which does not assume equal variance, was utilised for comparisons between groups for this dependent variable.

Table 8.7: ANOVA Results for Credit Evaluation Orientations by Religions

Credit Evaluation Orientations	F	Sig
Performance and profit	59.751	0.086
Environmental and ethical	4.416	0.005***
Additional	0.235	0.872

** $p < 0.05$; *** $p < 0.01$

ANOVA results are displayed in Table 8.7. Statistically, there were significant differences in the environmental and ethical credit evaluation orientation among managers affiliated to different religions ($F(3, 221) = 4.416$, $p < 0.01$). No significant differences were found in the performance and profit and additional measure credit evaluation orientations. The means and standard deviations are reported in Table 8.8.

Table 8.8: Descriptive Statistics for Credit Evaluation Orientations by Religions

Credit Evaluation Orientations	Islam	Christianity	Buddhism	Hinduism
Performance and Profit	23.28 (1.83)	23.52 (1.75)	22.43 (2.61)	23.63 (1.85)
Environmental and Ethical	14.38 (2.89)	12.19 (3.46)	13.47 (2.43)	14.75 (2.25)
Additional	7.11 (1.33)	7.1 (1.55)	7.0 (1.38)	6.75(1.04)

Pair-wise multiple comparison tests were conducted on the environmental and ethical credit evaluation orientation in order to determine the differences among managers in detail. For this purpose, the Tukey method was employed to perform the post-hoc analysis since Levene's F test suggested that the error variance of these dependent variables was equal (i.e. homogenous) across groups. For the environmental and ethical measure, a significant difference was found between Islam and Christianity groups ($p = 0.006$). Those managers affiliated to Islam had a higher mean score ($M = 14.38$) than those affiliated to Christianity ($M = 12.19$).

8.2.3 Testing of Hypothesis H1 (c)

To test hypothesis H1 (c), Multivariate Analysis of Variance (MANOVA) was performed using the three credit evaluation orientations (performance and profit, environmental and ethical, and additional measure) as dependent variables and bank profiles as an independent variable, with seven multiple levels: local conventional bank, fully-fledged Islamic bank, Islamic bank subsidiary of local conventional bank, Islamic bank subsidiary of foreign bank, foreign Islamic bank, foreign conventional bank, and investment bank. To examine whether the assumption of equality of variance-covariance matrices was equal across the seven bank profiles, Box's M test was run. The test result turned out to be significant at the $p < 0.1$ level (Box's M = 39.481, F = 1.005, p = 0.46), indicating that the covariance matrices were roughly equal and the assumption was tenable. The result is presented in Table 8.9.

Table 8.9: Box's M Test of Equality of Covariance Matrices

Box's M	39.481
F	1.005
df 1	36.0
df 2	6391.438
Sig	0.46

Pillai's Trace and Wilks' Lambda tests were used to test the statistical significant of the bank profiles effect. The findings are presented in Table 8.10. The results indicated that the tests were significant (Pillai's Trace = 0.239, $F(18,654) = 3.150$, $p < 0.001$; Wilks' Lambda = 0.777, $F(18, 611.426) = 3.164$ $p < 0.001$, with an effect size of 0.08. The results therefore showed there were significant differences in credit evaluation orientations among managers affiliated to different bank profiles. Thus, hypothesis H1 (c) was supported.

Table 8.10: MANOVA Results for Credit Evaluation Orientations by Bank Profiles

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta squared
Pillai's Trace	0.239	3.150	18.0	654.0	0.0001	0.08
Wilks' Lambda	0.777	3.164	18.0	611.426	0.0001	0.08

Statistically significant MANOVA results were followed by univariate ANOVA testing of each dependent variable to examine whether differences existed in credit evaluation orientations between managers affiliated to the seven bank profile groups. Prior to interpreting the results, the data was checked for homogeneity of variance assumption using Levene's F test. This test showed that the performance and profit credit evaluation orientation was significant at $p < 0.05$, indicating that the assumption for this variable was not met. Thus, Brown-Forsythe's one way ANOVA, which does not assume equal variance, was utilised for comparisons between groups for this dependent variable.

Table 8.11: ANOVA Results for Credit Evaluation Orientations by Bank Profiles

Credit Evaluation Orientations	F	Sig
Performance and profit	2.537	0.026**
Environmental and ethical	5.057	0.0001***
Additional	1.640	0.137

** $p < 0.05$; *** $p < 0.01$

One way ANOVA results are displayed in Table 8.11. Statistically, significant differences were found in two of the credit evaluation orientations, namely, performance and profit (Brown-Forsythe's $F (6, 84.57) = 2.537$, $p < 0.05$) and environmental and ethical ($F (6, 218) = 5.057$, $p < 0.001$), among managers affiliated to different bank profiles. There were no significant differences in the additional measure credit evaluation orientation between

managers affiliated to the seven different bank profile groups. The means and standard deviations are reported in Table 8.12.

Table 8.12: Descriptive Statistics for Credit Evaluation Orientations by Bank Profiles

Credit Evaluation Orientations	Local Conventional Bank	Fully-Fledged Islamic Bank	Islamic Bank Subsidiary of Local Bank	Islamic Bank Subsidiary of Foreign Bank	Foreign Bank	Foreign Islamic Bank	Investment Bank
Performance and Profit	23.26(2.01)	23.27(1.73)	23.61(1.85)	23.71(1.80)	23.87(1.13)	22.43(2.59)	21.96(2.34)
Environmental and Ethical	13.10(2.83)	14.86(2.82)	14.00(2.94)	15.86(2.61)	16.53(2.17)	14.00(3.21)	14.12(2.30)
Additional	7.04(1.30)	7.52(1.37)	6.78(1.20)	6.14(1.07)	7.13(1.36)	7.00(1.71)	6.96(1.31)

Pairwise multiple comparison tests were conducted on significant findings to determine the differences in detail. For the environmental and ethical credit evaluation orientation, the Tukey method was employed to perform the post-hoc analysis, since Levene's F tests suggested that the error of variance of the dependent variables was equal across groups. For the Performance and Profit credit evaluation orientation, Tamhane's T2 method for multiple comparisons was used, since the variable failed the Levene's F test for homogeneity of variance assumption, indicating that the error variance of the variable was unequal across groups.

With regard to the performance and profit credit evaluation orientation, a significant difference was found between foreign Islamic bank and investment bank ($p = 0.028$). The cell means indicated that the foreign Islamic bank mean score was higher ($M = 22.43$) than the investment bank mean score ($M = 21.96$). For the environmental and ethical credit evaluation orientation, significant differences were shown between local conventional bank and fully-fledged Islamic bank ($p = 0.01$) and foreign Islamic bank ($p = 0.0001$). The cell means indicated that the fully-fledged Islamic bank mean score ($M = 14.86$) and foreign

Islamic bank mean score (M = 14.0) was slightly higher than the local conventional bank mean score (M = 13.10).

8.2.4 Testing of Hypothesis H1 (d)

To test hypothesis H1 (d), Multivariate Analysis of Variance (MANOVA) was performed using the three credit evaluation orientations (performance and profit, environmental and ethical and additional measure) as dependent variables and environmental management commitment strategies as independent variables with three multiple levels: reactive, defensive and proactive. To examine whether the assumption of equality of variance-covariance matrices was equal across the three environmental management commitment strategies groups, Box's M test was run. The test turned out to be insignificant at the 0.1 level (Box's M = 17.225, F 1.385, $p = 0.165$), suggesting that the covariance matrices were roughly equal and the assumption was tenable (see Table 8.13).

Table 8.13: Box's M Test of Equality of Covariance Matrices

Box's M	17.225
F	1.385
df 1	12.0
df 2	16248.504
Sig	0.165

As presented in Table 8.14, MANOVA results showed a significant overall effect of environmental management commitment strategies on the credit evaluation orientations (Pillai's Trace = 0.078, $F (6, 442) = 2.985$, $p < 0.01$; Wilks' Lambda = 0.923, $F (6, 440) = 3.005$, $p < 0.01$. The result supported empirical findings reported for hypothesis H1 (d). There were significant differences in credit evaluation orientations among bank managers

affiliated to different environmental management commitment strategies. The effect size of this multivariate relationship was 0.039.

Table 8.14: MANOVA Results for Credit Evaluation Orientations by Environmental Management Commitment Strategies

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.078	2.985	6.0	442.0	0.007	0.039
Wilks' Lambda	0.923	3.005	6.0	440.0	0.007	0.039

Statistically significant MANOVA results were followed by univariate ANOVA testing of each dependent variable to examine whether differences existed in credit evaluation orientations among managers affiliated to different environmental management commitment strategies. Levene's statistic was not significant at the $p < 0.05$ level for all credit evaluation orientations, suggesting that the data met the homogeneity of variance assumption.

Table 8.15: ANOVA Results for Credit Evaluation Orientations by Environmental Management Commitment Strategies

Credit Evaluation Orientations	F	Sig
Performance and profit	1.047	0.353
Environmental and ethical	5.452	0.005***
Additional	1.277	0.281

** $p < 0.05$; *** $p < 0.01$

One way ANOVA results are displayed in Table 8.15. Statistically, significant differences existed in the environmental and ethical credit evaluation orientation among managers affiliated to different environmental management commitment strategies ($F (2, 222) = 5.452$, $p < 0.01$. No significant differences were noted in profit and performance and additional measure credit evaluation orientations. The means and standard deviations are reported in Table 8.16.

Table 8.16: Descriptive Statistics for Credit Evaluation Orientations by Environmental Management Commitment Strategies

Credit Evaluation Orientations	Reactive	Defensive	Proactive
Performance and Profit	23.06(2.07)	23.40(1.80)	22.82(2.40)
Environmental and Ethical	14.12(2.73)	13.43(3.16)	15.69(2.34)
Additional	7.80(1.32)	6.89(1.35)	7.09(1.41)

Paired comparison tests were conducted on the environmental and ethical credit evaluation orientation in order to assess whether there were significant differences in the means across the three environmental management commitment strategies. The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis, since Levene's F test indicated that the error variance of the dependent variable was equal across the three environmental management commitment strategies groups. A significant difference in credit evaluation orientations was found between managers affiliated to banks with a reactive environmental management strategy and those affiliated to banks with a proactive environmental strategy ($p = 0.047$) and between managers affiliated to banks with a defensive environmental management commitment strategy and those affiliated to banks with a proactive environmental management commitment strategy ($p = 0.004$). Table 8.16 shows that managers affiliated to banks with a proactive environmental management commitment strategy rated the environmental and ethical credit evaluation orientation significantly higher ($M = 15.69$) than those affiliated to banks with reactive ($M = 14.12$) and defensive ($M = 13.43$) environmental management commitment strategies.

8.2.5 Testing of Hypothesis H1 (e)

To test hypothesis H1 (e), Multivariate Analysis of Variance (MANOVA) was performed using bank types as the independent variable with two multiple levels: Islamic Bank and

Conventional Bank and credit evaluation orientations (performance and profit, environmental and ethical, and additional measure) as the dependent variables. Prior to interpreting the results, the assumption of homogeneity of variance and covariance was examined using the Box's M test.

Table 8.17: Box's M Test of Equality of Covariance Matrices

Box's M	9.68
F	1.588
df 1	6.0
df 2	208978.109
Sig	0.146

The test produced a non-significant result (Box's M =9.68, F = 1.588, p = 0.146) (see Table 8.17), suggesting that the assumption was not violated. Thus, there was no reason to believe that variances between the two bank groups significantly differed.

Pillai's Trace test and Wilks' Lambda test were used to assess the overall multivariate relationship. The MANOVA results, displayed in Table 8.18, indicated that there was a statistically significant difference in credit evaluation orientations (Pillai's Trace = 0.073, F (3, 221) = 5.791, p < 0.01; Wilks' Lambda = 0.927, F (3, 221) = 5.791, p < 0.01) among banks' managers affiliated to Islamic and conventional banks. The effect size of this multivariate relationship was 0.073. Thus, hypothesis H1 (e) was supported. Further testing was needed to further examine the effect of bank types on differences in attitude towards credit evaluation orientations among managers.

Table 8.18: MANOVA Results for Credit Evaluation Orientations by Bank Types

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.073	5.791	3.0	221.0	0.001	0.073
Wilks' Lambda	0.927	5.791	3.0	221.0	0.001	0.073

A significant result in the MANOVA test led to further investigation in relation to each of the two independent variables, i.e bank types. Since the investigation involved two independent variables only, 'Test of Between-Subject Effects' was applied. According to Coakes and Steed (2003), an examination of the univariate F-test for each dependent variable (credit evaluation orientations) will indicate which individual dependent variable contributes to the significant multivariate effect.

Levene's Test of Equality of Error Variances was carried out to assess whether the data violated the assumption of homogeneity of variance-covariance matrices. Tabachnick and Fidell (2007) suggest that an alpha of 0.025 or 0.01 will indicate if the data violates the assumption of equality of variances. The Levene's statistic was significant at $p < 0.05$ for the 'performance and profit' credit evaluation orientation, suggesting that the homogeneity of variance assumption was violated. The other two credit evaluation orientations recorded non-significant results at $p > 0.1$, suggesting that the homogeneity of variance assumption was not violated. Between-Subject Effects results are summarised in Table 8.19.

Table 8.19: Between-Subject Effects Results for Credit Evaluation Orientations by Bank Types

Credit Evaluation Orientations	F	Sig
Performance and profit	3.915	0 .049
Environmental and ethical	16.066	0.0001***
Additional	0 .771	0 .381

*** p < 0.001

The results pointed to statistically significant differences across the two bank groups with respect to environmental and ethical credit evaluation orientation F (1, 223) = 16.066, p < 0.01). There were no significant differences across bank types for performance and profit and additional measure credit evaluation orientations. The means and standard deviations are reported in Table 8.20.

Table 8.20: Descriptive Statistics for Credit Evaluation Orientations by Bank Types

Credit Evaluation Orientations	Conventional Bank	Islamic Bank
Performance and Profit	22.95(2.16)	23.50(1.70)
Environmental and Ethical	13.44(2.78)	15.00(2.89)
Additional	7.01(1.34)	7.18(1.36)

The results indicated that environmental and ethical credit evaluation orientation differed significantly among managers affiliated to conventional and Islamic banks. Table 8.20 shows that this credit evaluation orientation achieved a significantly higher mean score (M=15.00) among managers affiliated to Islamic banks than among those affiliated to conventional banks (M = 13.44).

8.2.6 Testing of Hypothesis H1 (f)

To test hypothesis H1 (f), Multivariate Analysis of Variance (MANOVA) was performed using bank nationalities as the independent variable, with two multiple levels: Local and Foreign Bank and credit evaluation orientations (performance and profit, environmental and ethical, and additional measure) as dependent variables. Prior to interpreting the results, the assumption of homogeneity of variance and covariance was examined using the Box's M test.

Table 8.21: Box's M Test of Equality of Covariance Matrices

Box's M	10.843
F	1.749
df 1	6.0
df 2	22263.694
Sig	0.105

The test turned out to be insignificant at the $p < 0.1$ level (Box's M = 10.843, F = 1.749, p = 0.105) (see Table 8.21), suggesting the covariance matrices were roughly equal and the assumption was tenable.

Table 8.22: MANOVA Results for Credit Evaluation Orientations by Bank Nationalities

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta squared
Pillai's Trace	0.060	4.720	3.0	221.000	0.003	0.06
Wilks' Lambda	0.940	4.720	3.0	221.000	0.003	0.06

The MANOVA test results are presented in Table 8.22. Based on the results, hypothesis H1 (f) was accepted since there was a significant difference in credit evaluation orientations among managers affiliated to banks with different nationalities. Pillai's Trace test and Wilks' Lambda test were used to assess the overall multivariate relationship. As displayed in Table

8.22, there was a statistically significant difference in credit evaluation orientations (Pillai's Trace = 0.060, $F (3, 221) = 4.720$, $p < 0.01$; Wilks' Lambda = 0.940, $F (3, 221) = 4.720$, $p < 0.01$. The effect size of this multivariate relationship was 0.06, thus, hypothesis H1 (f) was supported. Further testing was needed to further examine the effect of bank nationalities on differences in attitude towards credit evaluation orientations among managers. Since this investigation involved only two independent variables, 'Test of Between-Subject Effects' was applied in order to assess if there were any differences between bank nationalities and credit evaluation orientations. Levene's Test of Equality of Error Variances was conducted to ascertain whether the data violated the assumption of homogeneity of variance-covariance matrices. Tabachnick and Fidell (2007) stated that an alpha of 0.025 or 0.01 indicates if the data violates the assumption of equality of variances. Based on Levene's Test, all three dependent variables recorded a non-significant result at the $p > 0.1$, suggesting that the homogeneity of variance assumption was not violated. Between-Subject Effects results are summarised in Table 8.23.

Table 8.23: Test of Between-Subjects Effects of Credit Evaluation Orientations and Bank Nationalities

Credit Evaluation Orientations	F	Sig	Partial Eta Squared
Performance and profit	0.157	0.692	0.001
Environmental and ethical	10.247	0.002***	0.044
Additional	0.828	0.364	0.004

** $p < 0.05$; *** $p < 0.01$

The results pointed to a statistically significant difference between bank nationalities and 'environmental and ethical' credit evaluation orientation, $F (1, 223) = 10.247$, $p < 0.01$, partial eta squared = 0.044). There was no significant difference between bank nationalities

and performance and profit and additional measure credit evaluation orientations. The means and standard deviations are reported in Table 8.24.

Table 8.24: Descriptive Statistics for Credit Evaluation Orientations by Bank Nationalities

Credit Evaluation Orientations	Local Bank	Foreign Bank
Performance and Profit	23.13(2.02)	23.30(2.00)
Environmental and Ethical	13.76(2.84)	15.42(2.87)
Additional	7.11(1.32)	6.90(1.47)

Table 8.24 shows that managers affiliated to foreign banks rated the environmental and ethical credit evaluation orientation significantly higher (M =15.42) than those affiliated to local banks (M= 13.76).

Based on the above analysis, all of the hypotheses were accepted. Table 8.25 below presents a summary of the results. This table shows that differences in respondents' racial groups, religions, and their employer banks' profiles, natural environmental management strategies, types, and nationalities had an influence on credit evaluation orientations.

Table 8.25: Summary of the Credit Evaluation Orientation Results

Hypothesis	Result	Interpretation
H1 (a)	Accepted	There are significant differences in credit evaluation orientations among managers affiliated to different racial groups.
H1 (b)	Accepted	There are significant differences in credit evaluation orientations among managers affiliated to different religions.
H1 (c)	Accepted	There are significant differences in credit evaluation orientations among managers affiliated to different bank profiles.
H1 (d)	Accepted	There are significant differences in credit evaluation orientations among managers affiliated to different environmental management commitment strategies.

H1 (e)	Accepted	There are significant differences in credit evaluation orientations among managers affiliated to different bank types.
H1 (f)	Accepted	There are significant differences in credit orientations among managers affiliated to different bank nationalities.

8.3 Hypotheses for Perceptions of Stakeholder Groups

The hypotheses as per section 6.7.3 are as follows:

H2 (a): There are significant differences in stakeholder groups' orientations among managers affiliated to different racial groups.

H2 (b): There are significant differences in stakeholder groups' orientations among managers affiliated to different religions.

H2 (c): There are significant differences in of stakeholder groups' orientations among managers affiliated to different bank profiles.

H2 (d): There are significant differences in stakeholder groups' orientations among managers affiliated to different environmental management commitment strategies.

H2 (e): There are significant differences in stakeholder groups' orientations among managers affiliated to different bank types.

H2 (f): There are significant differences in stakeholder groups' orientations among managers affiliated to different bank nationalities.

8.3.1 Testing of Hypothesis H2 (a)

To test hypothesis H2 (a), Multivariate Analysis of Variance (MANOVA) was undertaken using three stakeholder groups (primary, secondary and regulatory) as dependent variables and racial group affiliation as the independent variable with three multiple levels: Malay, Chinese and Indian. Due to disparity in sample size among the three racial groups, Box's M test of the assumption of homogeneity of variance-covariance was run.

Table 8.26: Box's M Test of Equality of Covariance Matrices

Box's M	22.675
F	1.761
df 1	12.0
df 2	3135.694
Sig	0.049

The test resulted turned out to be insignificant at the 0.01 level (Box's M = 22.675, F = 1.761, p = 0.049 (see Table 8.26). There was therefore no reason to believe that variances between the three racial groups significantly differed.

Table 8.27: MANOVA Results for Stakeholder Groups' Orientations by Racial Groups

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.025	0.918	6.0	442.0	0.482	0.012
Wilks' Lambda	0.975	0.919	6.0	440.0	0.481	0.012

The MANOVA results are displayed in Table 8.27. Pillai's Trace and Wilks' Lambda tests were used to assess the overall multivariate relationship. The results indicated that the test results were not significant (Pillai's Trace = 0.025, F (6, 442) = 0.918, p > 0.1; Wilks' Lambda = 0.975, F (6, 440) = 0.919, p > 0.1. There were no significant differences in perceptions of stakeholders groups' orientations among bank managers affiliated to different racial groups, and no further testing was needed. Hypothesis H2 (a) was not supported. The means and standard deviations are reported in Table 8.28.

Table 8.28: Descriptive Statistics for Stakeholder Groups' Orientations by Racial Groups

Stakeholder Group	Malay	Chinese	India
Regulatory	4.58(0.55)	4.48(0.76)	4.82(0.40)
Primary	11.36(2.13)	11.06(1.91)	12.09(2.30)
Secondary	23.11(3.94)	22.67(3.20)	24.45(2.70)

8.3.2 Testing of Hypothesis H2 (b)

To test hypothesis H2 (b), Multivariate Analysis of Variance (MANOVA) was undertaken using the three stakeholder groups (primary, secondary and regulatory) as dependent variables and religions as an independent variable, with four multiple levels: Islam, Buddhism, Christianity, and Hinduism. Due to disparity in sample size among the four religions, Box's M test of homogeneity of variance-covariance assumption was run.

Table 8.29: Box's M Test of Equality of Covariance Matrices

Box's M	28.154
F	1.431
df 1	18.0
df 2	2940.89
Sig	0.107

The test turned out to be insignificant at the 0.1 level (Box's M = 28.154, F = 1.431, p = 0.107. There was therefore no reason to believe that the variances between the four religion groups differed significantly. The results are presented in Table 8.29.

Table 8.30: MANOVA Results for Stakeholder Groups' Orientations by Religions

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.033	0.827	9.0	663.000	0.591	0.011
Wilks' Lambda	0.967	0.830	9.0	533.139	0.588	0.011

The MANOVA results are displayed in Table 8.30. Pillai's Trace test and Wilks' Lambda test were used to assess the overall multivariate relationship. The Pillai's Trace and Wilks' Lambda results were not significant (Pillai's Trace = 0.033, $F(9, 663) = 0.827$, $p > 0.1$; Wilks' Lambda = 0.967, $F(9, 533.139) = 0.83$, $p > 0.1$, therefore, since there were no significant differences in perceptions of stakeholder groups' orientations among managers affiliated to different religions, no further testing was needed. Hypothesis H2 (b) was not supported. The means and standard deviations are shown in Table 8.31.

Table 8.31: Descriptive Statistics for Stakeholder Groups Orientations by Religion

Stakeholder Group	Islam	Christian	Buddhist	Hindu
Regulatory	4.58 (0.54)	4.57(0.93)	4.40(0.67)	4.88(0.35)
Primary	11.37(2.12)	11.38(2.18)	10.90(1.87)	12.13(2.23)
Secondary	23.10(3.91)	23.29(3.42)	22.64 (3.33)	23.75(2.19)

8.3.3 Testing of Hypothesis H2 (c)

To test hypothesis H2 (c), Multivariate Analysis of Variance (MANOVA) was undertaken using the three stakeholder groups (primary, secondary and regulatory) as dependent variables and bank profiles as an independent variable with seven multiple levels: local conventional bank, fully-fledged Islamic bank, Islamic bank subsidiary of local conventional bank, Islamic bank subsidiary of foreign bank, foreign Islamic bank, foreign conventional bank, and investment bank. Box's M test of homogeneity of variance-covariance assumption was run.

Table 8.32: Box's M Test of Equality of Covariance Matrices

Box's M	48.119
F	1.225
df 1	36.0
df 2	6391.438
Sig	0.167

The test turned out to be insignificant at the 0.1 level (Box's M = 48.119, F = 1.225, p = 0.167) (see Table 8.32). There was therefore no reason to believe that variances between the seven bank profiles differed significantly.

Table 8.33: MANOVA Result for Stakeholder Groups' Orientations by Bank Profiles

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.090	1.120	18.0	654.0	0.327	0.03
Wilks' Lambda	0.912	1.123	18.0	611.426	0.325	0.03

The MANOVA results are displayed in Table 8.33. The Pillai's Trace and Wilks' Lambda test results were not significant (Pillai's Trace = 0.09, $F(18, 654) = 1.120$, $p > 0.1$; Wilks' Lambda = 0.912, $F(18, 611.426) = 1.123$, $p > 0.1$. There were therefore no significant differences in perceptions of stakeholder groups's orientations among managers affiliated to different bank profiles, and no further test was needed. Hypothesis H2 (c) was not supported. The means and standard deviations are shown in Table 8.34.

Table 8.34: Descriptive Statistics for Stakeholder Groups' Orientations by Bank Profiles

Stakeholder Groups	Local Conventional Bank	Fully-Fledged Islamic Bank	Islamic Bank Subsidiary of Local Convention al Bank	Islamic Bank Subsidiary of Foreign Bank	Foreign Bank	Foreign Islamic Bank	Investment Bank
Regulatory	4.52(0.66)	4.52(0.55)	4.65(0.57)	4.71(0.49)	4.47(0.52)	4.79(0.43)	4.60(0.71)
Primary	10.92(2.21)	11.77(1.87)	10.74(2.05)	12.14(1.77)	11.53(2.17)	12.36(1.78)	11.60(1.83)
Secondary	22.64(3.54)	23.77(3.86)	22.17(4.41)	25.71(2.50)	22.80(5.12)	24.07(3.12)	23.04(2.37)

8.3.4 Testing of Hypothesis H2 (d)

To test hypothesis H2 (d), Multivariate Analysis of Variance (MANOVA) was performed using the three stakeholders groups (regulatory, primary and secondary) as dependent variables and environmental management commitment strategies as an independent variable, with three multiple levels: reactive, defensive and proactive. Box's M test was run to examine whether the assumption of homogeneity of variance and covariance was equal across the stakeholders groups. The test turned out to be insignificant at the 0.01 level (Box's M = 24.698, F 1.985, $p = 0.052$) (see Table 8.35), suggesting that the covariance matrices were roughly equal and the assumption was tenable.

Table 8.35: Box's M Test of Equality of Covariance Matrices

Box's M	24.698
F	1.985
df 1	12.0
df 2	16248.504
Sig	0.052

As presented in Table 8.36, MANOVA results pointed to a significant effect of environmental management commitment strategies on managers' perceptions of stakeholder groups (Pillai's Trace = 0.088, $F(6, 442) = 3.379$, $p < 0.01$; Wilks' Lambda = 0.914, F (6,

440) = 3.382, $p < 0.01$. The result supported the empirical findings reported for hypothesis H2 (d). There were significant differences in the perceptions of stakeholders groups' orientations among managers affiliated to banks with different environmental management commitment strategies. The effect size of this multivariate relationship was 0.044.

Table 8.36: MANOVA Results for Stakeholder Groups' Orientations by Environmental Management Commitment Strategies

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.088	3.379	6.0	442	0.003	0.044
Wilks' Lambda	0.914	3.382	6.0	440	0.003	0.044

Statistically significant MANOVA results were followed by univariate ANOVA tests to examine whether the three stakeholder groups were evaluated differently according to managers' employer banks' environmental management commitment strategies. The Levene's statistic was significant at the $p < 0.05$ level for regulatory stakeholder. For primary and secondary stakeholders, Levene's statistic was not significant at the $p < 0.05$ level, suggesting that the data met the homogeneity of variance assumption.

Table 8.37: ANOVA Results for Stakeholder Groups' Orientations by Environmental Management Commitment Strategies

Stakeholder Group	F	Sig
Regulatory	1.951	0.09
Primary	7.513	0.001***
Secondary	3.583	0.029**

** $p < 0.05$; *** $p < 0.01$

The one way ANOVA results are displayed in table 8.37. Statistically, significant differences were noted with regard to primary stakeholder (F (2, 222) = 7.513, $p < 0.01$ and secondary

stakeholder groups ($F (2, 222) = 3.583$, $p < 0.05$. No significant differences were noted with regard to regulatory stakeholder. The means and standard deviations are reported in Table 8.38.

Table 8.38: Descriptive Statistics for Stakeholder Groups' Orientations by Environmental Management Commitment Strategies

	Reactive	Defensive	Proactive
Regulatory	4.60(0.65)	4.50(0.61)	4.77(0.43)
Primary	10.71(2.06)	11.50(2.05)	12.46(1.71)
Secondary	22.68(3.92)	22.95(3.70)	25.00(2.14)

Paired comparisons were undertaken to assess whether there were significant differences in means for primary stakeholder and secondary stakeholder groups across the three environmental management commitment strategies groups. The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis since Levene's F test indicated that the error variance of the dependent variable was equal across the three strategies groups.

With regard to the primary stakeholder group, a significant difference was found in the perceptions of managers affiliated to banks with a reactive and defensive environmental management commitment profile ($p = 0.021$), and a reactive and proactive environmental management commitment strategy ($p = 0.001$). An inspection of the mean scores indicated that managers affiliated to banks with a defensive environmental management strategy rated the primary stakeholder group significantly higher ($M = 11.50$) than those affiliated to banks with a reactive environmental management commitment strategy ($M = 10.71$). Further, managers affiliated to banks with a proactive profile rated the primary stakeholder group

significantly higher (M = 12.46) than managers affiliated to banks with a reactive strategy (M = 10.71).

With regard to the secondary stakeholder group, there were significant differences in the perceptions of managers affiliated to banks with a proactive and defensive strategy (p = 0.043), and a proactive and reactive strategy (p = 0.0024). A comparison of means showed that managers affiliated to banks with a proactive strategy rated the secondary stakeholder group significantly higher (M =25.00) than those affiliated to banks with a defensive strategy (M = 22.95) and with a reactive strategy (M = 22.68) (see Table 8.38).

8.3.5 Testing of Hypothesis H2 (e)

To test hypothesis H2 (e), Multivariate Analysis of Variance (MANOVA) was undertaken using the three stakeholder groups (primary, secondary and regulatory) as dependent variables and bank types as an independent variable with two multiple levels: Islamic and Conventional bank. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.39: Box's M Test of Equality of Covariance Matrices

Box's M	10.955
F	1.797
df 1	6.0
df 2	208978.109
Sig	0.095

The test turned out to be insignificant at the 0.05 level (Box's M = 10.955, F = 1.797, p = 0.095) (see Table 8.39). Thus, there was no reason to believe that the variances between the two bank types significantly differed.

Table 8.40: MANOVA Results for Stakeholder Groups' Orientations by Bank Types

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.003	0.194	3.000	221.000	0.90	0.003
Wilks' Lambda	0.997	0.194	3.000	221.000	0.90	0.003

The MANOVA results are displayed in Table 8.40. The Pillai's Trace and Wilks' Lambda test results were not significant (Pillai's Trace = 0.003, F (3, 221) = 0.194, p > 0.1; Wilks' Lambda = 0.997, F (3, 221) = 0.194, p > 0.1. Thus, there were no significant differences in perceptions of stakeholder groups' orientations among managers affiliated to different bank types, and no further test was needed. Hypothesis H2 (e) was not supported. The means and standard deviations are reported in Table 8.41.

Table 8.41: Descriptive Statistics for Stakeholder Groups' Orientations by Bank Types

Stakeholder Group	Conventional Bank	Islamic Bank
Regulatory	4.57(0.65)	4.54(0.55)
Primary	11.24(2.14)	11.42(2.00)
Secondary	23.00(4.00)	23.14(4.18)

8.3.6 Testing of Hypothesis H2 (f)

To test hypothesis H2 (f), Multivariate Analysis of Variance (MANOVA) was undertaken using the three stakeholder groups (primary, secondary and regulatory) as dependent variables and bank nationalities as an independent variable with two multiple levels: local bank and foreign bank. Box's M test of homogeneity of variance-covariance assumption was

run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.42: Box's M Test of Equality of Covariance Matrices

Box's M	13.409
F	2.163
df 1	6
df 2	22263.694
Sig	0.043

The test turned out to be insignificant at the 0.01 level (Box's M = 13.409, F = 2.163, p = 0.043) (see Table 8.42). Thus, there was no reason to believe that variances in bank nationalities groups significantly differed.

Table 8.43: MANOVA Results for Stakeholder Groups' Orientations by Bank Nationalities

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.022	1.628	3.0	221.0	0.184	0.022
Wilks' Lambda	0.978	1.628	3.0	221.0	0.184	0.022

The MANOVA results are displayed in Table 8.43. The Pillai's Trace and Wilks' Lambda test results were not significant (Pillai's Trace = 0.022, F (3, 221) = 1.628, p > 0.1; Wilks' Lambda = 0.978, F (3, 221) = 1.628, p > 0.1, thus, there were no significant differences in perceptions of stakeholder groups' orientations among managers affiliated to different bank nationalities, and no further test was needed. Hypothesis H2 (f) was not supported. The means and standard deviations are reported in Table 8.44.

Table 8.44: Descriptive Statistics for Stakeholder Groups' Orientations by Bank Nationalities

Stakeholder Groups	Local Bank	Foreign Bank
Regulatory	4.55(0.63)	4.64(.050)
Primary	11.19(2.09)	11.97(1.93)
Secondary	22.90(3.62)	23.86(4.09)

Based on the above analysis of hypothesis H2 (a) through to hypothesis H2 (f), only H2 (d) showed a significant result. The results of the other hypotheses were insignificant. Table 8.45 presents a summary of the hypotheses testing results. Statistically, significant differences were noted with regard to primary stakeholder and secondary stakeholder groups. Managers affiliated to banks with a defensive and a proactive environmental management strategy rated the primary stakeholder group significantly higher than those affiliated to banks with a reactive environmental management commitment strategy. With regard to the secondary stakeholder group, managers affiliated to banks with a proactive strategy rated the secondary stakeholder group significantly higher than those affiliated to banks with a defensive strategy and with a reactive strategy.

The independent variables of racial groups, religions, bank profiles, bank types, and bank nationalities possibly had no significant influence on managers' perceptions of stakeholder groups' orientations because stakeholders in this research were divided into three groups rather than, as in Gago and Antolin's (2004) study, stand-alone individual stakeholders. Moreover, this study focused only on one key issue, namely, environmental risk management and banks' managers appeared unable to differentiate between stakeholder group types in this regard.

Table 8.45: Summary of the Results for Stakeholder Groups' Orientations

Hypothesis	Result	Interpretation
H2 (a)	Rejected	There are no significant differences in stakeholder groups' orientations among managers affiliated to different racial groups.
H2 (b)	Rejected	There are no significant differences in stakeholder groups' orientations among managers affiliated to different religions.
H2 (c)	Rejected	There are no significant differences in stakeholder groups' orientations among managers affiliated to different bank profiles.
H2 (d)	Accepted	There are significant differences in stakeholder groups' orientations among managers affiliated to different environmental management commitment strategies.
H2 (e)	Rejected	There are no significant differences in stakeholder groups' orientations among managers affiliated to different bank types.
H2 (f)	Rejected	There are no significant differences in stakeholder groups' orientations among managers affiliated to different bank nationalities.

8.4 Hypotheses for CSR Orientations

The hypotheses as per section 6.7.4 are as follows:

H3 (a): There are significant differences in CSR orientations among managers affiliated to different racial groups.

H3 (b): There are significant differences in CSR orientations among managers affiliated to different religions.

H3 (c): There are significant differences in CSR orientations among managers affiliated to different bank profiles.

H3 (d): There are significant differences in CSR orientations among managers affiliated to different environmental management commitment strategies.

H3 (e): There are significant differences in CSR orientations among managers affiliated to different bank types.

H3 (f): There are significant differences in CSR orientations among managers affiliated to different bank nationalities.

8.4.1 Testing of Hypothesis H3 (a)

To test hypothesis H3 (a), Multivariate Analysis of Variance (MANOVA) was undertaken using the four CSR orientations (economic, legal, ethical and philanthropic) as dependent variables and racial groups as an independent variable with three multiple levels: Malay, Chinese, and Indian. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.46: Box's M Test of Equality of Covariance Matrices

Box's M	40.785
F	1.851
df 1	20
df 2	2670.036
Sig	0.012

The test turned out to be insignificant at the 0.01 level (Box's M = 40.785, F = 1.85, p = 0.012) (see Table 8.46). There was therefore no reason to believe that variances in the three racial groups significantly differed.

Table 8.47: MANOVA Results for CSR Orientations by Racial Groups

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.178	5.372	8.000	440.0	0.0001	0.089
Wilks' Lambda	0.830	5.361	8.000	438.0	0.0001	0.089

As presented in Table 8.47, MANOVA results indicated a significant overall effect of racial groups on CSR orientations (Pillai's Trace = 0.178, $F(8, 440) = 5.372$, $p < 0.01$; Wilks' Lambda = 0.830, $F(8, 438) = 5.361$, $p < 0.01$. The results were consistent with empirical findings reported for hypothesis H3 (a). There were significant differences in CSR orientations among managers affiliated to different racial groups. The effect size of the multivariate relationship was 0.089.

Statistically significant MANOVA results were followed by univariate ANOVA testing of each dependent variable to examine whether banks' managers' attitude to it differed according to their racial groups. Levene's statistic was significant at the $p < 0.05$ level for economic orientation. For legal, ethical and philanthropic orientations, Levene's statistic was not significant at the $p < 0.05$ level, suggesting that the data met the homogeneity of variance assumption.

Table 8.48: ANOVA Results for CSR Orientations by Racial Groups

CSR Orientations	F	Sig
Economic	6.313	0.007***
Legal	2.764	0.065
Ethical	3.183	0.043**
Philanthropic	1.188	0.307

** $p < 0.05$; *** $p < 0.01$

The one way ANOVA results are displayed in Table 8.48. Statistically, differences existed with regard to economic orientation (Brown-Forsythe $F(2, 222) = 6.313$, $p < 0.01$ and ethical orientation ($F(2, 222) = 3.183$, $p < 0.05$. No significant differences were noted with regard to legal and philanthropic orientations. The means and standard deviations are reported in Table 8.49.

Table 8.49: Descriptive Statistics for CSR Orientations by Racial Groups

CSR Orientations	Malay	Chinese	India
Economic	16.83(2.33)	15.24(2.97)	14.55(4.00)
Legal	15.54(1.71)	15.63(1.64)	14.36(1.50)
Ethical	15.48(2.20)	15.17(2.61)	17.09(2.26)
Philanthropic	15.23(1.98)	15.06(2.41)	16.09(2.70)

Paired comparison tests were conducted on the economic and ethical orientations in order to assess whether there were significant differences in means across the three racial groups. The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis, since Levene's F test indicated that the error variance of the dependent variables was equal across the three groups. The Tamhane 2 method used for multiple comparisons was employed to perform the post-hoc analysis for economic orientation since it failed the test of homogeneity of variance.

With regard to economic orientation, a significant difference was found between Malay and Indian managers ($p = 0.001$). An inspection of the mean scores for CSR orientations suggested that Malay managers ($M = 16.83$) rated economic orientation significantly higher than Indian managers ($M = 14.55$). With regard to ethical orientation, Indian managers rated it significantly higher ($M = 17.09$) than Chinese managers ($M = 15.17$) at $p = 0.033$.

8.4.2 Testing of Hypothesis H3 (b)

To test hypothesis H3 (b), Multivariate Analysis of Variance (MANOVA) was undertaken using the four CSR orientations (economic, legal, ethical and philanthropic) as dependent variables and religions as an independent variable, with four multiple levels: Islam, Buddhism, Christianity, and Hinduism. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.50: Box's M Test of Equality of Covariance Matrices

Box's M	51.515
F	1.517
df 1	30.0
df 2	2549.536
Sig	0.036

The test turned out to be insignificant at the 0.01 level (Box's M = 51.515, F = 1.517, p = 0.036) (see Table 8.50). There was therefore no reason to believe that variances between the three religions significantly differed.

Table 8.51: MANOVA Results for CSR Orientations by Religions

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.162	3.142	12.00	660.0	0.0001	0.054
Wilks' Lambda	0.845	3.153	12.00	577.065	0.0001	0.054

As presented in Table 8.51, MANOVA results indicated a significant overall effect of religions on CSR orientations (Pillai's Trace = 0.162, F (12, 660) = 3.142, $p < 0.01$; Wilks' Lambda = 0.845, F (12, 577.065) = 3.153, $p < 0.01$. The results supported empirical findings

reported for hypothesis H3 (b). There were significant differences in CSR orientations among managers affiliated to different religions. The effect size of this multivariate relationship was 0.054.

Statistically significant MANOVA results were followed by univariate ANOVA testing of each dependent variable to further examine the effect of religions on bank managers' attitude to CSR orientations. Levene's statistic was not significant at the $p < 0.05$ level, suggesting that the data met the homogeneity of variance assumption.

Table 8.52: ANOVA Results for CSR Orientations by Religions

CSR Orientations	F	Sig
Economic	7.165	0.0001***
Legal	1.823	0.144
Ethical	1.608	0.188
Philanthropic	0.395	0.754

** p < 0.05 ; *** p < 0.01

Based on one way ANOVA analysis, it was found that, statistically, differences existed with regard to economic orientation ($F (3, 221) = 7.165$, $p < 0.01$. No significant differences were noted with regard to ethical, legal and philanthropic orientations. The means and standard deviations are reported in Table 8.53.

Table 8.53: Descriptive Statistics for CSR Orientations by Religions

CSR Orientations	Islam	Christianity	Buddhism	Hinduism
Economic	16.82(2.31)	15.00(3.11)	15.17(3.23)	14.88(3.49)
Legal	15.50(1.72)	16.09(1.55)	15.45(1.63)	14.50(1.51)
Ethical	15.46(2.20)	15.95(2.78)	15.02(2.63)	16.75(2.19)
Philanthropic	15.20(1.98)	15.19(2.94)	15.10(2.22)	16.00(2.73)

Paired comparisons were conducted on economic orientation in order to assess whether there were significant differences in the means across the four religions. The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis since Levene's F test indicated that the error variance of the dependent variables was equal across the four groups.

A significant difference was found between "Islam-Christianity" ($p = 0.016$) and "Islam-Buddhism" ($p = 0.002$). As inspection of the mean scores for economic CSR orientation suggested that managers affiliated to Islam rated it significantly higher ($M = 16.82$) than managers affiliated to Buddhism ($M = 15.17$) and Christianity ($M = 15.00$).

8.4.3 Test for Hypothesis H3 (c)

To test hypothesis H3 (c), Multivariate Analysis of Variance (MANOVA) was undertaken using the four CSR orientations (economic, legal, ethical and philanthropic) as dependent variables and bank profiles as an independent variable with seven multiple levels: local conventional bank, fully-fledged Islamic bank, Islamic bank subsidiary of local conventional bank, foreign conventional bank, Islamic bank subsidiary of foreign bank, foreign Islamic bank, and investment bank. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.54: Box's M Test of Equality of Covariance Matrices

Box's M	125.087
F	1.848
df 1	60.0
df 2	5635.494
Sig	0.0001

The test turned out to be significant at the 0.0001 level (Box's M = 125.087, F = 1.848, p = 0.0001) (see Table 8.54). The significant F indicated that there were significant differences among bank profiles on a linear combination of the four dependent variables. However, this was not a problem since both Wilks' Lambda test and Pillai's Trace test were used. Pillai's Trace test is very robust and not highly linked to assumptions about the normality of the distribution of the data.

Table 8.55: MANOVA Results for CSR Orientations by Bank Profiles

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.340	3.372	24.0	872.0	0.0001	0.085
Wilks' Lambda	0.676	3.716	24.0	751.255	0.0001	0.093

As presented in Table 8.55, MANOVA results indicated a significant overall effect of bank profiles on CSR orientations (Pillai's Trace = 0.340, F (24, 872) = 3.372, p < 0.01; Wilks' Lambda = 0.676, F (24, 751.255) = 3.716, p < 0.01. The results supported the empirical findings reported for hypothesis H3 (c). There were significant differences in CSR orientations among managers affiliated to different bank profiles. The effect size of this multivariate relationship was 0.085 and 0.093 for Pillai's Trace test and Wilks' Lambda test, respectively.

Statistically significant MANOVA results were followed with univariate ANOVA testing of each dependent variable to further examine the effect of bank profiles on differences in attitude towards CSR orientations among managers. Levene's statistic was not significant at p > 0.05 for three of the CSR orientations (economic, ethical, and philanthropic). Levene's

statistic was not significant at $p > 0.05$, suggesting that the data met the homogeneity of variance assumption. However, Levene's statistic was significant for legal orientation at $p < 0.05$.

Table 8.56: ANOVA Results for CSR Orientations by Bank Profiles

CSR Orientations	F	Sig
Economic	12.651	0.0001***
Legal	1.024	0.416
Ethical	1.020	0.413
Philanthropic	0.872	0.516

** p < 0.05 ; *** p < 0.01

One way ANOVA analysis indicated that, statistically, differences existed with regard to economic orientation ($F (6, 218) = 12.651$, $p < 0.01$). No significant differences were noted with regard to ethical, legal and philanthropic orientations. The means and standard deviations are reported in Table 8.57.

Table 8.57: Descriptive Statistics for CSR Orientations by Bank Profiles

CSR Orientations	Local Conventional Bank	Fully-Fledged Islamic Bank	Islamic Bank Subsidiary of Local Bank	Islamic Bank Subsidiary of Foreign Bank	Foreign Islamic Bank	Foreign Conventional Bank	Investment Bank
Economic	17.09(0.24)	16.64(0.36)	16.09(0.50)	11.29(0.90)	16.08(0.62)	12.64(0.64)	16.20(0.48)
Legal	15.50(0.17)	15.73(0.25)	15.13(0.35)	15.29(0.64)	15.58(0.44)	16.29(0.45)	15.00(0.34)
Ethical	15.45(0.24)	15.55(0.35)	15.00(0.50)	16.71(0.89)	15.00(0.61)	16.43(0.63)	15.24(0.47)
Philanthropic	15.32(0.22)	15.21(0.32)	14.83(0.45)	15.43(0.81)	14.67(0.56)	16.14(0.58)	14.88(0.43)

Paired comparison tests were conducted on economic orientation to assess whether there were significant differences in means across the seven bank profiles. The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis, since Levene's F test indicated that the error variance of the dependent variables was equal across the seven bank profiles groups.

A significant difference was found between foreign conventional bank and local conventional bank (p = 0.002), fully-fledged Islamic bank (p = 0.007), Islamic bank subsidiary of local conventional bank (p = 0.046) and investment bank (p = 0.022). An analysis of mean scores indicated that foreign conventional bank had a significantly lower mean score (M = 12.64) for economic orientation than local conventional bank (M=17.09), fully-fledged Islamic bank (M=16.64), Islamic bank subsidiary of local conventional bank (M = 16.09) and investment bank (M = 16.20). The findings thus suggested that foreign conventional banks focused less on economic orientations than other bank profiles.

A significant difference was also found between Islamic bank subsidiary of foreign conventional bank and local conventional bank (p = 0.027) and fully-fledged Islamic bank (p = 0.037). An analysis of means showed that Islamic bank subsidiary of foreign conventional bank had a lower mean (M = 11.29) than local conventional bank (17.09) and fully-fledged Islamic bank (M = 16.64).

8.4.4 Testing of Hypothesis H3 (d)

To test hypothesis H3 (d), Multivariate Analysis of Variance (MANOVA) was undertaken using the four CSR orientations (economic, legal, ethical, and philanthropic) as dependent variables and bank environmental management commitment strategies as an independent variable with three multiple levels: reactive, defensive and proactive. To test the assumption of homogeneity of variance-covariance matrices, Box's M test of homogeneity of variance-covariance assumption was run.

Table 8.58: Box's M Test of Equality of Covariance Matrices

Box's M	71.062
F	3.385
df 1	20.0
df 2	13662.015
Sig	0.0001

The test turned out to be significant at the 0.0001 level (Box's M = 71.062, F = 3.385, p = 0.0001) (see Table 8.58). The significant F indicated that there were significant differences among environmental management commitment strategies on a linear combination of the three dependent variables. However, this was not a problem since both Wilks' Lambda test and Pillai's Trace test were used. Pillai's Trace test is very robust and not highly linked to assumptions about the normality of the distribution of the data.

Table 8.59: MANOVA Results for CSR Orientations by Environmental Management Commitment Strategies

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.251	7.879	8.000	440.000	0.0001	0.125
Wilks' Lambda	0.754	8.293	8.000	438.000	0.0001	0.132

As presented in Table 8.59, MANOVA results indicated a significant overall effect of environmental management commitment strategies on CSR orientations (Pillai's Trace = 0.251, $F(8, 440) = 7.879$, $p < 0.01$; Wilks' Lambda = 0.754, $F(8, 438) = 8.293$, $p < 0.01$. The results supported the empirical findings reported for hypothesis H3 (d). There were significant differences in attitude towards CSR orientations among managers affiliated to banks with different environmental management commitment strategies. The effect size of

this multivariate relationship was 0.125 and 0.132 for Pillai's Trace test and Wilks' Lambda test, respectively.

Statistically significant MANOVA results were followed by univariate ANOVA testing of each dependent variable to further examine the effect of environmental management commitment strategies on managers' attitude towards CSR orientations. Levene's statistic was not significant at $p > 0.05$, for three CSR orientations (legal, ethical, and philanthropic). However, it was significant for economic orientation. For this reason, we used the Brown-Forsythe test.

Table 8.60: ANOVA Results for CSR Orientations by Environmental Management Commitment Strategies

CSR Orientations	F	Sig
Economic	16.61	0.0001***
Legal	0.435	0.648
Ethical	4.597	0.011**
Philanthropic	3.117	0.046**

** $p < 0.05$; *** $p < 0.01$

One way ANOVA analysis indicated that, statistically, differences existed with regard to economic (Brown-Forsythe (2, 222) = 16.61, $p < 0.01$), ethical (F = (2, 222) = 4.597, $p < 0.05$) and philanthropic ($F (2, 222) = 3.117$, $p < 0.05$) orientations. No significant differences were noted with regard to legal orientation. The means and standard deviations are reported in Table 8.61.

Table 8.61: Descriptive Statistics for CSR Orientations by Environmental Management Commitment Strategies

CSR Orientations	Reactive	Defensive	Proactive
Economic	16.23(0.28)	16.92(0.22)	12.86(0.53)
Legal	15.56(0.19)	15.43(0.15)	15.77(0.36)
Ethical	15.09(0.26)	15.49(0.21)	16.77(0.49)
Philanthropic	15.03(0.24)	15.14(0.19)	16.27(0.45)

Paired comparisons tests were conducted on economic, ethical, and philanthropic orientations to assess whether there were significant differences in the means across the three environmental management commitment strategies groups. Since economic orientation had failed to meet the assumption of equal variance, Tamhane 2 test was used to perform the post-hoc analysis. A significant difference was found between proactive environmental management commitment strategy and defensive environmental management commitment strategy ($p = 0.0001$) and reactive environmental management commitment strategy ($p = 0.001$). An analysis of mean scores showed that defensive environmental management commitment strategy had the highest mean score ($M = 16.92$) followed by reactive environmental management commitment strategy ($M = 16.23$), and proactive environmental management commitment strategy had the lowest mean score ($M = 12.86$).

The Tukey HSD method for multiple comparisons was employed to perform the post-hoc analysis, since Levene's F test indicated that the error of variance of the two variables philanthropic orientation and ethical orientation was equal. For ethical orientation, there was a significant difference between proactive and defensive environmental management commitment strategy ($p = 0.045$) and proactive and reactive environmental management commitment strategy ($p = 0.008$). There was no significant difference between reactive and defensive environmental management commitment strategy. Analysis of mean scores

showed that proactive environmental management commitment strategy had a higher score (M = 16.77) than defensive environmental management commitment strategy (M = 15.49) and reactive environmental management commitment strategy (15.09).

For philanthropic orientation, there was a significant difference between proactive environmental management commitment strategy and reactive environmental management commitment strategy (p = 0.04). The analysis of mean scores showed that proactive environmental management commitment strategy had a higher mean score (M = 16.27) than reactive environmental management commitment strategy (M = 15.03).

8.4.5 Test for Hypothesis H3 (e)

To test hypothesis H3 (e), Multivariate Analysis of Variance (MANOVA) was undertaken using the four CSR orientations (economic, legal, ethical, and philanthropic) as dependent variables and bank types as an independent variable with two multiple levels: conventional bank and Islamic bank. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.62: Box's M Test of Equality of Covariance Matrices

Box's M	15.024
F	1.471
df 1	10.0
df 2	147589.139
Sig	0.143

The test turned out to be insignificant at the 0.1 level (Box's M = 15.024, F = 1.471, p = 0.143) (see Table 8.62). There was therefore no reason to believe that variances between the two bank types significantly differed.

Table 8.63: MANOVA Results for CSR Orientations by Bank Types

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.021	1.165	4.000	220.0	0.327	0.021
Wilks' Lambda	0.979	1.165	4.000	220.0	0.327	0.021

The MANOVA results are displayed in Table 8.63. The Pillai's Trace and Wilks' Lambda tests results were not significant (Pillai's Trace = 0.021, F (4, 220) = 1.165, p > 0.1; Wilks' Lambda = 0.979, F (4, 220) = 1.165, p > 0.1, therefore, there were no significant differences in attitude towards CSR orientations among managers affiliated to different bank types, and no further test was needed. Hypothesis H3 (e) was not supported. The means and standard deviations are reported in Table 8.64.

Table 8.64: Descriptive Statistics for CSR Orientations by Bank Types

CSR Orientations	Conventional Bank	Islamic Bank
Economic	12.26 (2.50)	12.45 (2.79)
Legal	15.51 (1.50)	15.52 (1.98)
Ethical	15.53 (2.32)	15.38 (2.39)
Philanthropic	15.36 (2.11)	14.96 (2.21)

8.4.6 Testing of Hypothesis H3 (f)

To test hypothesis H3 (f), Multivariate Analysis of Variance (MANOVA) was undertaken using the four stakeholder orientations (economic, legal, ethical and philanthropic) as

dependent variables and bank nationalities affiliation as an independent variable with two multiple levels: local bank and foreign bank. Box's M test of homogeneity of variance-covariance assumption was run to test whether the data violated the assumption of homogeneity of variance-covariance matrices.

Table 8.65: Box's M Test of Equality of Covariance Matrices

Box's M	27.928
F	2.673
df 1	10.0
df 2	17216.76
Sig	0.003

The test turned out to be insignificant at the 0.001 level (Box's M = 27.928, F = 2.673, p = 0.003) (see Table 8.65). Thus, there was no reason to believe that variances between bank nationalities groups significantly differed.

Table 8.66: MANOVA Results for CSR Orientations by Bank Nationalities

Test	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	0.179	11.993	4.0	220.0	0.0001	0.179
Wilks' Lambda	0.821	11.993	4.0	220.0	0.0001	0.179

The MANOVA results are displayed in Table 8.66. Pillai's Trace test and Wilks' Lambda test results were significant (Pillai's Trace = 0.179, $F(4, 220) = 11.993$, $p < 0.01$; Wilks' Lambda = 0.821, $F(4, 220) = 11.993$, $p < 0.01$. Thus, there were significant differences in attitude towards CSR orientations among managers affiliated to foreign and local banks. The effect size of this multivariate relationship was 0.179. Thus, hypothesis H3 (f) was supported and the significant test results necessitated further investigation of each of the two independent variables, namely, foreign bank and local bank. Since only two independent

variables were involved, ‘Test of Between-Subject Effects; was applied to ascertain if there were differences between bank types and CSR orientations. Levene’s Test of Equality of Error Variances was run to assess whether the data violated the assumption of homogeneity of variance-covariance matrices. Tabachnick and Fidell (2007) suggest that an alpha of 0.025 or 0.01 indicates that data have violated the assumption of homogeneity of variance. Based on Levene’s Test, three dependent variables recorded non-significant results at $p > 0.1$ (legal, ethical and philanthropic orientations), suggesting that the homogeneity of variance assumption was not violated. However, economic orientation recorded a significant result at $p < 0.01$. The Between-Subject Effects results are summarised in Table 8.67.

Table 8.67: Between-Subjects Effects Results for CSR Orientations by Bank Nationalities

CSR Orientations	F	Sig	Partial Eta Squared
Economic	41.428	0.000***	0.157
Legal	2.144	0.145	0.10
Ethical	1.360	0.245	0.006
Philanthropic	0.300	0.584	0.001

** $p < 0.05$; *** $p < 0.01$

The results pointed to statistically significant differences in attitude towards economic orientation among managers affiliated to foreign and local banks $F (1, 261) = 41.428$, $p < 0.01$, partial eta squared = 0.157. The means and standard deviations are reported in Table 8.68.

Table 8.68: Descriptive Statistics for CSR Orientations by Bank Nationalities

CSR Orientations	Local Bank	Foreign Bank
Economic	16.75(0.18)	13.81(0.42)
Legal	15.44(0.12)	15.89(0.28)
Ethical	15.39(0.17)	15.89(0.39)
Philanthropic	15.18(0.16)	15.39(0.36)

Analysis of the mean scores for economic orientation showed that local bank had a significantly higher mean score (M = 16.75) than foreign bank (M = 13.81).

Based on the above analysis of hypothesis H3 (a) through to hypothesis H3 (f), all of the hypothesis were accepted except for hypothesis H3 (e) which was rejected. Table 8.69 presents a summary of the results. It shows how differences in racial groups, religions, bank profiles, natural environmental strategies, and bank nationalities influenced bank managers' perceptions of CSR orientations. Hypothesis H3 (e) was possibly rejected because of the mixed findings for H3 (c) where foreign conventional banks had a lower score for economic responsibility than Islamic bank subsidiaries of local conventional banks and fully-fledged Islamic banks, and Islamic bank subsidiaries of foreign conventional banks had a lower score for economic responsibility than local conventional banks. Thus, there were no clear differentations between conventional and Islamic banks' CSR orientations. Accordingly, H3 (e) was rejected.

Table 8.69: Summary of Results for Banks' Managers' Perceptions of CSR Orientations

Hypothesis	Result	Interpretation
H3 (a)	Accepted	There are significant differences in CSR orientations among managers affiliated to different Racial groups.
H3 (b)	Accepted	There are significant differences in CSR orientations among managers affiliated to different religions.
H3 (c)	Accepted	There are significant differences in CSR orientations among managers affiliated to different bank profiles.
H3 (d)	Accepted	There are significant differences in CSR orientations among managers affiliated to different environmental management commitment strategies.
H3 (e)	Rejected	There are no significant differences in CSR orientations among managers affiliated to different bank types.
H3 (f)	Accepted	There are significant differences in CSR orientations among managers affiliated to different bank nationalities.

8.5 Chapter Summary

This chapter has presented the data analysis and findings. It first focused on data analysis and findings relating to credit evaluation orientations divided into 'profit and performance', 'environmental and ethical', and 'additional measure'. It then presented bank managers' perceptions of stakeholder groups' orientations. Managers' attitude to different CSR orientations (economic, legal, ethical and philanthropic) as per Carroll (1979) was then examined.

The aforementioned areas were investigated to ascertain banks' managers' perceptions of them according to racial group affiliation, religious affiliation, employer bank's profile, environmental management commitment strategy, bank type, and nationality. With regard to credit evaluation orientations, managers' religious affiliation, and employer bank's environmental management commitment strategy, type and nationality were found to have a significant effect on their perception of these. Based on the results obtained from the analysis, hypotheses H1 (a) b, H1 (b), H1 (c), H1 (d), H1 (e) and H1 (f) were accepted.

As regards managers' perceptions of stakeholders groups' orientations, only employer bank's environmental management commitment strategy had a significant influence on managers' perceptions of them. Other variables such as racial group affiliation, religious affiliation, and employer bank's profile, type and nationality did not have a significant effect. Thus, based on the results obtained, only hypothesis H2 (d) was accepted and hypotheses H2 (a), H2 (b), H2 (c), H2 (d) and H2 (f) were rejected.

With regard to attitude towards CSR orientations, significant differences were found in managers' perceptions of them according to racial group affiliation, religious affiliation,

employer bank's profile, type, nationality and environmental management commitment strategy. There were no differences according to bank type, whether Islamic or conventional. Based on the results obtained, hypotheses H3 (a), H3 (b), H3 (c), H3 (d) and H3 (f) were accepted while hypothesis H3 (e) was rejected. In the next chapter, multiple regression analysis results will be presented.

CHAPTER NINE

Ordinal Regression Analysis Results

9.1 Introduction

This part of the analysis sought to determine the relationship between independent variables (CSR orientations, credit evaluation orientations, stakeholder groups' orientations, racial groups, religions, bank profiles, environmental commitment management strategies, bank types and bank nationalities) and their influence on banks' managers' project financing decisions. Two specific issues were addressed by the ordinal regression analysis:

1. To identify which variables were more or less important for predicting aspects of the project financing decision.
2. If meaningful relationships between variables were recorded, what was the direction and strength of the relationship between independent variables and project financing decision?

To address the above issues, four sets of variables (credit evaluation orientations, CSR orientations, stakeholder groups' orientations, and demographic factors[6]) were included in the ordinal regression models to predict how banks' managers would make a project financing decision based on six scenarios. The aim was to analyse the influence of demographic factors namely, racial groups, religions, bank types and bank nationalities, on managers' project financing decision-making. The objective of this analysis was to identify the best predictor model for each project financing scenario. Scenarios for analysis are presented in Table 9.1 below).

[6] Demographic factors in this study referred to racial groups, religions, bank profiles, environmental commitment management strategies, bank types and bank nationalities.

Table 9.1: Project Financing Scenarios for Analysis Purposes

No	Scenarios
1	Financing a lawful project that has a positive effect on the natural environment but low profitability to the bank.
2	Financing a lawful project with only break-even return to the bank but positive impact upon the natural environment
3	Financing a lawful project that has a very high risk in terms of potential damage to the natural environment but has a high profit potential
4	Financing a lawful project that is highly profitable and causes environmental damage in the short-term but can be remedied by the borrower in the medium-term/long-term.
5	Financing a lawful project with high potential profit and within acceptable environmental harm criteria but which causes a high level of harm to indigenous people.
6	Financing a lawful project with high potential profit and which is welcomed by indigenous people (job creation) but opposed by environmental NGOs and pressure groups.

Six hypotheses were subsequently proposed in order to identify if there was a significant relationship between religious/Islamic affiliation and each project financing scenario (see section 6.7.5).

H4 Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario one.

H5 Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario two.

H6 Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario three.

H7 Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario four.

H8 Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario five.

H9 Holding all others predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario six.

One of the advantages of ordinal regression analysis is that it allows independent variables from categorical factors or continuous covariates. In this analysis, categorical variables were: (1) racial groups which included Malay, Chinese, and Indian; (2) religions, which included Islam, Hinduism, Christianity, and Buddhism; (3) bank profiles, which included local conventional bank, Islamic bank subsidiary of local conventional bank, local Islamic bank, freign Islamic bank, foreign conventional bank, foreign Islamic bank subsidiary of foreign bank and investment bank; (4) natural environmental management commitment strategies which included proactive, defensive and reactive strategy, (5) bank types, which included conventional bank and Islamic bank; and (6) bank nationalities which included local and foreign.

Continuous covariates were also included, namely: (1) credit evaluation orientations, performance and profit, environmental and ethical, and additional measure; (2) stakeholder groups' orientations namely, primary stakeholder, secondary stakeholder, and regulatory stakeholder; and (3) CSR orientations, namely, economic, legal, ethical, and philanthropic.

9.2 Hypothesis 4

> *"Financing a lawful project that has a positive effect on the natural environment but low profitability to the bank".*

Table 9.2 presents a summary of the test of parallel lines. Based on the test of parallel lines -2 log likelihood null hypothesis model (380.48) did not significantly differ from the -2 log likelihood general model (376.77), (Chi-square = 3.710, df = 21, $p > 0.05$). The non

significant parallel lines test result indicated slopes were sufficiently the same to proceed. The non significant parallel lines test therefore showed that the model was well fitting.

Table 9.2: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	380.480			
General	376.770	3.710	21	1.000

Table 9.3 presents a summary of the model fitting information. Based on the likelihood ratio test, the -2 log likelihood value for the intercept only model (520.749) significantly differed from the corresponding final model (380.48), (Chi-square = 140.269, df = 7, $p < 0.01$). The result indicated that the model was a well fitting model.

Table 9.3: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	520.749			
Final	380.480	140.269	7	0.0001

Table 9.4 presents a summary of goodness of fit. Goodness of fit was not significant based on Pearson (Chi-square = 603.781, df = 565, $p > 0.05$) and Deviance test (Chi-square = 324.854, df = 565, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.4: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	603.781	565	0.125
Deviance	324.854	565	1.000

Table 9.5 presents a summary of Pseudo R^2. Since the Cox and Snell Pseudo R^2 value was 0.464, this suggested that the model was able to explain 46.4% of the variation in scenario one. Nagelkerke Pseudo R^2 value was 0.498, suggesting that the model was able to explain 49.8% of the variation in scenario one. The McFadden Pseudo R^2 value was 0.233, suggesting that the model was able to explain 23.3% of the variation in scenario one.

Table 9.5: Pseudo R^2

Cox and Snell	0.464
Nagelkerke	0.498
McFadden	0.233

Table 9.6 presents a summary of the ordinal regression analysis results for scenario one. As indicated in the parameter estimates in the table, scenario one was significantly related to the differences between Hindu versus Muslim at ($\beta = 1.953$, Wald = 7.023, $p < 0.01$); Christian versus Muslim at ($\beta = 1.113$, Wald = 3.922, $p < 0.05$); bank types, and Islamic versus conventional bank at ($\beta = 1.047$, Wald = 12.147, $p < 0.001$); bank nationalities, and foreign versus local bank at ($\beta = 4.662$, Wald = 73.80, $p < 0.001$).

Table 9.6: Summary of the Ordinal Regression Analysis Results for Scenario One

Location	Estimate	Std. Error	Wald	df	Sig.
Primary Stakeholder	-0.358	0.207	2.996	1	0.083
Ethical	0.163	0.245	0.441	1	0.507
Hindu V Muslim	1.953	0.737	7.023	1	0.008**
Christian V Muslim	1.113	0.562	3.922	1	0.048*
Buddhist V Muslim	-0.508	0.389	1.706	1	0.192
Muslim	0[a]	.	.	0	.
Islamic V Conventional	1.047	0.300	12.147	1	0.0001***
Conventional	0[a]	.	.	0	.
Foreign V Local	4.662	0.543	73.800	1	0.0001***
Local	0[a]	.	.	0	.

Link function: Logit
a. This parameter was set to zero because it was redundant
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The positive sign of the beta coefficient between Hindu versus Muslim suggested that Hindu respondents exhibited more positive attitudes to scenario one than Muslim respondents. The beta coefficient recorded between Christian versus Muslim suggested that Christian respondents exhibited more positive attitudes to scenario one than Muslim respondents. A positive beta coefficient between Islamic versus conventional banks implied that Islamic bank respondents tended to approve project financing as scenario one more than their conventional bank counterparts. The same finding was also recorded between foreign versus local banks, that is to say foreign banks were more likely to approve project financing in scenario one than their local bank counterparts.

9.3 Hypothesis 5

> *"Financing a lawful project with only break-even return to the bank but positive impact upon the natural environment".*

Table 9.7 presents a summary of the test of parallel lines. Based on the test of parallel lines, the -2 log likelihood null hypothesis model (393.208) did not significantly differ from the -2 log likelihood general model (376.798), (Chi-square = 16.410, df = 27, $p > 0.05$). The non significant parallel lines test result indicated slopes were sufficiently the same to proceed. The non significant parallel lines test therefore indicated that the model was well fitting.

Table 9.7: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	393.208			
General	376.798	16.410	27	0.945

Table 9.8 presents a summary of the model fitting information. Based on the likelihood ratio test the -2 log likelihood value for the intercept only null model (467.876) significantly differed from the corresponding final model (393.208), (Chi-square = 74.668, df = 9, $p < 0.01$). The result indicated that the model was a well fitting model.

Table 9.8: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	467.876			
Final	393.208	74.668	9	0.001

Table 9.9 presents a summary of goodness of fit. The well fitting model was not significant based on Pearson (Chi-square = 688.393, df = 655, $p > 0.05$) and Deviance (Chi-square = 360.886, df = 655, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.9: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	688.393	655	0.177
Deviance	360.886	655	1.000

Table 9.10 shows a summary of Pseudo R^2. Since the Cox and Snell Pseudo R^2 value was 0.282, this suggested that the model was able to explain 28.2% of the variation in scenario two. The Nagelkerke Pseudo R^2 value was 0.315, suggesting that the model was able to explain 31.5% of the variation in scenario two. The McFadden Pseudo R^2 value was 0.147, suggesting that the model was able to explain 14.7% of the variation in scenario two.

Table 9.10: Pseudo R^2

Cox and Snell	0.282
Nagelkerke	0.315
McFadden	0.147

As shown in the parameter estimates in Table 9.11, which summarises the ordinal regression analysis results for scenario two, this scenario was significantly related to the performance and profit credit evaluation measure at (β = -0.948, Wald = 7.364, $p < 0.01$); primary stakeholder at (β = 0.483, Wald = 4.889, $p < 0.05$); Hindu versus Muslim at (β = 4.139, Wald = 28.754, $p < 0.001$); Islamic versus conventional bank at (β = 1.604, Wald = 22.784, $p < 0.001$); bank nationalities, foreign versus local bank at (β = 1.713, Wald = 14.319, $p < 0.001$); and environmental commitment of the bank, proactive versus defensive (β = 1.241, Wald = 5.032, $p < 0.05$).

Table 9.11: Summary of the Ordinal Regression Analysis Results for Scenario Two

Location	Estimate	Std. Error	Wald	df	Sig.
Performance and Profit Measure	-0.948	0.349	7.364	1	0.007**
Primary stakeholder	0.483	0.219	4.889	1	0.027*
Hindu V Muslim	4.139	0.772	28.754	1	0.0001***
Christian V Muslim	0.663	0.511	1.684	1	0.194
Buddhist V Muslim	0.516	0.399	1.670	1	0.196
Muslim	0^a		.	0	.
Islamic V Conventional	1.604	0.336	22.784	1	0.0001***
Conventional	0^a	.	.	0	.
Foreign V Local	1.713	0.453	14.319	1	0.0001***
Local	0^a	.	.	0	.
Proactive V Defensive	1.241	0.553	5.032	1	0.025*
Reactive V Defensive	-0.405	0.315	1.653	1	0.199
Defensive	0^a	.	.	0	.

Link function: Logit

a. This parameter was set to zero because it was redundant

b. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The beta coefficients in scenario two implied that five predictor variables had a positive relationship with scenario two. The positive sign of primary stakeholder (customer, employee and investor) implied that there was a positive relationship between primary stakeholder and financing decision behaviour in scenario two. The positive sign of the beta coefficient between Hindu versus Muslim implied that Hindu respondents tended to approve project financing as scenario two more than Muslim respondents. The positive sign of the beta coefficient between Islamic bank versus conventional banks implied that Islamic bank respondents tended to approve project financing as scenario two more than Islamic bank respondents. Similarly, the positive sign of the beta coefficient between foreign and local bank implied that foreign bank respondents tended to approve project financing as scenario two more than local bank respondents. A positive beta coefficient was recorded between proactive versus defensive natural environmental commitment strategies. The positive sign of the beta coefficient implied that banks with a proactive natural environmental management commitment strategy tended to approve project financing as scenario two more than those with a defensive natural environmental management commitment strategy. A negative sign of the beta coefficient on the performance and profit measure implied that there was an inverse relationship between this measure of credit evaluation orientation and scenario two, i.e. banks' managers who had a high score on the performance and profit measure were more likely to reject project financing in scenario two.

9.4 Hypothesis 6

Financing a lawful project that has a very high risk in terms of potential damage to the natural environment but has a high profit potential

Table 9.12 presents a summary of the test of parallel lines. Based on the test of parallel lines, the -2 log likelihood null hypothesis model (526.731) did not significantly differ from the -2 log likelihood general model (499.831), (Chi-square = 26.900, df = 33, $p > 0.05$). The non significant parallel lines test result indicated slopes were sufficiently the same to proceed. The non significant parallel lines test therefore showed that the model was well fitting.

Table 9.12: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	526.731			
General	499.831	26.900	33	0.764

Table 9.13 presents a summary of the model fitting information. Based on the likelihood ratio test, the -2 log likelihood value for the intercept only model (692.53) significantly differed from the corresponding final model (526.731), (Chi-square = 165.799, df = 11, $p < 0.05$). The result indicated that the model was a well fitting model.

Table 9.13: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	692.530			
Final	526.731	165.799	11	0.0001

Table 9.14 presents a summary of goodness of fit. The model was not significant based on Pearson (Chi-square = 753.307, df = 877, $p > 0.05$) and Deviance tests (Chi-square = 525.344, df = 877, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.14: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	753.307	877	0.999
Deviance	525.344	877	1.000

Table 9.15 shows a summary of Pseudo R^2. Since the Cox and Snell Pseudo R^2 value was 0.521, this suggested that the model was able to explain 52.1% of the variation in scenario three. The Nagelkerke Pseudo R^2 value was 0.546, suggesting that the model was able to explain 54.6% of the variation in scenario three. The McFadden Pseudo R^2 value was 0.239, implying that the model was able to explain 23.9% of the variation in scenario three.

Table 9.15: Pseudo R^2

Cox and Snell	0.521
Nagelkerke	0.546
McFadden	0.239

Table 9.16 presents a summary of the ordinal regression analysis results for scenario three. The parameter estimates show that scenario three was significantly related to the environmental and ethical measure of credit orientation at (β = -0.45, Wald = 4.679, $p < 0.05$); ethic at (β = -0.668, Wald =6.662 , $p < 0.05$); proactive versus defensive environmental management commitment strategy at (β = -1.706 , Wald = 6.677, $p < 0.05$); foreign versus local bank at (β = -1.398, Wald = 8.197 , $p < 0.05$); Islamic versus conventional bank at (β = -3.108, Wald = 69.007, $p < 0.01$); Hindu versus Muslim at (β = -3.544, Wald = 20.222, $p < 0.01$); and Christian versus Muslim at (β = -1.784, Wald = 12.528 , $p < 0.01$).

Table 9.16: Summary of the Ordinal Regression Analysis Results for Scenario Three

Location	Estimate	Std. Error	Wald	df	Sig.
Environment and ethical measure	-0.450	0.208	4.679	1	0.031*
Regulatory Stakeholder	0.358	0.241	2.212	1	0.137
Ethic	-0.668	0.259	6.662	1	0.010*
Performance and Profit	0.459	0.338	1.841	1	0.175
Proactive V Defensive	-1.706	0.660	6.677	1	0.010*
Reactive V Defensive	-0.330	0.282	1.370	1	0.242
Defensive	0[a]	.	.	0	.
Foreign V Local	-1.398	0.488	8.197	1	0.001*
Local	0[a]	.	.	0	.
Islamic V Conventional	-3.108	0.374	69.007	1	0.001**
Conventional	0[a]	.	.	0	.
Hindu V Muslim	-3.544	0.788	20.222	1	0.001**
Christian V Muslim	-1.784	0.504	12.528	1	0.001**
Buddhist V Muslim	-0.012	0.371	0.001	1	0.973
Muslim	0[a]	.	.	0	.

Link function: Logit

a. This parameter was set to zero because it was redundant
b. *p < 0.05, ** p < 0.01, *** p < 0.001

The beta coefficients in scenario three indicated that all of the predictor variables had a negative sign. The negative sign of the beta coefficient on the environmental and ethical measure of credit evaluation orientation suggested that there was an inverse relationship between this credit evaluation orientation and scenario three. The negative sign of the beta coefficient on ethical CSR orientation implied there was a negative relationship between ethical CSR orientation and scenario three. The negative sign of the beta coefficient on proactive versus defensive natural environmental management commitment strategy suggested that banks with a proactive natural environmental management commitment strategy tended to reject project financing as scenario three more than banks with a defensive natural environmental management commitment strategy. The negative sign of the beta

coefficient on bank nationalities (foreign versus local) implied that foreign banks tended to reject project financing as scenario three more than local banks. The negative sign of the beta coefficient on bank types (Islamic versus conventional) suggested that Islamic banks tended to reject project financing of project as scenario three more than conventional banks. The negative sign of the beta coefficient on religion (Hindu versus Muslim) and (Christian versus Muslim) implied that Hindu and Christian respondents tended to reject project financing in scenario three more than Muslim respondents.

9.5 Hypothesis 7

Financing a lawful project that is highly profitable and causes environmental damage in the short-term but can be remedied by the borrower in the medium-term/long-term.

Table 9.17 presents a summary of the test of parallel lines. Based on the test of parallel lines, the -2 log likelihood null hypothesis model (333.303) did not significantly differ from the -2 log likelihood general model (328.810), (Chi-square = 4.493, df = 12, $p > 0.05$). The non significant parallel lines test result indicated that the slopes were sufficiently the same to proceed. The non significant parallel lines test showed that the model was well fitting.

Table 9.17: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	333.303			
General	328.810	4.493	12	0.973

Table 9.18 presents a summary of model fitting information. Based on the likelihood ratio test, the -2 log likelihood value for the intercept only model (420.68) significantly differed

from the corresponding final model (333.303), (Chi-square = 86.765, df = 4, $p < 0.05$). The result indicated that the model was a well fitting model.

Table 9.18: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	420.068			
Final	333.303	86.765	4	0.0001

Table 9.19 presents a summary of goodness of fit. The model was not significant based on Pearson (Chi-square = 356.001, df = 412, $p > 0.05$) and Deviance tests (Chi-square = 254.650, df = 412, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.19: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	356.001	412	0.978
Deviance	254.650	412	1.000

Table 9.20 presents a summary of Pseudo R^2. Since the Cox and Snell Pseudo R^2 value was 0.320, this suggested that the model was able to explain 32% of the variation in scenario four. The Nagelkerke Pseudo R^2 value was 0.349, indicating that the model was able to explain 34.9% of the variation in scenario four. The McFadden Pseudo R^2 value was 0.156, suggesting that the model was able to explain 15.6% of the variation in scenario four.

Table 9.20: Pseudo R^2

Cox and Snell	0.320
Nagelkerke	0.349
McFadden	0.156

Table 9.21 presents a summary of the ordinal regression analysis results for scenario four. The parameter estimates show that scenario four was significantly related to the performance and profit measure of credit evaluation orientation at ($\beta = 0.688$, Wald = 4.355, $p < 0.05$); primary stakeholder of stakeholder group at ($\beta = -0.605$, Wald = 9.023, $p < 0.01$); foreign versus local bank at ($\beta = -2.702$, Wald = 39.027, $p < 0.01$); and Islamic versus conventional bank at ($\beta = -1.115$, Wald = 15.635, $p < 0.01$).

Table 9.21: Summary of the Ordinal Regression Analysis Results for Scenario Four

Location	Estimate	Std. Error	Wald	df	Sig.
Performance and Profit Measure	0.688	0.330	4.355	1	0.037*
Primary Stakeholder	-0.605	0.201	9.023	1	0.003**
Foreign V Local	-2.702	0.432	39.027	1	0.001**
Local	0^a	.	.	0	.
Islamic V Conventional	-1.115	0.282	15.635	1	0.001**
Conventional	0^a	.	.	0	.

Link function: Logit

a. This parameter was set to zero because it was redundant
b. * $p < 0.05$, ** $p < 0.01$

The positive sign of the beta coefficient on the performance and profit measure of credit evaluation orientation implied that respondents who scored high on the performance and profit factor were more likely to approve project financing as scenario four than those who scored low. The negative beta coefficient sign on primary stakeholder (customer, employee and investor) suggested that respondents who scored high on primary stakeholder group were less likely to approve project financing as scenario four. The negative sign of the beta coefficient on bank nationalities (foreign versus local) implied that local bank respondents tended to approve project financing as scenario four more than foreign bank respondents. The negative sign of the beta coefficient on bank types (Islamic versus local) implied that

Islamic bank respondents tended to reject project financing as scenario four more than conventional bank respondents.

9.6 Hypothesis 8

> *Financing a lawful project with high potential profit and within acceptable environmental harm criteria but which causes a high level of harm to indigenous people.*

Table 9.22 presents a summary of the test of parallel lines. Based on test of parallel lines, the -2 log likelihood null hypothesis model (529.868) was not significantly different from the -2 log likelihood general model (508.119), (Chi-square = 21.749, df = 18, $p > 0.05$). The non significant parallel lines test result indicated that slopes were sufficiently the same to proceed. The non significant parallel lines test indicated that the model was well fitting.

Table 9.22: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	529.868			
General	508.119	21.749	18	0.243

Table 9.23 presents a summary of the model fitting information. Based on the likelihood ratio test the -2 log likelihood value for the intercept only model (562.921) significantly differed from the corresponding final model (529.868), (Chi-square = 33.053, df = 6, $p < 0.05$). The result indicated that the model was a well fitting model.

Table 9.23: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	562.921			
Final	529.868	33.053	6	0.0001

Table 9.24 presents a summary of goodness of fit. The model was not significant based on Pearson (Chi-square = 891.177, df = 826, $p > 0.05$) and Deviance tests (Chi-square = 517.908, df = 826, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.24: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	891.177	826	0.06
Deviance	517.908	826	1.000

Table 9.25 presents a summary of Pseudo R^2. Since the Cox and Snell Pseudo R^2 value was 0.137, this suggested that the model was able to explain 13.7% of the variation in scenario five. The Nagelkerke Pseudo R^2 value was 0.148, suggesting that the model was able to explain 14.8% of the variation in scenario five. The McFadden Pseudo R^2 value was 0.057, suggesting that the model was able to explain 5.7% of the variation in scenario five.

Table 9.25: Pseudo R^2

Cox and Snell	0.137
Nagelkerke	0.148
McFadden	0.057

Table 9.26 presents a summary of the ordinal regression of analysis results for scenario five. The parameters estimates show that scenario five was significantly related to the environmental and ethical measure of credit evaluation orientation at (β = -0.397, Wald =

4.312, $p < 0.05$); additional measure (collateral and political connection) of credit evaluation orientation at ($\beta = 0.515$, Wald = 6.426, $p < 0.05$); legal CSR orientation at ($\beta = 0.668$, Wald = 3.945, $p < 0.05$); ethical CSR orientation at ($\beta = -0.937$, Wald = 13.534, $p < 0.001$); and proactive natural environmental management strategy at ($\beta = -1.060$, Wald = 4.376 , $p < 0.05$).

Table 9.26: Summary of the Ordinal Regression Analysis Result for Scenario Five

Location	Estimate	Std. Error	Wald	df	Sig.
Environmental and Ethical Measure	-0.397	0.191	4.312	1	0.038*
Additional Measure	0.515	0.203	6.426	1	0.011*
Legal	0.668	0.336	3.945	1	0.047*
Ethical	-0.937	0.255	13.534	1	0.0001***
Proactive V Defensive	-1.060	0.487	4.736	1	0.030*
Reactive V Defensive	-0.430	0.275	2.456	1	0.117
Defensive	0^a	.	.	0	.

Link function: Logit

a. This parameter was set to zero because it was redundant
b. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The negative sign of the beta coefficient on the environmental and ethical measure of credit evaluation orientation implied that respondents who scored high on it were more likely to reject project financing as scenario five than those who scored low. The positive sign of the beta coefficient on the additional measure (collateral and political connection) of credit evaluation orientation implied that respondents who scored high on the additional measure were more likely to approve project financing as scenario five than those who scored low. The positive sign of the beta coefficient on legal CSR orientation suggested that respondents who scored high on this were more likely to approve project financing as scenario five. The negative sign of ethical CSR orientations suggested that respondents who scored high on it were more likely to reject project financing as scenario five than those who scored low. The

negative sign of natural environmental management commitment (proactive versus defensive) suggested that banks with a proactive natural environmental management commitment strategy were more likely to reject project financing of project as scenario five than banks with a defensive natural environmental management commitment strategy.

9.7 Hypothesis 9

> *Financing a lawful project with high potential profit and which is welcomed by indigenous people (job creation) but opposed by environmental NGOs and pressure groups.*

Table 9.27 presents a summary of the test of parallel lines. Based on the test of parallel lines, the -2 log likelihood null hypothesis model (542.327) did not significantly differ from the -2 log likelihood general model (535.415), (Chi-square = 6.912, df = 21, $p > 0.05$). The non significant parallel lines test result indicated that the slopes were sufficiently the same to proceed. The non significant parallel lines test showed that the model was well fitting.

Table 9.27: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	542.327			
General	535.415	6.912	21	0.998

Table 9.28 presents a summary of the model fitting information. Based on the likelihood ratio test, the -2 log likelihood value for the intercept only model (570.756) significantly differed from the corresponding final model (542.327), (Chi-square = 28.430, df = 7, $p < 0.05$). The result indicated that the model was a well fitting model.

Table 9.28: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept only	570.756			
Final	542.327	28.430	7	0.0001

Table 9.29 presents a summary of goodness of fit. The model was not significant based on Pearson (Chi-square = 941.348, df = 877, $p > 0.05$) and Deviance tests (Chi-square = 542.327, df = 877, $p > 0.05$). We therefore concluded that the data and the model predictions were similar and we had a good model.

Table 9.29: Goodness of Fit

Model	Chi-Square	df	Sig.
Pearson	941.348	877	0.065
Deviance	542.327	877	1.000

Table 9.30 presents a summary of Pseudo R^2. Since that Cox and Snell Pseudo R^2 value was 0.119, this suggested that the model was able to explain 11.9% of the variation in scenario six. The Nagelkerke Pseudo R^2 value was 0.129, suggesting that the model was able to explain 12.9% of the variation in scenario six. The McFadden Pseudo R^2 value was 0.050, implying that the model was able to explain 5.0% of the variation in scenario six.

Table 9.30: Pseudo R^2

Cox and Snell	0.119
Nagelkerke	0.129
McFadden	0.050

Table 9.31 provides a summary of the ordinal regression analysis results for scenario six. The parameter estimates show that scenario six was significantly related to the environmental and ethical measure of credit evaluation orientation at ($\beta = -0.405$, Wald = 4.183, $p < 0.05$);

regulatory stakeholder of stakeholder groups at (β = -0.66, Wald = 5.981= , $p < 0.05$); legal CSR orientation at (β = 1.052 , Wald = 9.118 , $p < 0.01$); and philanthropic CSR orientation at (β = -0.596 , Wald = 4.159 , $p < 0.05$).

Table 9.31: Summary of the Ordinal Regression Analysis Results for Scenario Six

Location	Estimate	Std. Error	Wald	df	Sig.
Environmental and Ethical Measure	-0.405	0.198	4.183	1	0.041*
Additional Measure	0.242	0.202	1.432	1	0.231
Secondary Stakeholder	-0.343	0.218	2.474	1	0.116
Primary Stakeholder	0.227	0.221	1.051	1	0.305
Regulatory Stakeholder	-0.660	0.270	5.981	1	0.014*
Legal	1.052	0.348	9.118	1	0.003**
Philantropic	-0.596	0.292	4.159	1	0.041*

Link function: Logit

a. This parameter is set to zero because it is redundant
b. * $p < 0.05$, ** $p < 0.01$

The negative sign of the beta coefficient on the environmental and ethical measure of credit evaluation orientation, regulatory stakeholder and philanthropic CSR orientation suggested these three variables were negatively related to scenario six. Respondents who scored high on the environmental and ethical measure of credit evaluation orientation, regulatory stakeholder, and philanthropic CSR orientation were more likely to reject project financing as scenario six than those who scored low. On the other hand, legal CSR orientation was positively related to scenario six. Respondents who scored high on legal CSR orientation were more likely to approve project financing as scenario six than those who scored low.

9.8 Chapter Summary

This section has summarised the results and conclusions drawn from the analysis. The major purpose of utilising ordinal regression analysis was to discover which characteristic variables

best predicted the project financing decision. Six scenarios were developed for the analysis. Table 9.32 below presents a summary of the results. Based on Table 9.32, several noteworthy findings emerged from the analysis:

1. Religious affiliation (religion and type of bank) was a good predictor of project financing scenarios in which there was a trade off between profitability and preserving the environment, i.e. scenarios 1, 2, 3 and 4.
2. Foreign banks showed a more positive attitude towards natural environmental management than local banks.
3. Islamic banks also showed a more positive attiude towards natural environmental management than conventional banks.
4. Legal responsibility was an important variable predicting general attitude towards project financing in scenarios 5 and 6 suggesting legal criteria were considered by respondents when facing a natural environmental problem in project financing.
5. There was no significant relationship between religious/Islamic affiliation and scenario five possibly because respondents focused more on the legality of the project than the harm to indigenous people.
6. There was no significant relationship between religious/Islamic affiliation and scenario six possibly because reposndents focused more on the legal factor and the project's acceptance by indigenous people than opposition from NGOs.

Table 9.32: Summary of Results for Hypotheses H4 to H9

Hypothesis	Result	Interpretation
H4	Accepted	Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario one.
H5	Accepted	Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario two.
H6	Accepted	Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario three.
H7	Accepted	Holding all other predictors constant, there is a significant relationship between religious/Islamic affiliation and scenario four.
H8	Rejected	Holding all other predictors constant, there is no significant relationship between religious/Islamic affiliation and scenario five.
H9	Rejected	Holding all others predictors constant, there is no significant relationship between religious/Islamic affiliation and scenario six.

The above summary of results for hypotheses H4 through to H9 showed that hypotheses 4,5,6, and 7 were accepted, whereas hypotheses 8 and 9 were rejected. The next chapter, which concludes the study, presents a summary of the findings and their implications for the CSR body of knowledge, Malaysia's banking system, NGOs, and policy makers. The limitations of the study are acknowledged and areas for further research are identified.

CHAPTER TEN

Conclusion

10.1 Introduction

The present study sought to examine how cultural diversity influences perceptions of and attitude to credit evaluation orientations, stakeholder groups' orientations, and CSR orientations. The study also aimed to determine how cultural diversity influences natural environmental management practices in project financing in the Malaysian banking sector. The study findings are useful for policy makers, NGOs and the banking sector, since they increase understanding of the influence of cultural diversity, which, in turn, can contribute to better policy planning and implementation. The findings can also be used as guidelines to establish more comprehensive codes of conduct at the national and international levels.

To accomplish the research aims, six research questions were designed and data collected through a questionnaire survey. The research questions in the study were as follows:

1. What is the current state of natural environmental management in project financing in Malaysia?
2. What is the Malaysian financial institution perspective on credit evaluation orientations, stakeholder groups' orientation, and CSR orientations?
3. To what extent is the environmental management perspective of a bank influenced by credit evaluation orientations, CSR orientations, and stakeholder groups' orientations, and how does this affect project financing assessment?
4. How do differences in ethnicity and religion influence the perception and attitude of Malaysian financial institutions towards credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?

5. What are the differences between the conventional bank's and Islamic bank's approach to credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?
6. What are the differences between the local bank and foreign bank approach to credit evaluations orientations, stakeholder groups' orientations, CSR orientations and project financing assessment?

This chapter is divided into three main parts. The first part presents an overview of the study findings in relation to the above research questions. The second part discusses the implications of the research findings for knowledge, Malaysia's banking system, NGOs, and policy makers. The limitations of the research and areas for future study are subsequently identified.

10.2 Research Findings

Chapter seven answered research questions one and two. For that purpose, cluster analysis and factor analysis were used in the study.

Research question 1: What is the current state of natural environmental management in project financing in Malaysia?

Based on cluster analysis, this study found that current natural environmental management practices can be divided into three main strategies: reactive, defensive, and proactive. The majority of respondents' employer banks were in the reactive and defensive strategy groups. Only 22 were in the proactive natural environmental management strategy group. The findings therefore indicated that the Malaysian banking sector needs to improve and implement more proactive natural environmental management practices. There are many

areas that could be improved, such as providing manuals detailing environmental procedures in credit assessment and establishing committees dedicated to dealing with environmental risk in credit assessment. Overall, the findings provided in-depth details about current natural environmental practices in Malaysia's banking sector. Besides the above, the study also found that no Malaysian bank participates as a member in the UNEP financial initiative, UNEP (2012) and EPs (Equator Principles, 2012).

Research question 2: What is the Malaysian financial institution perspective on credit evaluation orientations, stakeholder groups' orientations, and CSR orientations?

With respect to credit evaluation orientation, the current study found it could be divided into three main categories: (1) profit and performance; (2) environmental and ethical; and (3) additional measures. The study found that the profit and performance measure was the most important consideration in bank managers' project financing decision. This finding thus indicated that economic factors were most important for credit assessment. The environmental and ethical measure was second in importance. The findings also confirmed that bank managers' viewed economic responsibility as the most important CSR orientation.

Stakeholders groups were divided into three main groups: (1) primary stakeholder, (2) secondary stakeholder and (3) regulatory stakeholder. The study found that the secondary stakeholder group has most influence on the implementation of natural environmental risk management in project financing in Malaysia. Environmentalist groups, the local community, the natural environment, mass media, global community, and environmental policies of other banks are among stakeholders in this group. The study showed that policies of other banks are among stakeholders in this group. The study showed that bank managers recognised the natural environment as a stand-alone (qualified) stakeholder. This finding

differs from that reported by Bendheim et al. (1998) and Driscoll and Starik (2004) who found that when companies make a trade-off among stakeholders, the natural environment is often not on the list.

As regards CSR orientations, the study found that banks' managers in Malaysia viewed economic responsibility as most important, followed by legal, ethical and philanthropic responsibilities. The high importance attached to economic responsibility was unsurprising given that profit is the main aim of a business, since profit enables it to continue operating. The importance attached to legal responsibility was also unsurprising given that the banking sector is heavily regulated by government and its activities are closely monitored. The result is consistent with Carroll (1979). However, it differs from a study conducted in Malaysia by Dusuki and Yusuf (2008) where economic responsibility was viewed as most important, followed by ethical, legal and philanthropic responsibilities. The differences may be due to the nature of the study samples, i.e. banks' managers in this study and MBA students in theirs.

The following section synthesises the empirical findings relating to research questions three to six. MANOVA analysis was used to identify the influence of differences in natural environmental commitment strategies, racial groups, religions, bank types and bank nationalities on banks' managers' perceptions of and attitude towards credit evaluation orientations, stakeholder groups' orientations, and CSR orientations. The empirical findings were presented in chapter eight. Chapter nine presented ordinal regression analysis results to discover which characteristic variables best predicted project financing decision. Six scenarios were developed for analysis purposes.

Research question 3: To what extent is the environmental management perspective of a bank influenced by credit evaluation orientations, CSR orientations, and stakeholder groups' orientations, and how does this affect project financing assessment?

The study grouped natural environmental management strategy into three main groups: (1) reactive, defensive and proactive. The study found a significant relationship between the natural environmental management strategy of a bank and managers' attitude to credit evaluation orientations, stakeholder groups' orientations and CSR orientations. Natural environmental strategies significantly influence bank managers' attitude to the environmental and ethical measure in credit evaluation orientations (ethical performance, potential environmental impact of the financing, the environmental performance of the company, compliance with religious requirements), which measure is the most important for improved natural environmental management practice in project financing.

Statistically significant differences were noted with regard to primary and secondary stakeholder groups. Managers employed by banks with defensive and proactive environmental management strategies rated the primary stakeholder group significantly higher than those employed by banks with a reactive environmental management commitment strategy. As regards the secondary stakeholder group, managers employed by banks with a proactive strategy rated the secondary stakeholder group significantly higher than those employed by banks with defensive and reactive strategies. Natural environmental management strategies also influenced attitude towards economic responsibility, ethical responsibility, and philanthropic responsibility. Managers employed by banks with a proactive natural environmental management strategy had the lowest score on economic responsibility, indicating their low emphasis on economic considerations in finance decisions. Consistent with this finding, they had higher scores on ethical responsibility and

philanthropic responsibility than respondents employed by banks with reactive and defensive strategies.

As regards ordinal regression analysis results, natural environmental management strategy was among the important predictors of bank managers being likely to approve a project financing scenario having a beneficial effect on the environment (see scenarios 5, 6 and 8, Table 9.1). The analysis showed that differences in current natural environmental management strategies had an influence on attitude towards credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing decision. Respondents employed by banks with a proactive natural environmental strategy had a more positive attitude towards natural environmental management than those employed by banks with reactive and defensive strategies. This study finding is consistent with that reported by Henriques and Sadorsky (1999); Buysse and Verbeke (2003), and Paulraj (2009) who found that firms with more proactive natural environmental startegies were more environmentally committed than those with reactive and defensive strategies.

Research question 4: How do differences in ethnicity and religion influence the perception and attitude of Malaysian Financial institutions towards credit evaluation orientations, stakeholder groups' orientations, CSR orientations and project financing assessment?

The study found a significant relationship between banks' managers' racial groups and religious affiliations and their perception of and attitude towards credit evaluation orientations and CSR orientations. Bank managers' religious affiliation significantly influenced their attitude to the environmental and ethical measure of credit evaluation orientation and the economic responsibility component of CSR orientation.

Their racial group affiliation significantly influenced their attitude to economic responsibility and ethical responsibility and credit evaluation orientations. Bank managers who were Malay had the highest mean score for the performance and profit measure whereas Indian managers had the lowest. Indian managers had the highest mean score for the environmental and ethical measure whereas Chinese managers had the lowest. The results suggest that Malay managers are more concerned with economic performance and profit than Indian managers. The findings thus showed that attitude to credit evaluation orientations was influenced by racial group affiliations.

Ordinal regression analysis results indicated that religious affiliation was a significant predictor of project financing decision as scenarios 1, 2, 3 and 4. MANOVA and ANOVA results also showed that differences between bank managers' racial groups and religious affiliations influenced their attitude towards credit evaluation orientations, CSR orientations, and project financing assessment.

Research question 5: What are the differences between the conventional bank's and Islamic bank's approach to credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment?

The research found that bank type (conventional or Islamic) had a significant relationship with credit evaluation orientations and project financing decision. Bank managers affiliated to Islamic banks had higher scores for the environmental and ethical measure in credit evaluation orientation than those affiliated to conventional banks. This finding suggests that Islamic banks are more concerned about the environmental and ethical measure in credit evaluation than conventional banks.

Ordinal regression analysis results revealed that bank type significantly contributed to banks' managers' attitude to credit evaluation. Islamic banks have implemented more environmental management practices than conventional banks. The influence of religious affiliation and bank type on bank managers' perceptions and attitude to CSR orientations found in this study is consistent with Brammer et al (2007), Schultz et al. (2005) and Schultz and Zelezny (1999) who found that religion and cultural values play a significant role in shaping individual or organisational perceptions of CSR.

Research question 6: What are the differences between the local bank and foreign bank approach towards credit evaluation orientations, stakeholder groups' orientations, CSR orientations and project financing assessment?

Empirical findings indicated that bank nationality had a significant influence on attitude to credit evaluation orientations, stakeholder groups' orientations, CSR orientations, and project financing assessment. A significant difference was found between bank nationalities and the environmental and ethical measure of credit evaluation orientation. Foreign banks were more concerned about natural environmental issues than local banks. Ordinal regression analysis results also indicated that foreign banks had a more positive attitude towards natural environmental management than local banks. In contrast, with regard to CSR orientations, local banks put more emphasis on economic responsibility than foreign banks. That is to say, local banks were more concerned than foreign banks about profit and economic achievement than natural environmental management.

However, the study found no relationship between bank managers' racial groups, religious affiliations, bank profiles, bank types and bank nationalities and their attitude to stakeholder groups' orientations. The findings are in harmony with those of Agle et al. (1999) who found

inconsistent relationships between managers' values and their perceptions of stakeholder attributes.

10.3 Research Implications and Recommendations

This research focused on CSR, specifically the issue of natural environmental management. It has subsequently produced both theoretical justifications and empirical findings with practical implications for natural environmental management in Malaysia. This section now presents the implications of this study's findings.

10.3.1 Implications for Knowledge

First, the present study fills an important gap in knowledge of CSR and natural environmental management in the banking sector in Malaysia. It provides comprehensive understanding of CSR and natural environmental management from the conventional and Islamic perspective. It also adds to the literature through its examination of the influence of different profiles, such as racial group and religion, on CSR and the natural environment. Second, the study provides a comprehensive review of natural environmental risk management in the banking sector, especially credit financing evaluation. Here, it makes a particularly important contribution to the literature since few studies have discussed natural environmental management in the banking sector. Most of the literature and discussions concentrate on natural environmental management in critical industries such as oil and gas and the chemical industry. Third, the study focuses on an emerging economy which is another contribution to the CSR literature, since most previous studies have been undertaken in developed economies, for example, in North America and Europe. Fourth, in its comprehensive study of CSR and natural environmental management, this study considered the racial and religious affiliation of respondents. Finally, the dual banking system in Malaysia enabled the study to provide a

comprehensive view of CSR and natural environmental management from the conventional bank and Islamic bank perspective.

10.3.2 Implications for Malaysia's Banking System

The study findings have several implications for Malaysia's banking system. Natural environmental management analysis indicated that the majority of banks in Malaysia exhibited reactive and defensive environmental management commitment strategies. This situation indicates that the project financing decisions of local banks in Malaysia have a potentially more harmful effect on the natural environment than those of their foreign bank counterparts. For example, in ordinal regression analysis, local banks were more likely to approve project financing scenarios that had a harmful effect on the environment (scenario 1, 2, 3, and 4, Table 9.1). This finding can be used by local banks, the Central Bank of Malaysia, and government to implement and improve natural environmental policy in the banking sector. The study's investigations also showed that not one of Malaysia's local banks participates in any codes of conduct programmes, such as the Equator Principles and United Nations' Environmental Programme (UNEP). It is advisable for local banks to participate in these as doing so will assist them in developing and improving their internal natural environmental management practices. As regards Islamic banks, their natural environmental management practices should reflect Islam's perspective on CSR and the natural environment. The study showed, however, that they still lag behind foreign banks in implementing natural environmental management practices. Islamic banks should play a leading role in natural environmental management in accordance with Islamic principles.

10.3.3 Implications for NGOs

Factor analysis showed that this stakeholder group had the greatest influence on the implementation of natural environmental management in the banking sector. Therefore, NGOs such as environmental groups, local communities and global community could play a greater role to stimulate, educate, and encourage the rapid development of natural environmental management in Malaysia. This stakeholder group can also play a monitoring role, as a watchdog, to oversee financing activities in Malaysia in order to develop more environmental friendly business activities. This group can also enhance their role by cooperating with relevant societies and the banking industry to create and increase awareness of the importance of natural environmental management.

10.3.4 Implications for Policy Makers

The study found the legal factor to be very important in the implementation of natural environmental management, an unsurprising finding given that the banking sector operates under strict legal requirements and standards set by the government. Thus, the government has an important role to play for better implementation of natural environmental management in the banking sector in Malaysia. The government through the Central Bank of Malaysia should establish comprehensive natural environmental management guidelines and policies for the banking sector in order to stimulate the implementation of natural environmental management practices in the country.

The government should also play a proactive role for better natural environmental management in the banking sector. A recent government policy that provides a special fund known as the 'Green Technology Financing Scheme' is one example of how the government can contribute to better environmental management in Malaysia.

The present study demonstrated the importance of understanding how cultural and social diversity influences natural environmental management activities. It showed that bank managers' racial and religious affiliations influence their attitude to the natural environment. At the same time, bank type and nationality also influence managers' attitudes towards natural environmental management. These findings are important as they demonstrate that policy makers, especially at the international level such as the World Bank and United Nations need to take into account the influence of racial and cultural diversity on CSR implementation before they develop CSR policies, guidelines and programmes. As a result of such consideration, comprehensive, well-accepted policies and programmes will be developed and accepted.

10.4 Limitations and Suggestions for Further Research

The present research employed the survey questionnaire as the instrument for data collection. One of the weaknesses of using a single method is the inability to further confirm the findings obtained therefrom. By employing a mixed methodology, any findings obtained from a questionnaire can be confirmed through the interview process. A mixed methodology is therefore advisable for future research. Additionally, the questionnaire findings represented the views, experiences, and opinions only of the targeted group of banks' managers, thus, were restricted by the answers given by this one sample group.

The study's area of investigation was natural environmental management in the banking sector, specifically the issue of credit financing. The findings and analysis were restricted to this context. Future research could include other banking activities in the study area, such as product development, marketing, strategy, and training and development. Moreover, this study concentrated only on the banking sector for several reasons: first, the banking sector

functions as a capital provider that provides and channels capital to other sectors; second, the banking sector affects a country's development more than other sectors; and third, it finances activities that can affect the environment. Future research could focus on others sectors, for example, the chemical industry, tourism industry, housing and development, in order to obtain a greater variety of responses and findings.

In this study, religiosity was investigated by focusing on bank managers' personal beliefs and bank type, e.g. Islamic or Conventional bank. It is suggested that in future research, level of religiosity should be one of the variables examined for its influence on the perceptions of and attitudes towards CSR implementation.

The results were obtained from the Malaysian banking sector only, therefore, could not be generalised to banking sectors in other countries. A study of the cultural, social, banking and investment environments of other countries would enable wider generalisation. Finally, it is recommended that future research explores natural environmental management practices in other ASEAN countries, such as Indonesia, Thailand, Vietnam and Cambodia, or undertakes a comparison study of such practices in two or more Asian countries.

Despite the above limitations, this study provides a model of project financing decision in a multi-racial and multi-religious developing country. Specifically, it enables environmental management policies to be developed both within the financial sector and the wider political context which accommodate the religious and cultural values of a diverse population. Given the inter-racial riots which affected Malaysia in the 1960s, the recommendations proposed in this research may provide the basis for the evolution of policies and structures by which

similar disturbances can be avoided both in Malaysia and similar culturally and religiously diverse countries in the future.

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Appendix 1

Table 1A: Stages in Corporate Social Responsiveness Models and Their Stages in the Management Literature

Author	General Characteristics	
	Title of the Model	Number of Stages
Mc Adam (1973)	Social responsibility philosophy	1. Lead the industry 2. Be progressive 3. Do only what is required 4. Fight all the way
Archie B. Carroll (1979)	Philosophy of social responsiveness	1. Reaction 2. Defence 3. Accommodation 4. Pro-action
Wartick and Cochran (1985)	Corporate social responsiveness	1. Reactive 2. Defensive 3. Accommodative 4, Proactive
Reidenbach and Robin (1991)	Corporate moral development	1. Amoral 2. Legalistic 3. Responsive 4. Emerging ethical 5. Ethical
Post and Altman (1994)	Stages of organisational change and learning (Continuum)	1. Adjustment 2. Adaptation 3. Anticipation 4. Innovation
Hart (1996)	Strategic capability	1. Pollution prevention 2. Product stewardship 3. Sustainable development
Marrewijk and Werre (2003)	Corporate sustainability	1. Pre-CS 2. Compliance-driven CS 3. Profit driven 4. Caring CS 5. Synergistic CS 6. Holistic CS
Zadek (2004)	Stages of organisational learning	1. Defensive 2. Compliance 3. Managerial

		4. Strategic 5. Civil
Mirvis and Googins (2006)	Stage of corporate citizenship	1. Elementary 2. Engaged 3. Innovative 4. Integrated 5. Transforming
Lotila (2010)	Corporate responsiveness	1. Tactical approach 2. Strategic approach 3. No action
Maon et al. (2010)	CSR cultural phase	1. Dismissing stage 2. Self-protecting stage 3. Compliance-seeking stage 4. Capability-seeking stage 5. Caring stage 6. Strategising stage 7. Transforming stage

Table 1B: Environmental Management Strategy, Models and Evaluation Criteria

Author	Model Name	Stages	Criteria evaluation
Hunt and Auster (1990)	Stages of EM	1. Beginner 2. Fire-fighter 3. Concerned citizen 4. Pragmatist 5. Pro-activist	1. Degree to which programme reduces environmental risk 2. Commitment of the Organisation a) General mindset of corporate management b) Resource commitment c) Support and involvement of top management 3. Program me design a) Performance objective b Integration with company c) Reporting to top management d) Reporting structures e) Involvement with legal counsel, public relations, manufacturing and productions, product design
Roome(1992)	Strategic option to act on environmental pressure	1. Non-compliance 2. Compliance 3. Compliance-Plus 4. Commercial and environmental excellence 5. Leading edge	1. Attitude towards environmental issues 2. Position via-a-vis environmental legislation 3. Organisational structure and systems 4. Environmental strategy 5. Environmental programme 6. Employee involvement and training 7. Reporting and auditing
Azzone and Bertele (1994)	Environmental context	1. Stable 2. Reactive 3. Anticipative 4. Proactive 5. Creative	1. Industry norms 2. Public opinion a) Interest in environmental problems b) Sections interested in environmental issues 3. Technology a) Pace of innovation
Post and Altman (1994)	Stages of Organisational Change/ Learning	1. Adjustment 2. Adaptation and anticipation 3. Innovation	1. Waste reduction 2. Product design 3. Regulatory compliance 4. Community relations
Shrivastava (1995)	Sustainable Competitive Strategies	1. Least cost 2. Differentiation 3. Niche	1. Product services 2. Operational improvements 3. Employee/customer education 4. Prior precautions 5. Contractor supplier relationship 6. Technology transfer
Hart (1995)	Sustained Competitive Advantage	1. Pollution prevention 2. Product stewardship 3. Sustainable development	1. Total quality environmental management 2. Public scrutiny/transparency 3. Process based 4. Stakeholders' integration 5. Share vision 6. Collaboration
Hutchinson (1996)	Levels of Penetration	1. High penetration-damaging, dirty and	1. We are committed to environmental goals. 2. We comply with current and anticipated

	Environmental Management	dangerous 2. Moderate penetration- wasteful and polluting 3. Low penetration- The silent destroyer	legislation. 3. We conduct regular reviews/audits of all operations. 4. We take environmental factors into account in decisions. 5. We apply the precautionary principle. 6. We manage energy, resources, and wastes responsibly. 7. We recycle materials wherever possible. 8. We set high standards of health and safety. 9. We play our part in community initiatives. 10. We contribute to charitable causes. 11. We train employees in environmental matters. 12. We require our suppliers to meet our environmental standards. 13. We report progress on achieving our environmental goals. 14. We use an effective environmental management system.
Rondinelli and Vastag (1996)	Classification of environmental policies	1. Reactive 2. Proactive 3. Crisis preventive 4. Strategic	1. Environmental management actions 2. Training and education 3. Driving force for environmental improvements 4. Nature of environmental performance 5. Environmental management strategies
Madsen (1996)	-	1. Proactive 2. Reactive	1. Existence of environmental strategies or internal environmental guidelines and membership of environmental charters. 2. Use of instruments and techniques to control and monitor the process of a more sustainable development (valid percentages). 3. Provision of environmental information.
Starik (1996)	Type of environmental strategic postures	1. Green product innovation 2. Green product differentiation 3. Pollution prevention beyond compliance 4. Pollution prevention compliance	1. Mission and objective 2. Strategic postures 3. Action plans 4. Implementation mechanism 5. Control features
Hass (1996)	Environmental management typology	2 x 2 typology emerges with four orientations 1. Low structure of environmental management system and low implementation 2. Low structure of environmental management system and low implementation 3. High structure of environmental	As per Hunt and Auster (1990) five stage Corporate Environmental Management

		management system and low implementation 4. High structure of environmental management system and high implementation	
Hart (1997)	Environmental strategy	1. Pollution prevention 2. Product stewardship 3. Clean technology	1. Product performance 2. Technology improvement 3. Waste management 4. Corporate vision 5. Product design 6. Product life cycle
Berry and Rondinelli (1998)	Stages for Corporate Environmental Management	1. Unprepared 2. Reactive 3. Proactive	1. Compliance with regulations 2. Waste minimisation-pollution prevention 3. Demand side management 4. Design for the environment 5. Product stewardship 6. Full cost environmental accounting
Ghobadian, Viney and James (1998)	Position In Relation to Environmental Startegy	1. Non-compliance 2. Compliance 3. Restrained 4, Compliance plus 5. Conditional 6. Speculative 7. Condition and Leading edge	1. Leadership 2. Corporate tradition 3. Corporate ethics 4. Technology 5. Cost advantage 6. Human resource availability 7. Organisational adaptability 8. Market behaviour 9. Legal/regulatory 10. Social expectation
Henriques and Sadorsky (1999)	Environment Commitment Profiles	1. Reactive 2. Defensive 3. Accommodative 4. Proactive	1. Had an environmental plan 2. Had a written plan 3. Had communicated this plan to employees 4. Had communicated this plan to shareholders/stakeholders 5. Had an EHS unit 6. Had a board or management environment committee
Winn and Angell (2000)	Factor-based Model of Corporate Greening	1. Reactive 2. Defensive 3. Accommodative 4. Proactive	Environmental management 1. Environmental management demand sub-contractors/suppliers. 2. Environmental consideration in new product development. 3. Responsibility to improve the natural environment. 4. Intention/ opinion about future environmental legislative requirements. 5. Consideration of environmental issues in business activities and decisions on future investment. 6. Gather information about environmental issues in order to anticipate future legislative requirements 7. Environmental issues are seen as among the

			most important criteria when making major decisions. 8. Waste minimisation is a primary goal driving decision-making within all functional areas of the company. 9. Environmental activities are given the highest priority by top management 10. The top management of this firm is dedicated to the concept of sustainable development.
Buysse and Verbeke (2003)	Environment strategy profiles	1. Reactive 2. Pollution prevention 3. Environmental leadership	1. Investments in products and manufacturing processes to green competencies 2. Investment in employee skills 3. Investment in organisational competencies 4. Development of a written environmental plan 5. Life cycle analysis 6. Internal environmental reporting 7. External environmental reporting 8. Environmental performance inclusion in top management evaluation 9. Integration of environmental issues 10. Participation of environmental managers in strategic planning
Paulraj (2009)	Environmental motivation	1. Coercive 2. Competitive 3. Comprehensive motivation	Environmental commitment value/evaluate based on 6 criteria. 1. Entrepreneurship ✓ Cultural emphasis on innovation and R&D in environmentally friendly products 2. Corporate social responsibility Our organisations correct conditions that endanger the environment. 3. Environmental commitment ✓ Formal written plan ✓ Formal documents describing environmental plans ✓ Manual detailing environmental plan ✓ Employee training programme 4. Internal environmental practices ✓ Support the inventory recovery sale ✓ Use reusable and returnable packing 5. Supplier selection ✓ Select supplier based on environmental competence 6. Supplier evaluation ✓ Conduct regular environmental audits into our suppliers' internal operations 7. External environmental practices We cooperate with our supplier to achieve
Clemens, Bamford, and Douglas (2008)	The strategies based on Oliver's strategies developed by Oliver (1991).	1. Acquiescence 2. Compromise 3. Avoidance 4. Defiance 5. Manipulation	3 questions for each sections 1. Acquiescence Follow the approach most commonly used in the past by your organisation. Follow the approach used by effective organisations and by successful managers in your organization and in other

			organisations. Make a conscious evaluation of the specific regulatory requirements and choose to comply with all of them. 2. Compromise Negotiate openly with the regulators to obtain a mutually agreeable solution. Partially conform to the required procedures and change your processes to comply with others. Negotiate with the regulatory organisations to obtain an advantageous solution. 3. Avoidance Appear to comply but intentionally avoid certain aspects of the requirements. Ignore the requirements and continue doing business as usual. 4. Defiance Reduce the extent to which your organization is inspected. Change your processes to avoid burdensome regulations. Challenge the requirements in court. Challenge the requirements in the media. 5. Manipulation Attempt to form an alliance with the regulators Attempt to influence public perceptions on the particular issue. Meet with elected legislatures. Use lobbyists to influence decision makers
Sprengel and Busch (2010)	Response strategies	1. Minimalist 2. Regulation shapers 3. Pressures managers 4. Emission avoiders	Environmental strategy: Our company…. • Our company *increases efficiency*, substitutes input factors or modifies products or production processes to reduce our direct GHG emissions • Our company *reduces the production and sale* of GHG emission-intensive products • Our company *informs stakeholders* such as customers or analysts of our efforts to reduce our direct GHG emissions • Our company *engages in the political process* regarding a future emission reduction regulation that could potentially include our company • Our company *increases the emission limits* by offsetting our own emissions (e.g. by

			engaging in emission reduction projects) or by acquiring additional emission capacity (e.g. by purchasing emission allowances) • Our company *explores new markets/environments* with lower societal or governmental pressure to reduce GHG emissions in order to avoid emission reduction pressures • Our company engages in activities in order to *become largely independent* of direct GHG emissions • Our company *outsources* GHG emission intensive processes or technologies
First and Khetriwal (2010)	-	1. Environmental leader 2, Environmental performers 3. Environmental advocate 4. Environmental laggards	1. Environmental sustainability of the production process 2. Environmental characteristics of the products 3. Transparency and managerial oversight of the firm's environmental activities 4. External recognition of environmental efforts The firms were scored on each of the variables on a scale of 0–3, with 0 being the worst and 3 the best performance on a parameter. The final environmental performance score for each firm was the average score of all parameters.

Appendix 2

Table 2A: List of Islamic Banks in Malaysia

No	Name	Ownership
1	Affin Islamic Bank Berhad	L
2	Al Rajhi Banking & Investment Corporation (Malaysia) Berhad	F
3	Alliance Islamic Bank Berhad	L
4	AmIslamic Bank Berhad	L
5	Asian Finance Bank Berhad	F
6	Bank Islam Malaysia Berhad	L
7	Bank Muamalat Malaysia Berhad	L
8	CIMB Islamic Bank Berhad	L
9	EONCAP Islamic Bank Berhad	L
10	Hong Leong Islamic Bank Berhad	L
11	HSBC Amanah Malaysia Berhad	F
12	Kuwait Finance House (Malaysia) Berhad	F
13	Maybank Islamic Berhad	L
14	OCBC Al-Amin Bank Berhad	F
15	Public Islamic Bank Berhad	L
16	RHB Islamic Bank Berhad	L
17	Standard Chartered Saadiq Berhad	F

Source: BNM (2011b). L = Local bank; F = Foreign bank

Table 2B: List of Conventional Banks in Malaysia

No	Name	Ownership
1	Affin Bank Berhad	L
2	Alliance Bank Malaysia Berhad	L
3	AmBank (M) Berhad	L
4	Bangkok Bank Berhad	F
5	Bank of America Malaysia Berhad	F
6	Bank of China (Malaysia) Berhad	F
7	Bank of Tokyo-Mitsubishi UFJ (Malaysia) Berhad	F
8	CIMB Bank Berhad	L
9	Citibank Berhad	F
10	Deutsche Bank (Malaysia) Berhad	F
11	EON Bank Berhad	L
12	Hong Leong Bank Berhad	L
13	HSBC Bank Malaysia Berhad	F
14	Industrial and Commercial Bank of China (Malaysia) Berhad	F
15	J.P. Morgan Chase Bank Berhad	F
16	Malayan Banking Berhad	L
17	OCBC Bank (Malaysia) Berhad	F
18	Public Bank Berhad	L
19	RHB Bank Berhad	L
20	Standard Chartered Bank Malaysia Berhad	F
21	The Bank of Nova Scotia Berhad	F
22	The Royal Bank of Scotland Berhad	F
23	United Overseas Bank (Malaysia) Bhd.	F

Source: BNM (2011b); L = Local bank; F = Foreign b

Table 2C: List of Investment Banks in Malaysia

No	Name	Ownership
1	Affin Investment Bank Berhad	L
2	Alliance Investment Bank Berhad	L
3	AmInvestment Bank Berhad	L
4	CIMB Investment Bank Berhad	L
5	ECM Libra Investment Bank Berhad	L
6	Hong Leong Investment Bank Berhad	L
7	Hwang-DBS Investment Bank Berhad	L
8	KAF Investment Bank Berhad	L
9	Kenanga Investment Bank Berhad	L
10	Maybank Investment Bank Berhad	L
11	MIDF Amanah Investment Bank Berhad	L
12	MIMB Investment Bank Berhad	L
13	OSK Investment Bank Berhad	L
14	Public Investment Bank Berhad	L
15	RHB Investment Bank Berhad	L

Source: BNM (2011b) L = Local bank; F = Foreign bank

Appendix 3

TO WHOM IT MAY CONCERN

APPLICATION TO CONDUCT AN ACADEMIC SURVEY

I am currently conducting a PhD research project regarding environmental risk management in the banking sector in Malaysia. The main objective of this research is to analyse Malaysian financial institutions' perspective on issues pertaining to environmental risk management. My targeted respondent groups are: (1) CEOs, (2) Credit Committee Members, (3) Senior Managers, (4) Managers, and (5) Executives who are directly involved in credit financing assessment.

I would be grateful if you could authorise your staff to participate in this survey. Their participation will provide invaluable input to the success of this study and further development of environmental risk management in project financing, as well as assist in policy formulation by government regulatory agencies and NGOs.

All information will be treated as highly CONFIDENTIAL and used for academic purposes only.

Your cooperation is very much appreciated.

Thank you.

Sincerely,

(MOHAMAD YAZIS ALI BASAH)
PhD Candidate
Cardiff Business School
Cardiff University

Appendix 4

Department of Accounting and Finance

Cardiff Business School

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A SURVEY OF ENVIRONMENTAL RISK MANAGEMENT IN THE BANKING SECTOR IN MALAYSIA

General Instructions and Information

1. All individual responses to this questionnaire will be kept **STRICTLY CONFIDENTIAL.**

2. Please do not worry about questions that seemingly look alike. If you do not have the exact answer to a question, please provide your best judgement by **ticking or circling** the appropriate boxes in the questions. **Your answers are very important for the accuracy of the study.**

3. If you wish to make any comments, please feel free to use the space at the end of the questionnaire.

PART A: Personal Profile and Bank Profile

Personal Information and Bank Information.

1. Gender

☐ Male ☐ Female

2. Age

☐ 20 or below
☐ 21-30
☐ 31-40
☐ 41-50
☐ 51 or above

3. Race

☐ Malay
☐ Chinese
☐ Indian
☐ Other (Please specify) ______________________

4. Religion

☐ Islam
☐ Christianity
☐ Buddhism
☐ Hinduism
☐ Other (Please Specify) ______________________

5. Position

☐ Executive
☐ Manager
☐ Senior Manager
☐ CEO
☐ Member Board of Directors
☐ Other (Please specify) ______________________

6. Please indicate the profile of your bank

☐ Local Conventional Bank
☐ Fully-Fledged Islamic Bank
☐ Islamic Bank Subsidiary of Local Conventional Bank
☐ Islamic Bank Subsidiary of Foreign Bank
☐ Foreign Islamic Bank
☐ Foreign Conventional Bank
☐ Investment Bank

7. Total Assets

☐ Less than RM1 Billion
☐ RM1 Billion –RM49 Billion
☐ RM50 Billion –RM99 Billion
☐ RM100 Billion –RM149 Billion
☐ RM150 Billion- RM199 Billion
☐ More than RM200 Billion
☐ Other (Please specify) ______________________

PART B: Environmental Commitment and Awareness

Section A. This question is about the environmental commitment and awareness of your bank.

	The bank has…………	**Strongly Disagree**	**Disagree**	**Do not know**	**Agree**	**Strongly Agree**
1.	Guidelines and policies on environmental issues	1	2	3	4	5
2.	Special department and staff that deal with environmental issues	1	2	3	4	5
3.	Committees dedicated to dealing with environmental risk in credit assessment	1	2	3	4	5
4.	Manuals detailing environmental procedures in credit assessment	1	2	3	4	5
5.	Employee training programmes on environmental procedures in credit assessment	1	2	3	4	5
6.	A special financial product that rewards the environmental achievement of customers	1	2	3	4	5
7.	Environmental information in external communications such as bulletins, newsletters, annual reports	1	2	3	4	5
8.	Environmental reviews or audits	1	2	3	4	5
9.	A policy of refusing loans to companies with poor environmental records	1	2	3	4	5
10.	Integrated environmental risk procedures into general risk management policy	1	2	3	4	5

Section B: When undertaking a credit appraisal, which of the following factors is perceived as important for obtaining approval.

		Not Important At All	Not Important	No Opinion	Important	Very Important
1.	Financial performance	1	2	3	4	5
2.	Customer track record	1	2	3	4	5
3.	Customer character	1	2	3	4	5
4.	Collateral/security	1	2	3	4	5
5.	Management of the company	1	2	3	4	5
6.	Customer creditworthiness	1	2	3	4	5
7.	Ethical performance	1	2	3	4	5
8.	Potential environmental impact of the financing	1	2	3	4	5
9.	The environmental performance of the company	1	2	3	4	5
10.	Business that complies with religious requirement	1	2	3	4	5
11.	Political connections of the company	1	2	3	4	5

Section C: The following section is about general attitudes towards project financing.

		Rejected	Marginally Rejected	Neutral	Marginally Approved	Approved
1.	Financing a lawful project that has a positive effect on the natural environment but low profitability to the bank	1	2	3	4	5
2.	Financing a lawful project with only break-even return to the bank but positive impact upon the natural environment	1	2	3	4	5
3.	Financing a lawful project that has a very high risk in terms of potential damage to the natural environment but has a high profit potential	1	2	3	4	5
4.	Financing a lawful project which is highly profitable and causes environmental damage in the short-term but can be remedied by the borrower in the medium term/long term	1	2	3	4	5
5.	Financing a lawful project with high potential profit and within acceptable environmental harm criteria, but which causes a high level of harm to indigenous people	1	2	3	4	5
6.	Financing a lawful project with high potential profit and which is welcomed by indigenous people (job creation) but opposed by environmental NGOs and pressure groups	1	2	3	4	5

PART C: Stakeholder Issues in Environmental Risk Management

Section A. **The following stakeholder groups have the capacity and ability to make the bank adopt decisions in accordance with environmental demands, either by means of economic rewards or punishments or by resorting to direct force or legal action or by influencing the company's public image.**

		Strongly Disagree	Disagree	Do not know	Agree	Strongly Agree
1.	Government	1	2	3	4	5
2.	Customers	1	2	3	4	5
3.	Employees	1	2	3	4	5
4.	Global community	1	2	3	4	5
5.	Local community	1	2	3	4	5
6.	Environmentalist groups	1	2	3	4	5
7.	Mass media	1	2	3	4	5
8.	Investors	1	2	3	4	5
9.	Natural environment	1	2	3	4	5
10.	Environmental policies of other banks	1	2	3	4	5

Section B. This section is about your bank's attitude to corporate social responsibility.

	To what extent do you agree with the following statements?	Strongly Disagree	Disagree	Do not know	Agree	Strongly Agree
1.	In banking, it is important to focus upon profitability; internal concerns and policies regarding the natural environment are distractions from this goal	1	2	3	4	5
2.	In banking it is important to perform in a manner consistent with expectations of the law in terms of following the spirit rather than the letter	1	2	3	4	5
3.	A project that has a negative impact on the natural environment and human rights but complies with the law should be rejected because	1	2	3	4	5

	To what extent do you agree with the following statements?	Strongly Disagree	Disagree	Do not know	Agree	Strongly Agree
	it fails to meet ethical standards					
4.	The bank should assist those environmental projects that enhance a community's quality of life	1	2	3	4	5
5.	It is important that borrowers comply with various federal, state and local authority regulations, and this is a matter of concern to the bank	1	2	3	4	5
6.	It is important that a successful business be defined as one that fulfils its ethical obligations to the natural environment rather than one that pursues profitability alone	1	2	3	4	5
7.	It is important to assist forest conservation organised by NGOs through internal lending criteria and loan evaluation	1	2	3	4	5
8.	Immediate profit must be prioritised even if this means sacrificing the natural environment	1	2	3	4	5
9.	In environmental management, it is important to the bank to provide services that at least meet minimum legal requirements	1	2	3	4	5
10.	Development of 'green' lending policies, including lower interest rates for environmentally aware borrowers compared to mainstream borrowers, should be a priority for the bank	1	2	3	4	5
11.	Involvement in environmental management policies must be run in parallel with financial objectives of the bank	1	2	3	4	5
12.	It is important that good corporate citizenship be defined in terms of protecting the natural environment, and not just complying with strict legal obligations	1	2	3	4	5
13.	It is important to show environmental preservation commitment by participating voluntarily with activities organized by NGOs and local community	1	2	3	4	5
14.	It is important to recognize that corporate integrity and ethical behaviour go beyond mere compliance with laws and regulations	1	2	3	4	5
15.	In banking business, it is important that a successful bank be defined as one that fulfils its legal obligations above all others considerations	1	2	3	4	5
16.	Environmental management must be avoided if it affects financial performance	1	2	3	4	5

Thank you for taking the time to complete this questionnaire.

Your assistance in providing this information is very much appreciated.

If there are any comments you would like to make regarding this survey, please do so in the space provided below

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It would be appreciated if you could provide your contact details for further discussion or follow up. However, if you wish to remain anonymous, you need not.

Name:	
Address:	
Phone Number:	
E-mail Address:	

☐ Please tick (√) the box if you would like a summary of the findings.