

**THE IMPACT OF INSTITUTIONAL PRESSURE,
CORPORATE GOVERNANCE AND STRATEGIC
POSTURE ON ENVIRONMENTAL REPORTING
OF MALAYSIAN LISTED COMPANIES: THE
MODERATING EFFECTS OF PERCEIVED
ENVIRONMENTAL VARIABLES**

ABDALLA MEFTAH SHWAIREF

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by

ABDALLA MEFTAH SHWAIREF

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The Researcher

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LIST OF ABBREVIATIONS

NRBV	Natural Resource-Based View
RBV	Resource-Based View
GRI	Global Reporting Initiative
NGOs	Non-Government Organizations
CSR	Corporate Social Reporting
CSR Committee	Corporate Social Responsibility Committee

KESAN TEKINAN INSTITUSI, KAWALSELIA KORPORAT DAN POSTUR STRATEGIK TERHADAP PELAPORAN ALAM SEKITAR SYARIKAT BURSA MALAYSIA: PENGARUH MODERASI PEMBOLEHUBAH PERSEPSI PERSEKITARAN

ABSTRAK

Pelaporan persekitaran merupakan satu laporan penting yang berkaitan dengan kelestarian korporat. Kini, isu persekitaran menjadi fenomena penting yang dilihat dalam pelaporan persekitaran. Penilaian mendalam tentang amalan pelaporan sedia ada adalah perlu bagi meningkatkan tahap pelaporan persekitaran daripada segi ketelusan dan akauntabiliti bagi memenuhi permintaan pemegang taruh. Objektif kajian adalah untuk menilai tahap pelaporan persekitaran dalam konteks Malaysia dalam syarikat yang tersenarai dalam Bursa Malaysia. Kajian ini mengkaji kesan kedua-dua tekanan institusi dan mekanisme kawal selia korporat terhadap postur strategik dan pengaruhnya ke atas pelaporan persekitaran. Kajian ini juga menilai pengaruh moderasi postur strategik dalam hubungan antara tekanan institusi, mekanisme kawal selia korporat dan pelaporan persekitaran. Kajian ini juga bertujuan untuk mengkaji pengaruh moderasi pemboleh ubah persepsi persekitaran antara hubungan postur strategik dan pelaporan persekitaran. Rangka kerja penyelidikan ini disokong oleh teori insititusi, teori pemegang taruh dan teori kontigensi. Sebanyak 757 soal selidik telah diedarkan kepada peringkat pengurusan kanan syarikat yang tersenarai di pasaran utama Malaysia; di mana 127 soal selidik didapati boleh digunakan dengan kadar respons 16.8 peratus. Selain itu, data bagi tahun kewangan yang berakhir pada 2012 diperolehi daripada laporan tahunan 127 syarikat yang tersenarai. Perisian *Partial Least Square* (PLS) telah digunakan bagi menguji hubungan hipotesis dalam kajian ini. Hasil kajian menunjukkan pelaporan

persekitaran adalah rendah dalam kalangan syarikat Malaysia yang tersenarai. Walau bagaimanapun, hasil kajian menunjukkan bahawa tekanan paksaan dan normatif adalah signifikan dengan postur strategik yang mana tekanan mimetik didapati tidak signifikan. Didapati juga, kesan saiz lembaga, pemilikan institusi dan kehadiran jawatan kuasa CSR dan dimensi kawal selia korporat adalah signifikan kepada postur strategik. Manakala tumpuan kebebasan dan pemilikan lembaga didapati tidak signifikan. Keputusan kajian juga menunjukkan pengaruh moderasi postur strategik dalam pelaporan persekitaran. Hasil kajian juga memberi bukti pengaruh moderasi postur strategik yang signifikan dalam setiap hubungan antara tekanan paksaan, tekanan nomatif, pemilikan institusi dan jawatan kuasa CSR dengan pelaporan persekitaran. Seterusnya, kajian ini menunjukkan pengaruh moderasi yang signifikan terhadap persepsi persekitaran yang tenang dan tanggapan kekompleksan persekitaran antara hubungan postur strategik dan pelaporan persekitaran. Walau bagaimanapun, pengaruh moderasi yang tidak signifikan dikenal pasti dalam hubungan tanggapan persekitaran di antara postur strategik dan pelaporan persekitaran. Akhir sekali, kajian ini menyumbang kepada beberapa implikasi dan cadangan kepada pengurusan sedia ada bagi organisasi, pemilik perniagaan, pengamal, penggubal polisi dan badan kerajaan dalam usaha meningkatkan amalan pelaporan persekitaran bagi tujuan pembangunan organisasi dalam pasaran global yang berdayasaing.

THE IMPACT OF INSTITUTIONAL PRESSURE, CORPORATE GOVERNANCE AND STRATEGIC POSTURE ON ENVIRONMENTAL REPORTING OF MALAYSIAN LISTED COMPANIES: THE MODERATING EFFECTS OF PERCEIVED ENVIRONMENTAL VARIABLES

ABSTRACT

Environmental reporting is one of the most important types of reporting in relation to corporate sustainability. Currently, environmental issues have become a prominent phenomenon observable by way of environmental reporting. An in-depth assessment of the existing reporting practices is necessary to improve the level of environmental reporting in terms of transparency and accountability in order to meet the stakeholders' demands. The objective of this study is to evaluate the level of environmental reporting in the Malaysian context in the listed companies in Bursa Malaysia. This study eventually advances the investigation of the impact of both the institutional pressure and the mechanisms of corporate governance on a strategic posture and the effect of a strategic posture on environmental reporting. This study also assesses the mediating effect of a strategic posture in the relationship between the institutional pressure, corporate governance mechanisms and environmental reporting. Furthermore, this study investigates the moderating effect of the perceived environmental variables between the relationship of a strategic posture and environmental reporting. The research framework is supported by the institutional theory, the stakeholder theory and the contingency theory. A total of 757 questionnaires were distributed to the senior-level of management in the Main Market of Malaysian listed companies; whereby 127 questionnaires were found to be

usable with a response rate of 16.8 per cent. Also, the data for financial year ending 2012 is obtained from these 127 listed companies' annual report. A technique of partial least square (PLS) second generation structural equation modelling was employed to test the hypothesized relationships. The findings of the present study revealed a low level of environmental reporting among the Malaysian listed companies. On the other hand, the study result revealed both coercive and normative pressures are significantly related with a strategic posture, whereas mimetic pressure was found to be insignificant. In the same way, board size, institutional ownership, and the presence of a CSR committee and the dimensions of corporate governance were found to be significantly associated with a strategic posture. Whilst, board independence, and ownership concentration was found to be insignificant. Also, the results of the study showed a significant effect of a strategic posture on environmental reporting. The findings of the study also provide evidence of a significant mediating effect of a strategic posture on the respective relationship between coercive pressure, normative pressure, institutional ownership and a CSR committee with environmental reporting. Finally, the present study showed a significant moderating effect of the perceived environmental munificence and the perceived environmental complexity between the relationship of a strategic posture and environmental reporting. However, an insignificant moderating effect was found between the perceived environmental uncertainty on the relationship between a strategic posture and environmental reporting. Finally, the present research provides several implications and recommendations for the existing management of organizations, business owners, practitioners, policy-makers and government bodies to improve their efforts in enhancing the environmental reporting practices.

CHAPTER - 1 - INTRODUCTION

1.0 Introduction

Worldwide, in the last few decades, communities have recognized the impact of the activities of organizations on the environment. Social pressure has provided the impetus for these organizations to have a greater awareness and concern for environmental issues and to take responsibility for these issues. Furthermore, there is increased pressure for organizations to be transparent about the way in which they act in relation to these issues (Baughn, Bodie, & McIntosh, 2007). In addition, organizations widely began to report on a voluntary basis concerning environmental issues in order to gain legitimacy and to continue their operations in a more environmentally-friendly way.

The aim of this study is to focus on the external and the internal forces that are expected to contribute to environmental reporting directly and indirectly through an active strategic posture, which can be leveraged to produce a high level of environmental reporting. Also, this study explores the moderating effect of the perceived environmental variables of dynamism, munificence and complexity on the relationships between a strategic posture and environmental reporting.

This introductory chapter provides the background of the study on a global scale and also locally in the Malaysian context. In addition, in this chapter the recent environmental issues and the environmental reporting philosophy as well as the impact of external and internal forces that are expected to influence the extent of environmental reporting through a strategic posture will be covered, followed by the problem statement, research questions, and the objectives of this study. Finally, the chapter illustrates the significance and scope of this study, as well as the definitions of the key terms.

1.1 Background of this Study

Due to the awareness of environmental responsibility by organizations and the growing concerns for environmental protection, environmental practices have become topical issues in most organizations regardless of their size. Environmental reporting has emerged as a response to the organizational environment.

1.1.1 Environmental Reporting Globally

Globally, environmental and social responsibilities have become of paramount importance. Worldwide, significant debate has waged over the nature of corporate social responsibility and the organizations' duty towards environmental protection (Wood, 1991). Since 1960, in general, people voiced concerns about environmental issues, such as air and water pollution, chemical contamination and waste disposal, and these concerns have increased gradually. Then later, in the 1980s, global environmental problems have manifested through climate change, deforestation, ozone depletion, changes in biodiversity, acid rain, water management issues and globalization (Frank, 1997). Recently, members of public bodies have become interested in environmental issues in addition to concerns from the business community.

The communities in which these companies operate increasingly demand companies to be accountable and responsible for their social and environmental impacts (Hamann, 2003). This demand comes as a result of problems related with global warming which is widely discussed at the societal level. This increased awareness about the environmental impacts has influenced people and institutions dealing with companies and led to an increasing awareness and curiosity concerning the companies' environmental awareness when they consume its products and

services. Accordingly, the pressure on companies to minimize their harmful behaviors increases and this in turn leads to the emerging notion of corporate social and environmental responsibilities (Mohr, Webb, & Harris, 2001).

Moreover, the environmental concerns adopted by international institutions have led to many voluntary environmental initiatives. The initiatives include ISO 14001, Business Charter for Sustainable Development, Eco labels, United Nations Global Compact, Coalition for Environmentally Responsible Economics (CERES) principles, the Global Reporting Initiative (GRI), and Forest Product Certification (FSC) (Christmann & Taylor, 2001). The focal point of these initiatives is the protection of the natural environment, the impact of the organizations on the natural environment, and the responsibility and transparency of organizations towards environmental issues. These initiatives also translate into the increase in pressure placed on companies to become more transparent and accountable in their efforts to reduce harmful behaviors. For instance, the Global Reporting Initiative (GRI) guidelines assist organizations to launch and enhance environmental reporting (Chen & Bouvain, 2009; Spence, 2007). These guidelines have been considered to significantly enhance both the quantity and the quality of environmental reporting.

Environmental reporting has emerged as a result of companies' concerns and an awareness of their effect on the natural environment (Bebbington & Gray, 2001). Thus, the elevated level of concern and the heightened awareness of environmental issues provides a platform for organizations to involve accounting and reporting practices in an attempt to address environmental concerns (Bebbington & Gray, 2001; Gray & Milne, 2002). This environmental involvement in reporting practices aims to address the issues in a sensitive manner and to enhance further environmental objectives and to achieve those objectives. Due to the involvement of accounting and

reporting practices, organizations can become more accountable regarding environmental issues, and in turn, generate an orientation towards environmental protection.

Also, stakeholders' concern about the way in which the organizations interact with environmental issues is considered as another motivation for companies to establish environmental reporting (Hassan & Ibrahim, 2012). Companies provide environmental reporting as a response to the stakeholder pressure with stakeholders demanding transparency and the accountability (Kolk, 2008). Also, environmental reporting is considered a vehicle which is instrumental in enforcing the value of stakeholders' concern about environmental issues (da Silva Monteiro & Aibar, 2010). Hence, the companies, via environmental reporting, can enhance their transparency and accountability towards environmental activities to meet the stakeholders' concerns.

In other words, environmental reporting acts as a tool for providing environmental information designed to meet accountability and to indicate a company's concern regarding environmental issues (Shearer, 2002). It is, therefore, inevitable that businesses and organizations have connections that are linked by social means to the surrounding society. This leads to a heightened need for accountability to be undertaken. Gray *et al.* (1997) provided a definition of social relationship with accountability as essentially being related to the relationships between groups, organizations and individuals, and the rights to information that these relationships bring about. Accordingly, it is through the discourse of accounting that environmental accountability values can be progressed with a view for transparency and comprehensiveness being represented (Shearer, 2002).

Thus, the collective significance of these disclosures includes the closeness of relationships as moral values including respect and an ethical responsibility (Lehman, 1995). Ultimately, corporate environmental reporting accomplishes a role to provide environmental data intended to meet the requirements of the relationships of accountability and to denote corporate consciousness by way of an intellectual discussion based on moral values of respect concerning environmental issues (Shearer, 2002). Corporate environmental reporting justifies a level of environmental accountability in order to create a moral society for business corporations.

Environmental reporting is considered to be a part or a tool of a company's environmental management, to communicate with stakeholders and to enhance their transparency and their accountability. This tool takes various forms with some companies providing stand-alone reports on environmental issues, whilst others establish it as a part of a corporate social responsibility report or a part of an annual report (Koskela & Vehmas, 2012).

According to Hart (1997), most studies have largely focused on developed countries such as the United States, United Kingdom, Australia as well as countries in Western Europe. Meanwhile, Rizk, Dixon & Woodhead (2008) remarked there are few studies conducted in developing nations, and the majority of studies conducted were in the perspective of the newly industrialized Asian countries such as Malaysia and Singapore. Most studies make a similar conclusion, in which environmental reporting in developing countries is still in an infancy stage (Buniamin, 2012).

1.1.2 Environmental Reporting in Malaysia

Malaysia, as a developing country, is reviewing its institutions and its structure to meet the needs of the 21st century, in order to become a modern society with an

advanced economy. It has been remarked that, with the creation of Agenda for the 21st century, a crucial step was undertaken to clearly outline the role of business and industry in the evolution of a more sustainable society (Amran & Haniffa, 2011). The Malaysian government has developed a number of national strategies in different areas to achieve this goal. Furthermore, companies can play an important role to respond effectively to the environmental challenge through suitable strategies and operations (Ahmad, Sulaiman, & Siswantoro, 2003).

In recent years Malaysian companies' awareness concerning environmental and social issues has showed an increase, but at a slow rate (Aminrad, Zakariya, Hadi, & Sakari, 2012). Despite this attention, the literature reveals that environmental problems have increased in number, leading to issues such as problems with biodiversity, pollution and erosion. The needs of primary energy users have increased; with it being stated that from 1971 to 2004 the energy consumption in Malaysia is likely to increase by 26 per cent per annum and is expected to continue to rise (Mohd & Sayce, 2010). In view of the rapid economic growth rate, it seems most likely that Malaysia will begin to import energy by the year 2015. According to the *United Nations Development Program (UNDP), 2007*, Carbon emissions in Malaysia have increased by 221 per cent since 1990. The large amount of energy consumption with the associated high level of carbon emissions taking place throughout Malaysia has brought forward several initiatives to use renewable energy as well as considering ways in which to cut emissions (Mohd & Sayce, 2010).

However, it is the rapid rate of development of economic growth and globalization which has created serious environmental challenges for Malaysia, with the essential environmental issues identified as air and water pollution, water and wastewater management and management of solid waste. The emissions of

Malaysian companies may increase at such an alarming rate that the sustainable economy may not be able to be maintained (Al-Amin, Chamhuri Siwar, & Abdul Jaafar, 2007). Perry, Singh and Unies (2001) revealed that the environmental issues in Malaysia include an over-logging of primary forests, air and water pollution, and dumping of hazardous waste.

The Malaysian government has identified concerns regarding the 9th Malaysian plan's environmental aspects (2006-2010). The government has the onus and a motivation to ensure that there is an appropriate proper balance between environmental sustainability and development. Accordingly, the government of Malaysia is likely to increase the level of preventive measures and step up enforcement of those measures (Buniamin, Alrazi, Johari, & Rahman, 2011). Moreover, in examining the 2006 Malaysian government budget, an amount of RM 1.9 billion has been allocated to implement projects related to environmental conservation. From this amount, RM40 million was set aside to inhibit coastal areas' erosion, whilst RM 370 million was provided for flood mitigation and drainage nationwide, RM 114 million for enhancing river estuaries and rivers, RM 991 million for repairing the existing sewerage plants and construction of new plants. While, RM 363 million was allocated for solid waste management program (Buniamin et al., 2011).

The increased level of environmental problems and environmental challenges has provided a motivation for Malaysian companies to conduct environmental disclosures. Also, as a consequence of the increased levels of pollution, the Prime Minister of Malaysia in 2007 stated that social and environmental information ought to be disclosed in the annual reports of listed companies in Bursa Malaysia (Mohd & Sayce, 2010). Despite this, environmental reporting in Malaysia still faces many

problems. In examining the probable causes of these problems, and with challenges facing the Malaysian listed organizations to enhance their environmental reporting, there is a requirement to thoroughly explore the motivation for this phenomenon.

The previous literature has highlighted problems in relation to environmental reporting in Malaysia. These studies, in general, have attempted to examine social reporting as a whole, and there is lack of studies that specifically examine environmental reporting of Malaysian companies (Nazli & Sulaiman, 2004). More recently, another study demonstrated that the agenda for sustainability is more skewed to the notion of corporate philanthropy than it is to environmental issues (Mohd Aini & Sayce, 2010). This is comparable to the finding of the other studies conducted in Malaysia which stated that environmental reporting in Malaysia is declarative, narrative and merely makes references to general commitment. Also, as indicated to above, environmental reporting is merely informative and mostly confined to corporate philanthropy and charity (Ahmad & Mohamad, 2014; Amran & Devi, 2008; Amran & Haniffa, 2011; Thompson & Zakaria, 2004).

Moreover, the previous studies have indicated environmental reporting within Malaysia is at a low level and not sufficient (Huui, Sing, & Siddiq, 2012). In the same vein, other studies verified that the environmental reporting in the 243 companies listed on the Main Board of Bursa Malaysia is at a low level. In fact, according to Buniamin et al. (2011), only 28 per cent of 243 companies disclose environmental information. Furthermore, on average, every company revealed 4.7 sentences, whereas the quality, as measured by the reporting index proves, on average, only 3.24 sentences reported. This could be due to the voluntary nature of environmental reporting, or environmental reporting has only been recently acknowledged in Malaysia (Buniamin et al., 2011).

Malaysian listed companies have a desire to value their environmental reporting, which is still considered in its infancy as previously mentioned (Buniamin, 2012). Thus, there is a need for a study of Malaysian companies to serve as the basis for further research in environmental reporting. Such a position would support Malaysia in having a competitive advantage as a clean, green and ethical nation, as a main part of the Vision 2020 and the Third Industrial Master Plan (Al-Amin, et al., 2007). Thus, Malaysian organizations ought to determine their motivations to disclose environmental information in order to gain several benefits such as a competitive advantage.

1.1.3 Factors Influencing Environmental Reporting

Although there is an increasing level of interest for environmental information and the presence of international-level guidelines, there is a scarcity of reasons and a unitary structure for suitable environmental reports. In looking to enhance companies' transparency and accountability, there are several studies that have investigated the factors that have an impact on reporting. As environmental reporting is often undertaken on a voluntary basis, and due to the lack of a regulatory framework, various studies have focused on identifying factors that influence those companies from developing countries that do disclose environmental information. The determinants can be divided broadly into three groups (Adams, 2002; Hasnah, Sofri, Sharon, & Ishak, 2006). The first group is related to the corporate characteristics, such as the age of the company (Roberts, 1992) the industry (Deegan & Gordon, 1996), and the size (Hackston & Milne, 1996). The second group is the external factors, such as the economic context (Guthrie & Parker, 1989), cultural context (Haniffa & Cooke, 2005), media coverage (Brown & Deegan, 1998),

stakeholder power (Roberts, 1992), and the institutional pressure (Amran & Haniffa, 2011). The third and last group to consider is the internal factors, such as corporate values and corporate governance (Haniffa & Cooke, 2005), strategy issues (Galbreath, 2010) and the demands for ethical responsibility (Adams & Kuasirikun, 2000).

Understanding the factors that play a role in the reporting processes is expected to increase the transparency and the accountability of companies (Adams, 2002). The current study, therefore, investigated the internal and external aspects of the reporting processes simultaneously. Based on the literature, this study expected that institutional pressure and corporate governance are relevant for social and environmental activities. Thus, the present study intended to examine the influence of these variables on a strategic posture with consideration to the perceived environmental variables.

The related literature showed that institutional forces play a vital role in affecting companies to implement new accounting and reporting practices (Dillard, Rigsby, & Goodman, 2004; Tsamenyi, Cullen, & González, 2006). An institutional mechanism directs companies to implement management practices in order to gain legitimacy regardless of their actual values (Othman, Alam, Arshad, & Darus, 2009). According to this aspect, companies consider social and environmental reporting as a vital instrument for a legitimating strategy that provides useful information to communicate with their multiple stakeholders. The institutional forces that leads to legitimization are normally categorized into three mechanisms promoting isomorphism (DiMaggio & Powell, 1983). These three general mechanisms promoting isomorphism are: coercive, normative and mimetic pressures. The three dimensions of institutional pressure influence or force organizations to implement

the same accounting practices, such as standards of reporting, accounting, evaluations, or planning as a result of this pressure. Furthermore, several studies stated that institutional factors are a significant mechanism to enhance and promote environmental practices (Bansal, 2005; Sarkis, Gonzalez-Torre, & Adenso-Diaz, 2010).

This study examined the institutional factors in the context of external pressures, and corporate governance mechanisms in the context of internal pressures. Despite the rich literature relating to these variables, there is a lack of studies in relation to the impact of two variables simultaneously on environmental reporting. The effect of corporate governance on environmental reporting has been mentioned in numerous studies in the relative associated literature (Gibson & O'Donovan, 2007; Haniffa & Cooke, 2005; Ienciu, 2012; Kolk, 2008; Michelon & Parbonetti, 2012). However, before the 1990s the existence of the term 'corporate governance' is rarely mentioned (Keasey, Thompson, & Wright, 2005). Claims have been made that good corporate governance is vital for increased transparency and credible reporting (Ajinkya, Bhojraj, & Sengupta, 2005; Cormier, Ledoux, Magnan, & Aerts, 2010). Ethically responsible and effective environmental reporting and corporate reporting, in general, are considered big challenges facing the corporate governance of companies. Organizations which highlight the awareness of their environmental responsibilities are expected to extend their accountability beyond the traditional financial disclosure to include environmental reporting (Gray, 2006). Thus, corporate governance is expected to effect the companies environmental reporting to meet stakeholders' demand for transparency and accountability. Furthermore, the present study examined the effect of the institutional pressure and the mechanisms of

corporate governance on a strategic posture to assess the indirect impact on environmental reporting.

Strategic posture refers to the way in which organizations respond to social demands. An organization adopting an active strategic posture attempts to supervise and manage its association with its stakeholders. Therefore, such organizations continuously monitor and administer their association with their key stakeholders. Conversely, those organizations which adopt a passive strategic posture do not consider their relationship with stakeholders (Prado-Lorenzo, García-Sánchez, & Gallego-Álvarez, 2009). Accordingly, organizations which implement an active strategic posture most likely take into account environmental issues (Branco & Rodrigues, 2007). The state of institutional pressure and companies' corporate governance, according to the related literature, is expected to lead to the adoption of a particular strategic posture in the context of environmental issues which is anticipated to influence the level of environmental reporting.

Institutional pressures are considered as external factors and these factors have an effect on companies' responsiveness toward environmental issues (Buysse & Verbeke, 2003). Many studies acknowledged the significance of the institutional theory to clarify the behavior of companies (J.D. Goodstein, 1994; Handelman & Arnold, 1999; McFarland, Bloodgood, & Payan, 2008; Scott, 1995). Furthermore, a number of authors have built on the concept of the institutional theory, describing the adoption of specific strategies by companies' dependence on the type and the strength of these pressures, and the companies' response to these strategically range from an active to a passive response (Oliver, 1991). According to the institutional theory, globalization decision-making is affected by the social structure in which the organization operates (Lyles, Flynn, & Frohlich, 2008). A strategic posture is likely

to mediate the internal pressures and the environmental performance. Several studies have implied that a strategic posture is affected by the institutional pressure, as a manager's decisions and interactions occur within the social-related climate rather than merely adhering to an economic rational perspective.

Moreover, stakeholders have an impact on management's decision-making process to implement a specific strategy (Carter & Rogers, 2008; Henriques & Sadosky, 1999; Zhu & Sarkis, 2007). Thus, the stakeholder theory could be applied to investigate the ways in which companies change and how they respond strategically. Managers ought to consider the interests of shareholders, employees, suppliers, customers, and society, to develop an objective based on the stakeholders' interests in order to obtain long term support and success. Hence, managers have a requirement to investigate the relationship with all stakeholders to develop all the appropriate business strategies (Freeman & McVea, 2001).

The relevant literature indicates that corporate governance has a vital impact on a strategic posture (Daily, McDougall, Covin, & Dalton, 2002; Michelon & Parbonetti, 2012). The involvement of a board's directors in strategic decision-making leads to the creation of value and to a competitive advantage. Good corporate governance is dependent on many factors; such as the board size (otherwise known as the number of directors appointed to the board), the level of independence of the board members, the ownership concentration, and the institutional ownership and whether there is a corporate social responsibility (CSR) committee presence. All these mechanisms are expected to have an impact on a strategic posture and most likely have a positive influence on the strategic decision-making process (Gabrielsson, Huse, & Minichilli, 2007; Rindova, 2002).

In addition, several empirical studies have been conducted in an attempt to investigate the relationship between the managerial strategic posture and social and environmental reporting (Gray, Kouhy, & Lavers, 1995; Magness, 2006; Roberts, 1992). The majority of these studies were undertaken post 1985, after the measurable model was presented by Ullmann (1985).

A company's strategic posture towards social and environmental reporting is the second element of Ullmann's model. A strategic posture proposes that organizations undertake different strategies in response to the stakeholders' demands. Also, a strategic posture may range from a response such as an avoidance of demands to partial or total compliance with stakeholders' demands (Elijido-Ten, 2004). When an organization continually monitors its relationship with key stakeholders and actively seeks to manage that relationship in order to gain an optimal level of interdependence with its stakeholders, it is defined as an active strategic posture. An active stakeholder management strategy formulates the development of social responsibility programs as well as actively disclosing the existence of such programs (Galbreath, 2010). On the other hand, organizations which adopt a passive strategic posture, therefore, do not endeavor to monitor and manage their relationship with key stakeholders. Accordingly, with respect to the environmental information provided in annual reports, it is anticipated that those organizations which demonstrate a more active strategic posture towards environmental concerns are anticipated to divulge a greater level of environmental information in those reports (Husillos & Álvarez-Gil, 2008; Prado, Gallego, & Garcia, 2009).

Moreover, a broad body of literature has been built up to explore the influence of the external environment on companies' strategies, structures, processes,

and outcomes (Child, 1972; Goll & Rasheed, 2004; Milliken, 1987). The literature has revealed that the arrangement between the business environment and strategy or managerial behavior allows for optimal performance (Ansoff, 1991; Child, 1972; Lawrence & Lorsch, 1967). A strategic significance has grown as the external environment has become increasingly unstable and competitive. There is not one single strategy that is universally proper and that can be utilised for all organizations, and in all conditions (Otley, 1980). This, then, indicates that the strategic posture ought to match the situations and conditions in which the organization is operating, in order to meet the objective of an improvement in outcome. Thus, the business environment is an important element that should be considered when studying the relationship between strategy and the outcome of organizations. The external environment differs from industry to industry and from company to company, and it seems natural to suggest that the association between a strategic posture and environmental reporting may also differ from one environment to another. For example, a prior study has empirically indicated the context for the influence of the relationship association between strategy and performance or outcome (Goll & Rasheed, 2004).

Many studies have adopted Dess and Beard's (1984) framework, which indicates the emergence of a broad consensus around its general validity and applicability for analyzing globalization task environments (Andrews, 2009; Boyd & Gove, 2006). Dess and Beard (1984) identified three dimensions; dynamism, munificence, and complexity, as a conceptualization of the environment. Dess and Origer (1987) Stated that the environmental dimensions are considered as a source of information, with the complexity and dynamism indicating a degree of uncertainty

confronts corporations and a munificence dependence on the environment's resources.

In relation to dynamism it can be associated with a managerial awareness of the business environment, in general, or specifically to one of its components of unpredictability (Dess & Beard, 1984; Milliken, 1987). The business environment, in general, will probably be perceived as uncertain in the circumstances of the interface between the natural environment and business. A manager's uncertainty can be evident in relation to a number of factors including the feasibility of future technologies, such as solar energy devices or fuel cell for instance, and their direction or about the consumers' shifting expectations in relation to their inclination to procure environmentally-friendly services and products, or perhaps due to likely legislative changes.

Complexity can be considered as having a significant exogenous impact on the environmental strategies of corporations in the service-related industries further to the increase in the number of stakeholders and their respective concerns, changes in public policy and regulations, scientific debate and scrutiny concerning environmental problems, and changing societal expectations. In the event that an organisation's senior executives recognise that a large quantity and mixture of issues and factors exist and are related to the business of the organisation, it is perceived that environmental complexity exists (Miller & Friesen, 1983; Smart & Vertinsky, 1984; Tan & Litschert, 1994). For instance, multiple stakeholders actively debate the issues of climate change and global warming with polarised views.

The definition of munificence is the extent to which an environment is sustainable in light of a continuous organisational growth or sales growth rate (Dess & Beard, 1984). In the instance of the interface between the national environment

and business a munificent environment is seen to exist when a large number of consumers are content to pay a higher rate for services and products with environmental-friendly credentials. This is an environment which can be considered as: one that fosters the development of environmental technologies in institutions such as universities; the inclusion of tax incentives and government subsidies in exchange for the adoption of alternative greener energies; lower rates of interest for the funding of the environmental technologies and their implementation; lower rates for insurance premiums when environmental risks have been minimised; and the presence of viable alternative inputs that are economical and environmentally-friendly (Aragon-Correa & Sharma, 2003).

Previous related literature indicates, in general, a conflict between strategies and their relationship with the overall performance of companies. Accordingly, in this study an examination of the environmental variables was made to explore the effect of the variables to test whether those variables moderate the relationship between a strategic posture and environmental reporting as it is anticipated to do.

Finally, the aim of the current study is to contribute to the body of accounting knowledge related to environmental reporting of the Malaysian listed companies. Specifically, this study focused on the institutional pressure and the mechanisms of corporate governance, and investigated their indirect effect through a strategic posture as a mediator on environmental reporting, taking into consideration the perceived environmental variables as a moderator in the relationship between a strategic posture and environmental reporting. The next section will focus on the research problem of this study.

1.2 Research Problem

The literature has consistently argued that environmental reporting is an important corporate phenomenon (Ahmad & Haraf, 2013; Georg, 2003). Based on the literature, there is an increased call for organizations to demonstrate and take on responsible action in relation to environmental issues (Elijido-Ten, 2012; Othman & Ameer, 2010; Sarkis et al., 2010). In this context, sustainability reporting is seen as an important platform for establishing transparency, accountability and effective governance (Subramaniam, Hodge, & Ratnatunga, 2006). This demand could, for instance, emerge from the stakeholders' pressure and the curiosity from society about the organizations' actions regarding environmental issues (de Villiers & van Staden, 2010). As a result of this demand, organizations ought to be aware of and account for the environmental impacts of their activities. Therefore, environmental reporting is considered an important practice for the organizations' sustainability.

In the context of Malaysia, the practice of environmental reporting by organizations is scarce and do not discharge the companies' accountability (Ahmad & Mohamad, 2014). Furthermore, previous studies examining the underlying factors in relation to decisions made regarding environmental by Malaysian companies are limited in number (Saleh, Zulkifli, & Muhamad, 2010). Barraclough and Morrow (2008) revealed in their study that Malaysian companies are not ready for the application of environmental reporting. Another study conducted by Buniamin (2012); and Huui *et al.* (2012) indicated that there is a low level of environmental reporting and this level is not sufficient for the Malaysian organizations. Moreover, environmental reporting in Malaysia is narrative, declarative and merely making references to general commitment (Ahmad & Haraf, 2013; Ahmad & Mohamad, 2014; Amran & Devi, 2008). A study conducted by Sharifah Buniamin *et al.* (2011) found from their analysis that only 28 per cent of the public listed companies in the

main board of Bursa Malaysia disclosed environmental related information. The same study explained that, on an average, the organizations report 4.7 sentences and in relation to the reporting whereby there is quality information regarding environmental reporting it was found to be a mere 3.2 sentences. These results were indicative of a low level of reporting practices. As a consequence of the low level of environmental reporting, it has had a negative influence on the accountability, transparency and legitimacy of the organizations (Kolk, 2008).

Sumiani, Haslinda, and Lehman (2007), Alrazi, Sulaiman, and Ahmad (2009) and Ahmad and Mohamad (2014) revealed that the low level of reporting raises the question of discharging the accountability of the organizations, and as a result, retaining the concentration of the stakeholders will be difficult for the organizations into the future. Additionally, from the context of legitimacy it also can be considered as one of the crucial issues facing an organization whereby the absence of reporting practices references a low level of attachment of the organization in the position of societal relations (Amran, Lee, & Devi, 2014). Accordingly, in this context, the requirement for informative and qualified environmental reporting is essential (Sawani, Mohamed Zain, & Darus, 2010).

A large body of empirical research concerning environmental reporting has focused on an examination of companies operating in developed countries (Campbell, 2007; Holland & Boon Foo, 2003; Lober, Bynum, Campbell, & Jacques, 1997; Martin & Hadley, 2008; Stray & Ballantine, 2000). These prior studies have investigated the relationship between environmental performance and environmental disclosures (Hassan & Kouhy, 2014); examined the effect of specific company characteristics on the level of environmental reporting (Elsakit & Worthington, 2014); examined the impacts of specific environmental incidents with environmental

reporting (Azizul Islam & Aminul Islam, 2011); and made a comparison between companies operating in different countries (Amran, Periasamy, & Zulkafli, 2014). Thus, these researchers have indicated that consideration ought to be given to environmental reporting, in that environmental reporting is a vital phenomenon for the sustainability of organizations.

In the context of Malaysia, an emphasis has not been placed by practitioners and academicians on environmental reporting, and the examination of these issues is a very recent phenomenon and the reporting is limited (Mohd Khalid, Lord, & Dixon, 2010). For a better level of implementation of environmental reporting within organizations, the researchers considered the institutional pressure (Amran & Haniffa, 2011) and corporate governance (Haniffa & Cooke, 2005) as being influential factors. Additionally, Joseph, Pilcher, and Taplin (2009) asserted that the institutional pressure can motivate an organization to be more committed to the adoption of environmental reporting practices which can also make an organization more sustainable in the context of reporting environmental issues. On the other hand, Joseph, *et al.* (2009) revealed that the level of environmental reporting is enhanced in the event that organizations adopt good corporate governance practices. Thus, the current study expects that the prevailing institutional pressure and the mechanisms of corporate governance have an impact on the environmental reporting practices of the organizations.

Furthermore, for the purpose of enhancing environmental reporting in organizations, the institutional pressure and corporate governance itself may not necessarily be the only factors. Whereas, for the ultimate survival of organizations, researchers also revealed that in the long term, sustainability is impossible without an appropriate strategy (Thompson, 2001). Thus, the practice of strategic choice is a

primary managerial task and is considered as an important function for all types of organizations. A strategic choice explains the determinations of courses of action an organizations has deliberated upon in relation to a chosen strategy (Child, 1997). Therefore, as a strategic choice, a strategic posture is also considered by the researcher as an influential factor for an organization's environmental reporting (Husillos & Álvarez-Gil, 2008; Oliver, 1991; Ullmann, 1985).

In addition, there is an ever increasing body of literature that has investigated the importance of the association of the element of strategy with environmental reporting (Castello & Lozano, 2009; Eljido-Ten, 2004; Magness, 2006). On the other hand, there is lack of studies that have investigated the mechanism or the indirect impact of external and internal factors on adopting a specific strategic posture to establish or enhance the existing environmental reporting. However, there is a growing interest to introduce environmental reporting by organizations to ensure the reporting is more consistent, transparent and sustainable, and in doing so it may overcome the weaknesses of reporting systems (Amran, Lee, & Selvaraj, 2013; Kolk, 2008).

Moreover, some empirical studies that examined the association between strategy and an organization's outcome revealed inconsistent results and rendered this relationship as being ambiguous (Agbejule, 2005; Cadez & Guilding, 2008; Hoque, 2005; Malmi, Raulas, Gudergan, & Sehm, 2004; O'Connor & Cheung, 2007). Though, some studies have provided evidence to support a positive association between strategy and an organization's outcome, when taking into consideration the external environmental variables (McArthur & Nystrom, 1991; Priem, Rasheed, & Kotulic, 1995). Since environmental reporting is a vital tool that reflects environmental performance, therefore the current study has attempted to fill the gap

in the literature by investigating the impact of the perceived environmental variables on the relationship between a strategic posture and environmental reporting.

In summary, the main aim of this research is to assess the extent to which environmental reporting is taking place in the Malaysian context, and to find answers to the conflicting results regarding the companies' motivations to provide information related to their environmental issues using a linkage to examine between the variables derived from the institutional pressure, corporate governance, strategic posture, perceived environmental variables and environmental reporting.

1.3 Research Questions

Based upon the presentation of the underlying problem, as above-mentioned, this study has attempted to provide an answer to the following research questions:

1. What is the extent of environmental reporting among the listed companies?
2. What is the relationship between the institutional pressure and a strategic posture among the listed companies?
3. What is the relationship between the mechanisms of corporate governance and a strategic posture among the listed companies?
4. What is the relationship between a strategic posture and environmental reporting in the listed companies?
5. Does a strategic posture mediate the relationship between the institutional pressure and corporate governance, with environmental reporting?
6. Do the perceived environmental variables (dynamism, munificence, and complexity) moderate the relationship between a strategic posture and environmental reporting?

1.4 Research Objectives

In providing an answer to the research questions, this study seeks to accomplish, specifically, the following six objectives:

1. To determine the extent of environmental reporting among listed companies;
2. To investigate the relationship between institutional pressure (coercive, normative and mimetic), and a strategic posture among listed companies;
3. To investigate the relationship between corporate governance (board size, board independence, ownership concentration, institutional ownership and a CSR committee), and a strategic posture, among the listed companies;
4. To examine the relationship between a strategic posture and environmental reporting in the listed companies;
5. To examine whether a strategic posture mediates the relationship between the institutional pressure (coercive, normative and mimetic), and the mechanisms of corporate governance (board size, board independence, ownership concentration, institutional ownership and a CSR committee), with environmental reporting;
6. To determine the potential moderating effects of the perceived environment variables (dynamism, complexity, and munificence) in the relationship between a strategic posture and environmental reporting.

1.5 The Scope of This Study

The broad objective of this study was to explore the factors and the motivations which encourage Malaysian listed firms to establish environmental reporting. Moreover, this study aimed to identify the main causes behind the low level of environmental reporting by Malaysian listed companies. In particular, this study focused on investigating the extent of environmental reporting, and the indirect impact of these variables through a strategic posture as an intervening variable on

environmental reporting. Also, this study investigated the interactive impact of the perceived environmental variables on the relationship between a strategic posture and environmental reporting in the Malaysian listed companies. The listed companies have been chosen as the population for this study as it is a requirement for all the listed companies to prepare environmental reports (Buniamin, Alrazi, Johari, & Rahman, 2008; Othman & Ameer, 2010; Sawani, Zain, & Darus, 2010). The listed companies in this study are all the non-financial listed companies on the main board (Bursa Malaysia) for the calendar year 2012. The financial companies were excluded due to these companies' operations being considered to have a lesser impact on the environment, and due to their different types of reporting requirements and their different criteria (Wilmshurst & Frost, 2000).

1.6 Significance of This Study

This study has contributed on both theoretical and practical sides; in terms of examining the extent of the Malaysian listed companies' environmental reporting. Also, this study has taken into consideration the indirect effect of these variables on environmental reporting through a strategic posture, which is expected to mediate this relationship. Moreover, this study investigated the role of environmental variables as a moderator between the strategic posture and environmental reporting. Furthermore, all these variables together represent a holistic framework which sets this study apart from other studies conducted, in general, and in the Malaysian context specifically, which is expected to fill the gap in the relative literature of environmental reporting. Hence, the following two sub-sections present some of the potential important contributions which are expected outcomes of the current research endeavor.