EXPLORING THE IMPACT OF MEDIA PUBLICITY ON ANNUAL REPORT ENVIRONMENTAL DISCLOSURES

Evangeline Elijido-Ten
Swinburne University of Technology, Australia

A paper reviewed and accepted for the 8th Australasian Conference on Social and Environment Accounting Research (CSEAR 2009)

6-8 December 2009

Christchurch, New Zealand
EXPLORING THE IMPACT OF MEDIA PUBLICITY ON ANNUAL REPORT ENVIRONMENTAL DISCLOSURES

ABSTRACT

**Purpose** – This research extends the developing-country environmental disclosure literature by exploring managerial perceptions of different environmental events and the impact of media coverage on management’s decision to provide annual report environmental disclosure (ARED) voluntarily.

**Design/methodology/approach** – Using the broad lens of stakeholder theory, a Malaysian experiment is initiated to gain insights into the type of environmental disclosure approach preferred by management. The study also examines whether these preferences are affected by such factors as: (1) the perceived significance of the environmental event; (2) the stakeholder’s potential behaviour; and (3) the impact of media publicity on the featured event. Three hypothetical vignettes are used featuring environmental events of varying nature and impact to human health and the environment.

**Findings** – The results suggest that the influence of media coverage on management’s preferred ARED approach is most pronounced when the event is of negative nature and is generally ‘unobtrusive’ such that the stakeholders concerned have less direct experience on the issue.

**Originality/value** – This research, although exploratory in nature, provide evidence that the application of stakeholder theory combined with the media agenda setting theory has the potential to enhance our understanding of how corporate entities behave particularly in the context of a rapidly developing economy such as Malaysia.

**Keywords**: environmental disclosures, stakeholder theory, media agenda setting theory, developing country, Malaysia
Introduction

The purpose of this research is to extend the developing-country environmental disclosure literature by exploring managerial perceptions of different environmental events and the impact of media coverage on their decisions to voluntarily provide environmental disclosures. This current study combines the use of media agenda setting theory (Brown & Deegan, 1998) and the broad lens of stakeholder theory, in particular, the stakeholder strategy formulation framework introduced by Freeman (1983, 1984). A Malaysian experiment is initiated to gain insights into the type of environmental disclosure strategy preferred by management and whether these preferences are affected by such factors as: (1) the perceived significance of the environmental event; (2) the stakeholder’s potential behaviour; and (3) the impact of media publicity on the featured event.

This study contributes to the existing body of literature in a number of ways. Firstly, it brings a perspective from a developing country such as Malaysia into the social and environmental reporting literature. The lessons learned from the Western experience hint that with rapid economic growth comes the price of environmental degradation as a downside to industrialisation. Being a rapidly developing economy, Malaysia offers a fertile setting from which an investigation could be made on how corporate entities manage their possibly competing stakeholder demands through the provision of environmental disclosures. Furthermore, if a truly voluntary disclosure setting is sought, a study conducted from a developing country where mandatory reporting is almost non-existent and environmental awareness is generally low would provide a richer setting than those conducted in developed economies where environmental awareness and governmental regulations are prevalent.

Secondly, the current study extends the application of stakeholder theory through the use of experimental setting that allows the manipulation of different variables of interest. In this investigation, the experiment enables the inclusion of environmental events of varying levels of urgency and the ability to manipulate whether the event has been publicised by the media or not. Prior studies use experimental design from the legitimacy perspective (e.g. O’Donovan, 2002; Milne & Patten, 2002) while others extend the development of stakeholder theory through the use of case studies (Frooman, 1999; Friedman & Miles, 2002). This study combines the strength of both strands of research.

Finally, by using hypothetical vignettes to elicit the informants’ views, this research provides an account on how management makes voluntary environmental disclosure decisions from an ex ante perspective. Much of environmental disclosure research provides evidence from an ex post perspective thereby excluding the possibility of learning from the “enquiry of
absence” (Choudhury, 1988, p. 555). By gathering information on an *ex ante* basis, the “presence orientation” of disclosures is broadened (O’Dwyer, 2002) and relevant insights on managerial perceptions and thought processes are more likely to be uncovered (O’Donovan, 2002).

The remainder of the paper is organised as follows. The next section provides a brief background to the Malaysian context and the results of recent research in Malaysian environmental reporting practice. A discussion of media agenda setting theory and the stakeholder strategy formulation framework used to inform the analysis is shown next followed by the section that explains the research methodology employed. Results are discussed in the penultimate section. Finally, some reflections and conclusions are offered.

**The Malaysian Context**

Malaysia’s quest to become a developed country by the year 2020 has been well disseminated since the launch of *Vision 2020* in 1991. Despite the government’s initiative to incorporate environmental considerations since the Eighth Plan period (2001-2005), the Malaysian Quality of Life Index (MQLI)¹ for 1990 to 2004 showed a negative percentage change in two areas - the environmental front and on public safety (Economic Planning Unit (EPU) 2006). Malaysia has gone past the mid-point of its journey towards the 2020 target and is now in its final fifteen-year phase commencing with the Ninth Plan period (2006-2010). Recognizing the necessity to improve the environmental index, the Ninth Plan promotes preventive measures to mitigate negative environmental effects by “fostering closer cooperation between stakeholders in addressing environmental concerns” (EPU 2006 p. 453, italics added). Despite these initiatives, there is very limited requirement for Malaysian companies to provide environmental disclosures in their Annual Reports.

**Malaysian Environmental Reporting Regulations**

The main authority for the prevention and control of environmental pollution in Malaysia is the Department of Environment (DOE), a department under the umbrella of the Ministry of Science, Technology and Environment. DOE is empowered to develop standards and guidelines to ensure compliance and to enforce the Environmental Quality Act of 1974 (EQA). Section 37 of the EQA entitles the Director General of DOE to demand environmental information from

---

¹ The Malaysian Quality of Life Index (MQLI) is an aggregate measure of the quality of life using forty-two indicators, representing eleven components of life, namely: (1) transport and communications; (2) working life; (3) education; (4) housing; (5) health; (6) culture and leisure; (7) social participation; (8) income and distribution; (9) family life; (10) environment; and (11) public safety (EPU’s Ninth Malaysia Plan, 2006, p.11).
companies in the event of non-compliance with the EQA but such information is not disclosed to the public.

Sub-regulation 22 of the Occupational Safety and Health Act of 1996 (OSHA) requires manufacturers to make public disclosures on the incidence of any major accident hazards and their impact on the population and environment. Section 169 subsection 7 of the Companies Act of 1965 (CA) requires directors to include information on any item, transaction or event of a material and unusual nature that may have arisen during the course of the financial year. Although these legislations can be interpreted to include environmental information, disclosures are not often provided, particularly in the annual report, as phrases such as “major accident hazards” and “material and unusual nature” can be vaguely interpreted.

The only other source of environmental reporting guidelines is the Malaysian Accounting Standards Board (MASB). Financial Reporting Standard (FRS) 101 (formerly known as MASB 1) makes explicit reference to environmental reports encouraging companies to present additional information if management believes they will assist users in making economic decisions. FRS 137 (formerly MASB 20) sets out the disclosure requirements for the recognition of contingent liabilities and assets. Although FRS 137 does not provide specific details of the types of liability, it is foreseeable that environmental liabilities could potentially be included within a company’s financial statement.

It is clear from the above discussion that annual report environmental disclosure (ARED) in Malaysia is largely optional. Despite the absence of mandatory requirement, the literature reveals that Malaysian environmental reporting research is on the increase.

**Malaysian Corporate Environmental Reporting**

Studies focusing on Malaysian environmental reporting have not appeared in the literature until the turn of the millennium. In a study commissioned by the Association of Chartered Certified Accountants (ACCA), the state of Malaysian corporate environmental reporting was examined by the Environmental Resources Management Malaysia (ERMM). An analysis of annual reports and stand-alone environmental reports by companies listed in the Kuala Lumpur Stock Exchange (KLSE) main board from 1999 to 2001 showed an increase in environmental reporting, albeit minimal. The study revealed that:

The number of reporting companies grew from 25 in 1999, to 35 in 2000, reaching 40 companies by 2001. This represented 5.3%, 7% and 7.7% of the KLSE main board listed companies in 1999, 2000 and 2001 respectively… Half the reporting companies were in the list of the top 100 companies in Malaysia… (ERMM, 2002, p. 8).

The ERMM report showed clearly that environmental reporting was not widely practised in Malaysia. The report also highlighted that 50% of disclosers are in the top 100 large
companies. Thompson and Zakaria (2004) confirmed that Malaysian environmental reporting is still at its infancy and that majority of disclosers are large companies providing mostly general policy statement with some unsubstantiated declarative statements.

There was an increase in the number of studies examining the motivations behind Malaysian environmental disclosures using different theoretical perspectives and methodologies. Adopting the contracting and political cost perspective, Ahmad, Hassan and Mohammad (2003) examined the voluntary disclosure of environmental information in the annual reports of 299 KLSE-listed companies. Their results showed lack of support for the general hypothesis that firms voluntarily disclose environmental information to mitigate contracting and political costs. They attributed this result to the “argument that the commonly held theoretical framework of principal-agent relationship may not hold in the Malaysian context” (p.85). Ahmad and Sulaiman (2004) employed legitimacy theory in their study of listed companies from the construction and industrial products sectors. They concluded that there was no serious attempt on the part of the companies to use AREDs to appear legitimate to society given the very low level of disclosure. Although different theoretical frameworks were used in these two studies, both found limited support to the central theory adopted.

Three recently published Malaysian studies (Yusoff, et al., 2006; Sumiani, et al., 2007; Smith, et al., 2007) adopted no specific theoretical model. In examining the AREDs of top 50 companies listed in KLSE, Yusoff, et al. (2006) used content and discourse analysis. Their analysis showed that “majority of disclosures made were around the motive of stakeholders’ concern” (p. 140). Sumiani, et al. (2007) also examined the disclosures made by top 50 Malaysian companies to explore the reporting behaviour of ISO-certified companies. They found that out of 36 disclosing companies, 13 are ISO14001 certified and all the ISO-certified firms provide some form of environmental disclosure in their annual reports. Focusing on the disclosing companies identified by the ERMM (2002) study, Smith, et al. (2007) found that only the financial performance was significant but is negatively associated with AREDs. This is contrary to their expectation prompting their conclusion that “environmental reporting practices in Malaysia appear to differ from those elsewhere, which may be partly attributable to the maturity of reporting process” (p. 195).

This section highlights a number of important points. First, despite the government’s initiatives, environmental reporting in Malaysia is still lagging behind indicating a low level of maturity. Second, as noted earlier, prior studies on Malaysian environmental disclosure research provides evidence from an ex post perspective thereby excluding the possibility of gaining an appreciation of managerial perceptions and the thinking process involved in their decision to
provide/not provide disclosures. Third, the theoretical frameworks used in various attempts to understand the motivations behind Malaysian corporate environmental reporting practices achieve limited support. In consideration of these points and following up on Yusoff, et al.’s (2006) finding that majority of AREDs are motivated by stakeholders’ concern, this study uses stakeholder theory. Furthermore, the use of stakeholder theory is aligned with the Ninth Plan’s initiative to foster “closer cooperation between stakeholders in addressing environmental concerns” as earlier noted.

**Stakeholder Theory & Media Agenda Setting Theory: Background And Model**

**Theoretical Background Overview**

Numerous reasons are suggested in the literature as to why companies provide environmental disclosures voluntarily (see Gray & Bebbington 2001; Buhr 2007), many of which are often related to different theoretical perspectives. The social and environmental accounting literature hints that the most commonly used theories are legitimacy theory and stakeholder theory (Gray, Kouhy & Lavers, 1995; Deegan, 2002). Gray, Owen and Adams (1996) explain that both legitimacy and stakeholder theories are derived from political economy theory which suggests that societal, political and economic issues cannot be isolated from one another. Although it is not the intention of this paper to provide a detailed comparison of various theories, it should be noted that the environmental accounting literature generally acknowledge the overlap and the complementary nature of both stakeholder and legitimacy theory.

Deegan (2002, p. 295) suggests that both stakeholder and legitimacy theory “conceptualise the organisation as part of a broader social system wherein the organisation impacts, and is impacted by, other groups within society.” Thus, both theories assume that companies have the ability to influence various groups within society through the provision of relevant disclosures. The main difference, however, lies in the degree of resolution. Legitimacy theory can offer a macro framework through the idea that contracts exist between firms and society (Cormier et al, 2004). Hence, under the legitimacy framework, it is society in general that confers legitimacy to an organisation (Pfeffer & Salancik, 1978).

On the other hand, a micro framework necessitates the identification of salient groups (Mitchell, Agle & Woods, 1997) that legitimise the organisation. This is seen as a cross-over to stakeholder theory given that stakeholders can only be successfully managed if the company has the continued support (seen as legitimate) of the relevant stakeholders. Hence, stakeholder

---

2 Despite the acknowledgment of the complementary nature of legitimacy and stakeholder theory, Nasi, Nasi, Phillips & Zyglidopoulos (1997) posit that each leads to different predictions regarding the evolution of corporate responses amidst different issues.
theory is capable of borrowing the legitimation tactics in legitimacy literature to manage its various stakeholders. This blurring of boundary between the two theories is not considered a problem because, as earlier noted, both theories are seen as complementary rather than competing theories (Gray et al., 1995, Deegan & Blomquist, 2006). The more refined resolution afforded by stakeholder theory is necessary in this study because, depending on the variables of interest, e.g. perceived significance of environmental events and media publicity, the relevant stakeholders could change and managerial decisions regarding the provision of environmental disclosures could differ.

Perhaps it should be acknowledged upfront that there are a number of theoretical perspectives broadly labelled under stakeholder theory. Deegan (2000) classifies these perspectives into two branches: the normative (ethical) branch and the managerial (positive) branch. The former prescribes how firms should treat their stakeholders with emphasis on organisational responsibilities while the latter explains how firms interact with their stakeholders emphasising the need to manage particular groups who have the power to control the much needed resources. Since this research seeks to examine managerial behaviour, the managerial branch of stakeholder theory is referred to in this study.

In addition, given that this current study seeks to explore the impact of media coverage on managerial decisions, it is deemed appropriate to consider the premise of media agenda setting theory, a theory that has been widely used in journalism literature (see, e.g. McCombs & Shaw, 1972; Zucker, 1978; Ader, 1995). According to this theory, the media do not necessarily mirror community expectations but rather shape and drive public awareness (Ader, 1995). Hence, the theory posits that media agenda could, indeed, create public concern. For example, an increased media attention on a particular event could trigger immense community concern making the issue a top priority (McCombs & Shaw, 1972).

In relation to this, a distinction is drawn between unobtrusive and obtrusive events. Obtrusive events are those which the public have general knowledge or direct experience like inflation or extreme weather conditions. On the other hand, unobtrusive events are those whereby the public have less direct contact or personal experience such as the use of harmful chemicals in remote locations. Studies have shown that the public is more likely to depend on the media for information when unobtrusive events are concerned (Zucker, 1978; Ader, 1995). Brown and Deegan’s study (1998) is possibly the first to use media agenda theory in combination with legitimacy theory in the accounting literature. They predict that as the media raise the community’s social and environmental concern, the firms will respond by increasing the extent of their disclosure in order to retain/regain community support. Their findings are
consistent with their prediction. As noted earlier, this study combines the use of media agenda setting theory with stakeholder theory given that the latter provides a more refined resolution which is important in this study because the relevant stakeholders (not the public or society, in general) could change depending on the perceived significance of differing events and media publicity which in turn could influence managerial decisions regarding the provision of environmental disclosures. The framework adopted in this study is discussed next.

**Stakeholder Strategy and Issues Management Framework**

Freeman’s (1984) seminal book, *Strategic Management: A Stakeholder Approach*, is generally acknowledged to have brought stakeholder theory into the forefront of management literature. Originally intended to generalise the notion that “stockholders are the only group to whom management need be responsive” (Freeman 1984, p. 31), the term “stakeholder” is broadened to include “those groups without whose support the organisation would cease to exist”. Thus, the central premise of stakeholder theory is “to enable managers to understand stakeholders and strategically manage them” (Frooman 1999, p. 191).

In developing a framework, Freeman (1984, pp. 131-36) introduces a process by which stakeholder strategy can be formulated. The *first* step is to *analyse* the stakeholders’ potential behaviour regarding the issue in question. Potential behaviour is assessed in terms of: (1) their *potential for cooperation* (PC) that is, what the stakeholder could do to help the firm achieve its desired outcome; and (2) their *potential for threat* (PT), i.e. what could the stakeholder do to prevent or help prevent the firm from achieving its goal. The *second* step is to *explain* stakeholder behaviour by asking the manager to play the role of a particular stakeholder in order to feel and see the world from their point of view. In doing so, the manager is able to synthesise and understand the stakeholder’s *objectives and beliefs* in terms of what the stakeholder is trying to accomplish on a particular issue, the linkage between the current issue and the stakeholder’s long-term objective and their views on whether the firm is incompetent and/or unresponsive or whether they believe otherwise. Finally, the *third* step is to conduct a *coalition analysis* which allows the manager to search for commonalities in terms of: *commonality in behaviour* – to look for stakeholder groups who have similar cooperative potential or competitive threat; and *commonality in interests* – to look for groups who share common objectives and beliefs about the firm. Rowley (1997) further explores this concept as he promotes the theory of stakeholder influences by moving beyond dyadic relationships between individual stakeholders and the focal organisation.
Hence, Freeman (1984, pp. 141-42), proposes that the relative power of stakeholders, in terms of potential for cooperation (PC) and potential for threat (PT) would determine the appropriate strategic programs. A typology of four types of stakeholders categorised according to their threat and cooperative potential together with the propositions emanating from Freeman’s typology are summarised in the matrix below:

<table>
<thead>
<tr>
<th>Grid 1</th>
<th>Swing Stakeholders (HiPC; HiPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If a stakeholder group has relatively high potential for cooperation (PC) and potential for threat (PT), the firm should adopt a strategy which seeks to change or influence the rules of the game which govern firm-stakeholder interactions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grid 2</th>
<th>Offensive Stakeholders (HiPC; LoPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If a stakeholder group has relatively high potential for cooperation (PC) and relatively low potential for threat (PT), the firm should choose a strategy to exploit &amp; try to bring about the cooperative potential of these stakeholders.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grid 3</th>
<th>Defensive Stakeholders (LoPC; HiPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If a stakeholder group has relatively low potential for cooperation (PC) and relatively high potential for threat (PT), then the firm should adopt a defend strategy to prevent competitive threat on the part of these stakeholders.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grid 4</th>
<th>Hold Stakeholders (LoPC; LoPT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If a stakeholder group has relatively low potential for cooperation (PC) and potential for threat (PT), the firm should adopt a strategy which seeks to continue current strategic programs, and holds the current position of these stakeholders in place.</td>
</tr>
</tbody>
</table>

To cater for the swing stakeholders (Grid 1) who have the ability to influence the outcome of a particular situation (high CP and CT), Freeman proposes a managerial strategy to change or influence the rules. This strategy necessitates either changing the kinds of decisions made by the firm or seeking to change rules that have been enacted into law. The obvious reason for such change is to enable strong collaboration with this type of stakeholders (see also Savage, Nix, Whitehead & Blair, 1991). In Grid 2 offensive stakeholders can help a great deal in achieving objectives but pose little relative threat. Since there is relatively little downside risk, virtually any strategic program is worth a try so the most appropriate strategy is to exploit any possible opportunity. In Grid 3 defensive stakeholders are characterised by low cooperative potential and high competitive threat. Freeman suggests a defensive managerial strategy. Some of the ways to introduce this strategy are to reinforce current beliefs or maintain programs while linking issues that stakeholder sees more favourably. Finally, Freeman believes that managers need not put much effort to hold stakeholders in Grid 4 as they can be of relatively little extra help or harm although they may be quite vital. If these groups are unlikely to move, it follows that existing strategic programs are sufficient hence the manager is likely to hold current position. Savage et al (1991) refer to this group as marginal stakeholders (e.g. consumer interest groups or environmentalists) as they are generally not concerned much about issues pertaining to the firm. However, because certain issues like public safety or pollution could activate these groups to either increase their cooperation or threat potential, it is best for management to
monitor their relationship with these groups. Freeman agrees with this notion. In explaining the proposed techniques under the holding current position strategy, he states:

Even though some stakeholders have relatively little cooperative potential or competitive threat they may still be important … Current programmes which are influencing stakeholder behaviour must be monitored, so that the major issue with holding programs is an issue of control rather than program formulation. Holding programs must logically guard against ‘changes in the rules of the game’, and consequently when ‘change the rules’ programs are formulated they must be checked to see if they change the rules for more than one stakeholder group (1984, p. 150).

Freeman’s stakeholder strategy formulation framework, although introduced in the strategic management area, is useful in providing insights on managerial decisions to voluntarily provide environmental disclosures. It is worth reiterating, however, that managerial perceptions of stakeholder behaviour could differ when an urgent event or issue is involved, i.e. the attribute of urgency (see Mitchell, Agle & Wood, 1997) is added.

Indeed, the issues management literature alludes to this notion. According to this strand of literature, there are three distinct phases of issues management: (1) issue and stakeholder identification phase - focusing on identifying issues that have impact on the firm and its important stakeholders; (2) issue analysis phase – includes ranking of issues in the order of importance to enable management to devote its limited resources to those issues that have the greatest impact on its survival (Bartha 1982; Dutton & Ashford 1993); and (3) issue response development – relates to developing responses such as influencing stakeholder expectations and perceptions of corporate behaviour through the use of various communication channels like annual report disclosures, or entering government policy debates to influence legislations (Greening & Gray 1994; Post 1978; Sethi 1979). These three phases complement those processes proposed by Freeman in formulating stakeholder strategy outlined earlier.

To accommodate an exploratory ex ante analysis of how different issues/events of varying level of urgency and its media publicity (or absence thereof) may affect voluntary disclosure decisions, Freeman’s model is used in conjunction with the issues management literature to design an experimental study which is described next.

Research Method and Analysis

Research Design

In order to conduct an ex ante exploration of managerial perceptions regarding different environmental events and the related disclosure strategy preferred, it is imperative in this study to be able to include and manipulate different variables of interest. An experimental approach is most suited for this type of research in line with prior accounting studies (Milne & Chan, 1999;
O'Donovan, 2002; Milne & Patten, 2002; Elijido-Ten, 2008). Although experimental studies are often criticised for lack of ‘external validity’, Milne and Patten (2002) explain that this is often an ‘irresolvable issue’. In fact, many methodology scholars (e.g. Campbell & Fiske, 1959; Lindsay & Ehrenberg, 1993) suggest that only through replication and accumulation of convergent results that empirical ‘knowledge’ gain credence. As such, findings from any single study cannot be regarded as ‘knowledge’. Thus, it is for this reason (and not because of the experimental approach) that the results from this exploratory study should be viewed with caution.

Despite this, it is acknowledged that the insights gathered from any experiment would be richer when ‘ecological validity’ is preserved. Brewer (2000) explains that ecological validity is achieved when the materials and setting of the study approximate real-life situation. In designing this research, ecological validity is sought by first, getting an overall familiarity of the Malaysian business psyche including the relevant rules/regulations surrounding corporate environmental obligations; and second, by exploring the critical environmental issues prevalent in the Malaysian context. Data sources include archival documents from relevant literatures, websites and published news articles. News articles are drawn from Factiva, a database that provides business and company information and full text news articles from major newspapers around the world. The archival documents are supplemented by five in-depth interviews with a government environmental officer, an Accounting academic engaged in environmental accounting research and three top management representatives of one small to medium enterprise (SME) and two large publicly listed Malaysian companies. All interviews are tape-recorded and transcribed verbatim.

While the interview data provide useful first-hand information, the non-interview data are used in the triangulation process to gain more understanding of the Malaysian background and the environmental issues that are considered important in the Malaysian context.

Three main issues appear to dominate the popular press media: (1) health risks due to rampant air pollution from toxic wastes and forest fires; (2) toxic wastes and chemicals used by certain companies destroying the ecological balance; and (3) general push for companies to adopt environmentally-friendly technology and practices. These environmental issues provide the platform for the formulation of hypothetical vignettes (referred to as ‘cases’) involving fictitious large publicly listed firms since the literature identify them as the ones providing voluntary environmental disclosures (ERMM, 2002). Each ‘case’ represents different industries with different levels of sensitivity to the environment.
The first two events describe two environmentally sensitive industries which have negative environmental impact, while the third event promotes environmentally sustainable practices. *Case 1* replicates an event that poses an immediate threat to human life when an oil refinery’s faulty equipment accidentally emits toxic fume. *Case 2* features the use of a new chemical to control pest infestation by a company in the plantation and logging industry. Although the event poses no immediate threat to human health, it threatens the ecological balance and the possibility of long-term effect to human health can not be ruled out. Finally *Case 3* involves a firm in the banking industry which promotes sustainable development and socially responsible initiatives. The featured event is the investment on a state of the art technology that enables efficient recycling, reduction of waste and energy consumption.

To facilitate the experiment and in keeping with the stakeholder strategy formulation framework, in-depth interviews are conducted using a structured questionnaire designed to allow the participants to play the role of top management who makes the decision either to provide/not provide environmental disclosures. For each of the three hypothetical *Cases*, the participants are asked: (1) their perception of the event’s significance level and which stakeholder groups would have the most potential threat to their company’s survival; (2) what environmental disclosure strategy relating to this event would they choose; and (3) whether their disclosure decision would be different if the event has been publicised/not publicised by the media. To probe deeper into the informant’s perceptions, opinions and reactions, both closed and open-ended questions are included in the questionnaire.\(^3\)

Given that the experiment necessitates informed opinions and reactions regarding the chosen environmental event, it is considered important not to select the participants randomly. A number of authors argue that qualitative samples tend to be purposive rather than random (Kuzel, 1992; Miles & Huberman 1994). Hence, the participants are chosen based on the criteria that their current/previous positions and experience would allow them to provide realistic responses to the hypothetical questions asked.

Snowball sampling (Patton, 1990) is used since this approach is useful for locating information-rich key informants. Initially, the names/contact details of prospective participants are taken from relevant company websites and from recommendations of the investigator’s former Malaysian colleagues. Once contacts are established, the participants introduced other prospective informants.

\(^3\) The questionnaire is available from the author upon request.
The main source of data for the experimental analysis consist of another fifteen interviews with informants ranging from Financial Controllers/Managers, Branch Managers, Chief Financial Officer, Environmental NGO Officers, News & Business Editors, Bank Officers, Chief Executive Officer, Environmental Government Officer and Academics. Kvale (1996, p.101) notes that, in designing an interview study, it is important to “interview as many subjects as necessary to find out what you need to know… in current interview studies, the number of interviews tends to be around 15 +/- 10.” Since a commonly recurring theme appear to have emerged from the interviews and given the time and geographic constraints in accessing participants from both the East and West Malaysia (Sarawak and Peninsular Malaysia), 15 interviews are considered sufficient.

**Analysis Techniques**

Data analyses follow the Miles and Huberman (1994) protocol consisting of data display and data reduction. Analysis for the structured interview data is undertaken in two distinct stages. In the first stage, the responses to the closed and open-ended interview questions are separately analysed using different techniques. Responses to the closed interview questions are tabulated. Then, quantitative techniques such as mean calculation, weighting and ranking are used. The analytical process to responses from the open-ended questions starts with the transcription of the audio-taped conversation. The main sections of the questionnaire are placed in a *question-by-question matrix*. The construction of this matrix allows an efficient data display and comparison of responses which are shown side-by-side plus a column set aside for ‘memoing’. *Memoing* allows the researcher to write summarised ‘memos’ to self and are useful in identifying recurring themes (Miles & Huberman, 1994).

Finally, in the second stage, both the quantitative and qualitative analyses are linked using ‘conceptual matrix’\(^4\). This technique is similar to what Yin (1994) refers to as ‘pattern-matching’ technique. The unit of analysis are the three fictitious companies (Cases 1, 2 & 3) involved in different environmental events of varying degree of impact to human life and the environment. The concepts or variables of interest are: (1) the stakeholder’s potential behaviour; (2) the perceived significance of the environmental event; and (3) the impact of media publicity on the featured event; and (4) the type of environmental disclosure strategy preferred by management.

\(^4\) Miles and Huberman (1994, p. 127) describe that a *conceptually clustered matrix* has “its rows and columns arranged to bring together items that “belong together.” This outcome can happen in two ways: *conceptual* – the analyst may have some a priori ideas about items that derive from the same theory or relate to the same overarching themes; or *empirical* – during early analysis you may find that informants answering different questions are tying them together or are giving similar responses.”
Results and Discussion

Stakeholders’ Cooperative/Threat Potential to the Firm

To assess the stakeholder’s potential for cooperation (PC) and potential for threat (PT), Part I the structured questionnaire asks the participants to rank the ten stakeholders (as shown in Table 1) in the order of their perceived significance to the company’s survival with 1 being the most significant and 10 being the least significant. The purpose here is to make an assessment, albeit indirectly, on the respondent’s general perceptions of the stakeholders’ potential to cooperate/threaten the company’s survival without any case-specific event. A follow up open-ended question asking for the reasons for ranking is envisaged to provide more insights as to why some stakeholders are viewed to be more significant than the others for company’s survival.

Table 1 shows the overall mean ranking and qualitative findings summary. The last column shows the ‘possible’ stakeholder type based on the threat and cooperation potential resulting from the conceptual matrix and pattern matching analyses conducted. The analysis shows that the top three most significant stakeholder groups for company survival are the major shareholders, customers and the employees with mean ranking of 2.41, 3.62 and 4.43, respectively. Note that these are all primary stakeholders, which according to the stakeholder literature possess the attributes of power and legitimacy (see Mitchell et al 1997). The other four primary stakeholders, namely, the long-term creditors, relevant government agency, suppliers and minor shareholders all have very close weighted mean of 5+ while the three secondary/adversary stakeholders, i.e. the competitors, media and environmentalists are lagging quite far behind with weighted mean of 7.08, 7.18 and 8.42, respectively.

The qualitative analysis reveals that both the major shareholders (MJS) and long-term creditors (LTC) could be classified as swing stakeholders. The major shareholders, by virtue of their substantial investment, have high potential to threaten firm survival. However, their incentive to cooperate with the firm is equally high as they depend on the firm for capital growth. The same rationale applies for companies highly dependent on long-term creditors for funding.

---

5 Indirect probing is deemed appropriate given that the stakeholders’ potential to cooperate/threaten, while dependent on the enormity of the event/issue, is also a matter of personal perception for which a numerical value provides limited meaning. Hence a direct question asking ‘how much cooperative/threat potential do you believe each stakeholder has?’ is envisaged to be inadequate, even inappropriate.
### Table 1: Analysis of Stakeholders’ Potential Behaviour

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Overall Rank (Mean)</th>
<th>Qualitative Findings Summary</th>
<th>Memos (Note to self)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJS</td>
<td>1 (2.41)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; HI POSSESS CONTROL &amp; POWER TO MAKE DECISIONS [6, 8, 11, 13, 16, 17, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; HI BECAUSE OF CAPITAL INVESTMENT [15, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEVEL OF COOPERATION IS DEPENDENT ON HOW MUCH THE CUSTOMER RELIES ON THE FIRM FOR MUCH NEEDED RESOURCES BUT GENERALLY LOW [10, 14, 19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY SWING - both the potential to cooperate and threaten the firm are equally high.</td>
<td></td>
</tr>
<tr>
<td>CUS</td>
<td>2 (3.62)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; HI WITHOUT CUSTOMERS’ SUPPORT, THE COMPANY CAN’T SURVIVE [10, 14, 18, 19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LEVEL OF COOPERATION IS DEPENDENT ON HOW MUCH THE CUSTOMER RELIES ON THE FIRM FOR MUCH NEEDED RESOURCES BUT GENERALLY LOW [10, 14, 19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY DEFENSIVE - highly important for firm survival with high threat potential and low potential to cooperate</td>
<td></td>
</tr>
<tr>
<td>EMP</td>
<td>3 (4.43)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI HI=&gt; Employee skills/services are vital [12, 16], ME=&gt; Employee skills/dedication is needed [19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; HI COMPANY’S [FINANCIAL] SUCCESS IS CRUCIAL TO EMPLOYEES’ JOB SECURITY [8, 14, 18]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY OFFENSIVE - although quite highly ranked, Malaysian employees are more likely to cooperate than to threaten firm survival</td>
<td></td>
</tr>
<tr>
<td>LTC</td>
<td>4 (5.07)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI NOT ALL DEPEND ON THEM BUT MANY DEPEND ON BANKS FOR FUNDING; POSSESS POWER TO RETRACT FUNDING [11, 18]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI COMPETITIVE INVESTMENT &amp; L-TERM RELATIONSHIP [11, 15]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY SWING - for companies relying more on LTC, both potential to cooperate and threaten will be high</td>
<td></td>
</tr>
<tr>
<td>RGA</td>
<td>5 (5.27)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI DEPENDING ON THE INDUSTRY [6]: POSSESS PUNITIVE &amp; OTHER POWERS, COULD STOP OPERATION IF NECESSARY [13, 16, 18, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI POLICIES CAN PROVIDE CONDUCE INVESTMENT CLIMATE TO COOPERATE THE COMPANY [16, 18, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY DEFENSIVE - despite low to high potential to cooperate, their sanction and punitive power is enough to threaten company survival</td>
<td></td>
</tr>
<tr>
<td>SUP</td>
<td>6 (5.64)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI BECAUSE OF BUSINESS OPPORTUNITY &amp; COMPETITION [14, 15, 18, 19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; HI MUTUAL BUSINESS RELATIONSHIP NECESSITATES SUPPLIER COOPERATION [17, 18, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY OFFENSIVE - given the low ranking and low threat potential but high cooperation potential</td>
<td></td>
</tr>
<tr>
<td>MIS</td>
<td>7 (5.88)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO POSSESS NO POWER INDIVIDUALLY; CAN’T MAKE DECISIONS [6, 16, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI CAPITAL INVESTMENT CAN BE EASILY LIQUIDATED [8, 9]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY OFFENSIVE - given the low ranking and low threat potential but high cooperation potential</td>
<td></td>
</tr>
<tr>
<td>COM</td>
<td>8 (7.08)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI GENERALLY LOW [8] BUT MAY BECOME HIGH IF THERE ARE URGENT EVENTS [14, 16]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO EXCEPT WHEN THERE’S AN INDUSTRY WIDE THREAT [16]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY HOLD - without any urgent issue, threat and cooperation potential are both low</td>
<td></td>
</tr>
<tr>
<td>MED</td>
<td>9 (7.17)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI MEDIA COULD PLAY A ROLE BUT NOT SO POWERFUL BECAUSE ITS GOVERNMENT-CONTROLLED [13] [15] [16] [19] [20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI DEPENDING ON POLITICAL CONNECTIONS [18] [15] [19]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY HOLD - without any urgent issue, threat and cooperation potential are both low</td>
<td></td>
</tr>
<tr>
<td>ENV</td>
<td>10 (8.42)</td>
<td>POTENTIAL FOR THREAT (PT) =&gt; LO to HI =&gt; could create a lot of trouble for the company if there is a need. [20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL FOR COOPERATION (PC) =&gt; LO to HI =&gt; DEPENDING ON WHETHER THE COMPANY ADOPTS ENVIRONMENTALLY FRIENDLY PRACTICE OR NOT [11, 15, 16, 18, 19, 20]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POSSIBLY HOLD - without any urgent issue, threat and cooperation potential are both low</td>
<td></td>
</tr>
</tbody>
</table>

**LEGEND:** MJS – major shareholders; CUS – customers; EMP – employees; LTC – long-term/major creditors; RGA – relevant government agency; SUP – suppliers; MIS – minor shareholders; COM – competitors; MED – media; ENV – environmentalist

With regards to the customers (CUS) and relevant government agencies (RGA), the analysis shows that their ability to threaten the firm in terms of lost business (for CUS) as well as penalties, sanction or even closure (for RGA) outweighs their potential to cooperate with the firm suggesting that they could be **defensive stakeholders.** It should be noted, however, that customers may have to cooperate with the firm particularly if they are dependent on the firm for the supply of goods/service. Similarly, the government may also have high potential to cooperate...
when firms have projects that alleviate socio-economic progress (for RGA). Under these circumstances, both CUS and RGA could become swing stakeholders.

The employees (EMP), suppliers (SUP) and minor shareholders (MIS) are more likely to fall under the offensive stakeholder category. In the Malaysian setting, the employees (EMP) and minor shareholders (MIS), rarely exercise their prerogative to question management decisions. Moreover, in a highly competitive market, there is generally an abundance of suppliers. Thus, their potential to threaten firm survival is low while their cooperative potential is generally high being dependent more on the firm. In cases, however, where the employees and suppliers are rare, their competitive threat could increase making them swing stakeholders.

Finally, in the absence of any urgent event, adversary stakeholders like the competitors (COM), media (MED) and environmentalists (ENV) virtually have neither power nor legitimate claim against the firm, hence their potential to threaten or cooperate with the firm is generally low. As confirmed by the low ranking for COM, MED and ENV (shown in Table 1), these stakeholders are not considered crucial to firm survival and are thus classified as hold stakeholders.

Although the above discussion may appeal to intuition, without specific events that could change or trigger the need for some stakeholders to exercise their potential to either cooperate or threaten the firm, the analysis is incomplete. This is where Part II of the questionnaire is deemed useful.

**Perceived Significance of Each Event to Stakeholders**

On a scale of 1 (Extremely Significant) to 5 (Not Significant), each participant is asked to provide their opinion as to how significant each environmental event outlined in ‘Cases’ 1 to 3 is to the various stakeholders identified. The purpose here is to elicit the respondent’s perceptions on how urgent they believe each environmental event is to the company’s stakeholders. Table 2 shows each stakeholder’s mean rank and significance for each of the three ‘cases’.

The magnitude of Case 1 event is reflected by the mean significance assigned by the respondents shown in Table 2. Unlike Case 2 where only the environmentalist group has mean significance of 1+, Case 1 event is perceived by the top four stakeholder groups, the environmentalists, relevant government agency, media and major shareholders (ranked 1st to 4th, respectively) to be at significance level between Extremely Significant (1) and Very Significant (2). The employees, competitors, minor shareholders and long-term creditors (ranked 5th to 8th respectively), have significance mean of 2+ indicating a range from Very Significant (2) to
**Significant (3)**. Even the two lowest ranked stakeholder groups, the customers and suppliers (9th and 10th) have significance mean of 3+ denoting a significance level between **Significant (3)** to **Moderately Significant (4)**.

In Case 2, the quantitative analysis shows that only the environmentalists (1.25) would find this event significant at a level between **Very Significant (2)** to **Extremely Significant (1)**. The relevant government agency (2.0), the second from the top, is perceived to give this event a significance level of (2) **Very Significant** while the competitors, major shareholders, media, employees and creditors (ranked 3rd to 7th, respectively) have significance mean of 2+ indicating a range between **Significant (3)** to **Very Significant (2)**. The customers and minor shareholders (8th and 9th) have significance means of 3+ denoting significance level between **Moderately Significant (4)** to **Significant (3)**. Finally, the overall consensus is that the suppliers would find this event **Moderately Significant (4)**, at most.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Mean Rank</th>
<th>Significance Mean</th>
<th>Stakeholder</th>
<th>Mean Rank</th>
<th>Significance Mean</th>
<th>Stakeholder</th>
<th>Mean Rank</th>
<th>Significance Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV</td>
<td>1</td>
<td>1.20</td>
<td>ENV</td>
<td>1</td>
<td>1.25</td>
<td>ENV</td>
<td>1</td>
<td>2.07</td>
</tr>
<tr>
<td>RGA</td>
<td>2</td>
<td>1.33</td>
<td>RGA</td>
<td>2</td>
<td>2.00</td>
<td>MJS</td>
<td>2</td>
<td>2.70</td>
</tr>
<tr>
<td>MED</td>
<td>3</td>
<td>1.40</td>
<td>COM</td>
<td>3</td>
<td>2.20</td>
<td>RGA</td>
<td>3</td>
<td>3.10</td>
</tr>
<tr>
<td>MJS</td>
<td>4</td>
<td>1.73</td>
<td>MJS</td>
<td>4</td>
<td>2.37</td>
<td>MED</td>
<td>4</td>
<td>3.20</td>
</tr>
<tr>
<td>EMP</td>
<td>5</td>
<td>2.03</td>
<td>MED</td>
<td>5</td>
<td>2.47</td>
<td>MJS</td>
<td>5</td>
<td>3.43</td>
</tr>
<tr>
<td>COM</td>
<td>6</td>
<td>2.43</td>
<td>EMP</td>
<td>6</td>
<td>2.70</td>
<td>MED</td>
<td>6</td>
<td>=6.5</td>
</tr>
<tr>
<td>MIS</td>
<td>7</td>
<td>2.67</td>
<td>LTC</td>
<td>7</td>
<td>2.97</td>
<td>MIS</td>
<td>7</td>
<td>=6.5</td>
</tr>
<tr>
<td>LTC</td>
<td>8</td>
<td>2.70</td>
<td>CUS</td>
<td>8</td>
<td>3.40</td>
<td>EMP</td>
<td>8</td>
<td>3.57</td>
</tr>
<tr>
<td>CUS</td>
<td>9</td>
<td>3.07</td>
<td>MIS</td>
<td>9</td>
<td>3.53</td>
<td>CUS</td>
<td>9</td>
<td>3.70</td>
</tr>
<tr>
<td>SUP</td>
<td>10</td>
<td>3.83</td>
<td>SUP</td>
<td>10</td>
<td>4.07</td>
<td>LTC</td>
<td>10</td>
<td>4.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>22.40</td>
<td></td>
<td>TOTAL</td>
<td>27.02</td>
<td></td>
<td>TOTAL</td>
<td>27.02</td>
<td></td>
</tr>
</tbody>
</table>

**Legend:** ENV – environmentalist; RGA – relevant government agency; COM – competitors; MJS – major shareholders; MED – media; EMP – employees; LTC – long-term/major creditors; CUS – customers; MIS – minor shareholders; SUP – suppliers

From the significance mean shown in Table 2, it is clear that Case 3 has a much lower impact since none of the stakeholders has significance level of 1+. The environmentalists and major shareholders (ranked 1st and 2nd, respectively) have significance mean of 2+ indicating a range between **Very Significant (2)** to **Significant (3)**. The relevant government agency, media, minor shareholders, suppliers, competitors, employees and customers (ranked 3rd to 9th, respectively) have significance mean of 3+ denoting significance level between **Significant (3)**.
to \textit{Moderately Significant} (4) while the long-term creditors, the lowest ranked, have mean significance mean of 4.0.

Overall, it appears that ‘Case 1’ is perceived by the respondents to be the most significant event to stakeholders with mean total of 2.24. ‘Case 2’ follows closely with mean total of 2.70 while ‘Case 3’ lags far behind with 3.28. This is not surprising given that both Cases 1 and 2 have negative impact on the environment and human life. Case 1, however, is perceived to be slightly more intense because its effect to human life is current and certain while in Case 2, notwithstanding its adverse effect on ecological balance, the event poses no immediate threat to human life. Case 3, on the other hand, is not perceived to be as important given that it portrays a positive environmental initiative which is generally not given high priority as indicated in the following comments:

…here in Malaysia, it’s quite common that when you’re doing well, you won’t get much attention. If you’re doing pretty badly, as in Cases 1 \& 2, then you get the attention… [7]
I think in our environment here, this [environmental] event is not significant. They don’t care. What they care is just making profit - the bottom-line. [9]

The above sentiments are shared by the majority of the respondents who expressed their belief that because Malaysian environmental awareness is generally low, the local customers\footnote{Local customers are the closest representative of the Malaysian public in the ten stakeholders included in the analysis.} are not likely to find Case 3, and in fact all three fictitious events, very high\footnote{Notice (from Table 2) how low the customers’ mean ranking is in all three ‘cases’ - second to last for Cases 1 \& 3 and third to last for Case 2. The slightly higher ranking for the customers in Case 2 is due to the fact that the respondents believe that the logging and timber industry have a lot of overseas customers who put higher concern for the environment.} in their priority list. It is, however, not surprising to find that in all three ‘cases’, the environmentalists top the ranking chart with mean significance of 1.20, 1.25 and 2.07 for Cases 1, 2 and 3 respectively. This is expected given the nature of the events featured in the ‘cases’ and the perceived role of environmentalists as portrayed in these selected direct quotes:

… that is the reason why they [environmentalists] exist … [13]
… because this is their [environmentalists] role - to be a watchdog for environmentalism… [16]
… for the environmentalists… this is their ‘rice bowl’... an opportunity to prove their point. [19]

The same can be expected of the government’s role, hence, it is not surprising to find that the mean significance of the relevant government agency is next only to the environmentalists for Cases 1 and 2 and third in Case 3.

\textit{The Impact of Media Publicity \& Perceived Stakeholder Behaviour on Annual Report Environmental Disclosure (ARED) Approach Preferred}
For each of the three featured ‘cases’, the participants are asked to rank four types of annual report environmental disclosure (ARED) approach with 1 (most preferred) to 4 (least preferred) given two scenarios: (1) when the event has not been published by the media; and (2) when the event has already been published by the media. These two scenarios are incorporated in order to observe how the media may or may not influence the management’s environmental disclosure preference given the issue at hand. The four types of ARED approach are chosen in line with what the literature on stakeholder strategy formulation framework proposed, namely: (1) influence the ‘rules of the game’ (for swing stakeholders) – provide some disclosure regarding the event in an attempt to sway/change the common belief regarding the event and the role of the firm; (2) exploit (for offensive stakeholders) – make some disclosure but concentrate mainly on good aspects; (3) defend (for defensive stakeholders) – disclose the issue/event but defend the reasons why it was done and/or what has been done to rectify the situation; (4) do nothing (for hold stakeholders) - provide no disclosure. Once again, the respondents are asked to provide the reason/s for their choice of disclosure approach in order to have a deeper understanding. Table 3 shows the mean ranking and the overall ranking for each ‘case’ under the ‘not published’ and ‘published’ scenarios.

Table 3: Mean Rank of Preferred Type of ARED Approach

<table>
<thead>
<tr>
<th>PREFERRED ARED APPROACH</th>
<th>CASE 1</th>
<th>CASE 2</th>
<th>CASE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Published</td>
<td>Published</td>
<td>Not Published</td>
</tr>
<tr>
<td></td>
<td>Mean Rank</td>
<td>Mean Rank</td>
<td>Mean Rank</td>
</tr>
<tr>
<td>Do nothing</td>
<td>3.50</td>
<td>4</td>
<td>3.71</td>
</tr>
<tr>
<td>Exploit</td>
<td>2.13</td>
<td>2</td>
<td>2.40</td>
</tr>
<tr>
<td>Defend</td>
<td>1.47</td>
<td>1</td>
<td>1.13</td>
</tr>
<tr>
<td>Influence the ‘rules of the game’</td>
<td>2.87</td>
<td>3</td>
<td>2.73</td>
</tr>
</tbody>
</table>

Case-Specific Discussion: Case 1 – Shexxon Refinery Berhad (SRB)

Majority of the respondents (11 of 15 or 73.3%) believe that Case 1 event can not be kept from the public. Hence, they believe that this is an obtrusive event. As such, they give the same ARED preference under the ‘not published’ (NP) and ‘published’(P) scenario believing that each stakeholder groups’ potential for cooperation (PC) and potential for threat (PT) should remain unchanged regardless of whether or not it has been publicised by the media. Table 3 shows the same ARED ranking for both the ‘not published’ and ‘published’ scenarios with defend landing in the top spot (mean rank of 1.47 and 1.13, respectively). The mean rank in the ‘published’ scenario is lower than the ‘not published’ scenario indicating that more respondents favour the defend approach once this event is published. Interestingly, although the ranking for ‘published’
scenario in Cases 1 and Case 2 are the same, the mean rank for the most preferred ARED approach vary dramatically from 1.13 (Case 1 – ‘published’ scenario) to 2.14 (Case 2 – ‘published’ scenario) which seems to suggest more homogeneity among the respondents’ choice to use the defend approach in Case 1. This is not surprising given the magnitude of the event as shown in this quotes:

[Since] 20 students were... hospitalised, the public will know about it. So whether it’s published or not, it doesn’t make any difference ...for company survival, defending is strongly needed. [7]  
Whether it’s published or not, it will be the same because you can’t hide this incident given that people have been hospitalised. So I will defend first...[8]  
Whether published or not published, my first choice is to defend because we can’t just keep quiet ... so we just have to protect the company at this stage. [11]  
I’d say... because this event can not be kept a secret, I definitely have to defend... [14]  
...even if this event is not publicised yet... people would know... there is a need to defend... we need to disclose that precautionary measures have been done. [15]  
I feel we are duty-bound to come up with some kind of remedial action. So whether its not published or published, my ranking will be the same. We will need to defend. [16]  
I would defend first...I would not even consider doing nothing... I have to say that we took the necessary steps, investigated what went wrong and rectified the situation. [17]  

These comments overwhelmingly emphasise the need to defend in order to inform the public that remedial action had been taken and to give assurance that precautionary measures are put in place to protect the company and to ensure its survival.

Further analysis of the respondents comments show that majority of the respondents feel that at least two of the adversarial stakeholders - the media and environmentalists - should move to the low PC/high PT category (defensive stakeholders) because of the seriousness and urgency of the Case 1 event. This is evident in the overall high ranking of the environmentalists and the media (1st and 3rd, respectively) for Case 1 (see Table 2). The customer group is also classified as defensive stakeholders since an international oil refinery such as SRB is expected to have both local, as well as overseas major customers. Likewise, it is conceivable that the employees are very concerned about their own safety, hence, they have moved to this category. Given the high salience of the customers and employees (evident in their high ranking in terms of company survival as per Table 1) magnified by the added pressure from both the environmentalists and the media, it is no wonder that the respondents feel that the management are most likely to provide an ARED defending their position.

The analysis also shows that the major shareholders, long-term creditors and suppliers are considered to have high PC and low PT (offensive stakeholders). Despite the low overall supplier ranking for Case 1, many respondents believe that the main supplier of oil to be refined by a refinery such as SRB is likely to be related to this firm (i.e. a subsidiary or even a parent company). Hence, given the severity of Case 1 event, it is even more likely that the suppliers, together with the major shareholders and long-term creditors (who, as noted earlier, are more
likely to be profit-oriented rather than environmentally conscious), are expected to cooperate more than threaten the firm’s survival because of their high stake in the company. As such, these stakeholder groups are likely to expect an ARED strategy that could improve their image in the midst of this scandal. Thus, given the importance of these stakeholders groups to company survival, it is not surprising that the management ranked second the ARED strategy that will exploit the situation in order to maintain their support.

The respondents’ perception regarding the relevant government agency’s (RGA) cooperation and threat potential is interesting. The respondent with the government background highlights the government’s high potential threat in this comment:

…RGA will be the one who will take action against companies that significantly degrades the environment - and especially in such incidents where it affects human beings. We are supposed to take immediate action enforcing the regulations that are in place. [16]

Although many of the respondents share this view, many believe that the government’s cooperation potential is also expected to be equally high for fear of possible economic downturn as neatly captured in this quote:

RGA will put ‘lip-service’ to this event. They might make some noise but I don’t think there is any meaning … because these are the “big guys” they are dealing with! The government could make the company’s life difficult but they won’t really do much because they really wouldn’t want these companies to disappear. The government needs them. [13]

Given the importance of the government as a stakeholder with high PC and PT, it is not surprising that the management ranked the disclosure strategy to influence the ‘rules of the game’ not so far behind the exploit strategy. The management views collaboration with RGAs a necessity, hence the need to sway their belief or win them over.

In the analysis, even the competitors and minor shareholders have the potential to move from being hold stakeholders (low PC and low PT). Some respondents feel that the competitors might develop the potential to cooperate given that this issue might affect the image of the oil refinery industry whilst others feel that the event will strengthen the competitor’s threat potential since they can market themselves as ‘better or cleaner’ alternative. Even the minor shareholders could exercise their right to sell their shares. Hence it is not surprising that do nothing is the least favoured ARED approach.

Case-Specific Discussion: Case 2 – Malaysian Holdings Berhad (MHB)

Of the three fictitious ‘cases’, Case 2 is the only one that has a dramatic change in disclosure approach ranking under the ‘not published’ and ‘published’ scenario. The most
preferred ARED approach in the ‘not published’ scenario is to **do nothing** with the mean of 1.8. The overall feeling among the respondents is well summarised in this comment:

*If it’s not published, I’d do nothing. This is what is happening in the industry…It’s just something like “hit-and-run”, take your chance. If nothing happens, I’ll keep quiet. If something happens, then I’ll wait for it and we’ll deal with it later.* [11]

The least favourite ARED approach in the ‘not published’ scenario is to **defend** which can be expected as one interviewee puts it plainly:

*… because it’s not publicised yet, there is nothing to defend.* [7]

Although the analysis shows that the major shareholders, long-term creditors, suppliers and minor shareholders are perceived by the majority of respondents to be more profit-oriented rather than environmentally conscious, it is very likely that the only stakeholder groups that have knowledge of this event, in the ‘not published’ scenario, are the major shareholders and the chemical supplier. This is a classic example of an ‘unobtrusive event’. Hence, in the ‘not published’ scenario, the major shareholder group is the only stakeholder group considered to have high PC and high PT while the chemical supplier has high PC and low PT. Despite the perceived high PC and high PT of the major shareholders, their profit motive is likely to supersede, thus, it is highly unlikely that they would demand the management to provide any ARED divulging this event. Since the other stakeholder groups are not likely to know this event, there will be no threat, thus no demand for ARED, even from the adversarial stakeholder groups. Hence, the prediction related to **hold stakeholders**, i.e. to hold current position (**do nothing**) and not provide ARED is most preferred in the ‘not published’ scenario. If ever MHB is to provide any ARED, it is conceivable that it will choose to **exploit** in order to gain/strengthen the confidence of other stakeholders that have high PC and low PT such as the chemical supplier. This may well be the reason why **exploit** is ranked second. The results shown confirm these predictions in the ‘not published’ scenario with **do nothing** and **defend** being the most and least preferred ARED approach, respectively.

Not surprisingly, the least preferred ARED approach in the ‘not published’ scenario becomes the most preferred in the ‘published’ scenario, albeit with a higher mean of 2.14\(^8\). Perhaps not surprisingly, the analysis on the stakeholder groups’ cooperation and threat potential under the ‘published’ scenario for Case 2 is quite similar to Case 1. As in Case 1, the customers, environmentalists and the media are classified as **defensive stakeholders** (high PT/low PC). Majority of the respondents share the view of Interviewee 15 who believes that although the

---

\(^8\) Compared to the most preferred ARED approach in the NP scenario (**do nothing**) which had a lower mean rank of 1.8, the mean rank of 2.14 suggests less preference despite the fact that it tops the ranking.
local customers might not bother much about this event, overseas customers are likely to care enough to do something about it.

The local customers might not care much because environmental awareness is not as much here compared to overseas customers … overseas customers would probably boycott this company … it would be extremely significant to them. [15]

Since it is highly unlikely that a huge industry such as timber and logging can rely solely on local customers, it is reasonable to assume that the overseas customers’ high threat potential will be taken seriously. Furthermore, majority of the respondents feel that all three adversarial stakeholders – the environmentalists, the media and even the competitors - now have low potential for cooperation (PC) but high potential for threat (PT). This is evident from Table 2 which shows that for Case 2, the environmentalists, competitors and media are highly ranked (1st, 3rd & 5th, respectively) because an urgent issue has now come to their attention that relates directly to their own existence. To the environmentalists, ‘ecological balance will be in their priority list’. The environmentalists’ role, together with the media, is to highlight events such as the type featured in Case 2. Whilst the respondents feel that local media is highly controlled by the Malaysian government, the increasing pressure from both the overseas customers and environmentalists would attract media attention pushing them to publicise this event even more. The competitors, on the other hand, are likely to use this publicised event to their advantage: either to destroy the firm’s reputation or to follow suit, i.e. to also use the new chemical given that it decreases operating costs. Either way, this event has certainly increased their potential to threaten MHB’s existence. Therefore, the change to the ‘published’ scenario creates the perception of increased threat potential among overseas customers and the adversarial stakeholders which could possibly explain why the defend ARED approach tops the ranking under Case 2 ‘published’ scenario.

It must be noted, however, that the second (exploit) and third (influence the ‘rules of the game’) most preferred ARED approach are not far behind with very close mean of 2.20 and 2.21, respectively, indicating that the respondents’ choices on ARED approach seems to be divided. The stakeholder analysis shows that the rest of the stakeholder groups from major shareholder (MJS) to minor shareholder (MIS), suppliers (SUP), long-term creditor (LTC), relevant government agencies (RGA) and even the employee (EMP) groups are now classified as offensive stakeholders with high PC and low PT. Since the MJS, MIS, LTC and SUP are after the economic stability of the firm and the new chemical use increases profitability, they are not likely to threaten the firm but rather support the management denoting high cooperation potential.
Whilst some may expect that the government would have equally high PC and PT in Case 2-'published' scenario, the analysis shows otherwise. Whilst the government’s PC is perceived to be high because the timber and logging industry is government-controlled, its PT is considered low. Given that there are no mandatory requirements to provide ARED and as long as MHB is not in breach of any government regulations, many of the respondents believe that the most the government will do is to ‘keep an eye’ on this company. The respondents concede that even the employees are not likely to make a big fuss about this event. This is most likely the reason why exploit is the second most preferred ARED approach.

However, many of the respondents also believe that the level of media publicity regarding this event could lead to greater threat potential of some stakeholder groups. For example, with more media coverage, employees could become more worried about their long-term health which could then trigger the government to take action. It is perhaps because of this uncertainty about the future inherent in Case 2 event that prompts management to also favour the ARED strategy of influencing the ‘rules of the game’ ranking it closely with the other two ARED approaches.

The results also show clearly that once this event has been highlighted by the media, do nothing becomes the least popular approach since explanation is now needed as shown in the following comments:

…and do nothing is last because this time, I can’t actually hide it. [9]
Doing nothing will be last if it’s already published because then we’ll need to give some explanation as to why we’re using this new chemical. [10]
… it’s very unlikely that I’ll do nothing because now, I have some explaining to do. [14]

Case-Specific Discussion: Case 3 – Keluarga Banking Berhad (KBB)

Case 3 has the only event that features a company’s proactive initiative to preserve the environment. As in Case 1, Case 3’s ranking under the ‘not published’ and ‘published’ scenarios are the same but for a totally different reason. In Case 1, the seriousness of the event is what prompted respondents to believe that events of this magnitude cannot be hidden from public eye. The respondents in Case 3, on the other hand, feel that it is in the company’s best interest to disclose this event because it is good for company image. In contrast to Case 1, however, the respondents are less homogenous for Case 3 with only 8 out of 15 (53%) providing the same ranking for the ‘not published’ and ‘published’ scenario.

The result shows that the most preferred ARED approach is to exploit under the ‘not published’ and ‘published’ scenario with mean rank of 1.47 and 1.73, respectively. Incidentally, this time the ‘not published’ scenario has a lower mean rank suggesting that the management’s desire to disclose this event in their Annual Report is stronger if the media have not picked this
up, “thereby garnering support in this fashion”, as Interviewee 6 puts it. Influence the ‘rules of the game’ is the second most preferred ARED approach followed closely by defend. As expected, do nothing is the least preferred given that it is in the company’s best interest to disclose this event.

Despite Case 3’s perceived low significance level, the stakeholder behaviour analysis shows that most of the stakeholder groups are classified in offensive stakeholder (high PC/low PT) category. The relevant government agency (RGA), environmentalists (ENV) and the media (MED) are perceived by majority of the respondents to have high PC and low PT since they are likely to make this company as an example for other companies to follow. Likewise, given that Case 3 event has the potential to enhance KBB’s image, both the major and minor shareholders, employees, suppliers, customers and long-term creditors, who in one way or another, are interested in the bank’s stability are most likely to support the company’s initiative to be environmentally friendly. Of course, this is on the assumption that the expenditure of RM$20million will not have a substantial negative effect on the company’s profitability. Therefore, since most of stakeholder groups have high PC and low PT given this event, the management is likely to provide ARED strategy that will exploit the situation. Once again, the results confirm this prediction with the most preferred ARED strategy being exploit under both the ‘not published’ and ‘published’ scenario.

Not surprisingly, the second most preferred ARED strategy is influence the ‘rules of the game’ since as noted in earlier discussions, Malaysian environmental awareness is still considerably low. Hence, the respondents feel the need to sway and improve public awareness by adopting this ARED strategy. In this regard, the media is perceived by most respondents to have the biggest role. This is why some respondent believe that the media (MED) could be a swing stakeholder (high PT and high PC), as one interviewee puts it:

*They* have the power to make or break the company. [20]

In addition, while the competitors (COM) are found to fall under the hold stakeholder (low PC and low PT) category, their concern is almost negligible as they are not considered important to company survival. It is, however, worth discussing why some respondents felt the need to defend this event. Two respondents raise a very valid point stressing the fact that if the major shareholders and/or long-term creditors do not support the management’s socially responsible policy, then there is a need to justify the firm’s position. The following direct quotes summarise their arguments:

The reason why I ask whether I could assume that the major shareholders are environmentally conscious is because if they are not, they might actually question this expenditure. [17]
As a long-term creditor, I’d like to know whether you’ll pay me first. Why should I lend you if you’d only use the money for something not directly related to your business. I’m more interested with whether the $20 million expenditure is well compensated by the savings and not so much with whether the company is socially responsible. [11]

Hence, if the situation described above is true, there is a perceived need to **defend** the management’s decision to incur the $20 million expenditure on environmentally friendly technology.

### Summary & Concluding Comments

The purpose of this research is to extend the developing-country environmental disclosure literature by exploring managerial perceptions of different environmental events and the impact of media coverage on management’s decision to provide annual report environmental disclosure (ARED) voluntarily. This study combines the use of media agenda setting theory and the broad lens of stakeholder theory. A Malaysian experiment is initiated to gain insights into the type of environmental disclosure approach preferred by management and whether these preferences are affected by such factors as: (1) the nature and perceived significance of the environmental event; (2) the stakeholder’s potential behaviour; and (3) the impact of media publicity on the featured event. Three hypothetical vignettes are used featuring environmental events of varying nature and impact to human health and the environment.

The analysis indicates that the impact of media publicity on management’s preferred ARED approach is most pronounced only in Case 2 where the use of the new chemical, whilst destroying ecological balance, has no immediate threat to human health. Case 2 event is of negative nature and is generally ‘unobtrusive’ such that majority of the stakeholders concerned have less direct experience on the issue. Hence, it is conceivable that without media coverage, majority of the stakeholders will not be aware of this issue and thus their cooperation and threat potential will not be affected. This is reflected in management’s decision not to provide environmental disclosure pertaining to this event. However, once the media have publicised the use of the new chemical, the management’s perception on stakeholder behaviour dramatically change and so with their disclosure preference.

In both Cases 1 and 3, the impact of media coverage showed very little movement in terms of management’s preferred ARED approach but for very different reasons. Given the enormity and the immediate impact to human life of Case 1 event, it was generally felt that an event of this magnitude can not be hidden from the public (characteristic of an ‘obtrusive’ event)
hence the need to provide disclosure is paramount regardless of whether the media has publicised the event or not.

On the other hand, in Case 3, the management felt the need to have the event disclosed since it is in the company’s best interest to flag a proactive environmental practice.

These findings are consistent with the main premise of both the media agenda setting theory and stakeholder theory. Freeman’s (1983; 1984) proposed stakeholder strategy formulation framework is useful in making sense of the insights generated from the analysis of results. Adapting the main proposition emanating from Freeman’s typology suggests that the manager’s perception of the stakeholder’s potential for cooperation (PC) and potential for threat (PT) would influence their decision regarding the type of Annual Report environmental disclosure (ARED) approach. Whilst this appeals to intuition, this exploratory research shows that the main premise from the media agenda setting theory could enhance the analysis.

Thus the results show that the management’s preferred ARED approach, while dependent on management perceptions of the stakeholder’s behaviour, is also affected by, at least, two other variables, namely: (1) the nature and magnitude of the event; and (2) whether or not the event has been publicised by the media.
References:


Patton, M (1990) Qualitative evaluation and research methods, Sage Publications, Newbury Park, California


