

**A QUALITATIVE STUDY ON THE DECOUPLING
OF ENVIRONMENTAL AND SOCIAL ISSUES
FROM MANAGEMENT CONTROL SYSTEMS
IN A PETROLEUM COMPANY:
AN INSTITUTIONALIST APPROACH**

By

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LIST OF ABBREVIATIONS

BP	British Petroleum
CA & CD	Corporate Affairs and Community Development
CNPC	China National Petroleum Company
CPA	Comprehensive Peace Agreement
CSP	Corporate Social Performance
CSR	Corporate Social Responsibility
E & D	Exploration and Development
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
ENRSC	Environment and Natural Resources Supreme Council
EPA	Environmental Protection Act
EPSA	Exploration and Production Sharing Agreement
GDES	General Directorate of Environment and Safety
GM	General Manager
GNPOC	Greater Nile Petroleum Operating Company
GRI	Global Reporting Initiative
HCENR	Higher Council for Environment and Natural Resources
HSE	Health, Safety, and Environment
ICT	Information Communication Technology
IPC	Individual Performance Contract
KPIs	key Performance Indicators
MC	Management Committee
MCS	Management Control System
MOEPD	Ministry of Environment and Physical Development
MOP	Ministry of Petroleum
NCP	National Congress Party
NGO	Non- Governmental Organization
NIE	New Institutional Economics
NIS	New Institutional Sociology
OHSAS	Occupational Health and Safety Management System Specification

OIE	Old Institutional Economics
ONGC	Oil and Natural Gas Corporation
PDOC	Petrodar Operating Company
SD	Sustainable Development
SEA	Social and Environmental Accounting
SEA	Strategic Environmental Assessment
SEAR	Social and Environmental Accounting Research
SECS	Sudanese Environmental Conservation Society
SIC	Sudan Interim Constitution
SPLA	Sudan People's Liberation Army
SPLM	Sudan People's Liberation Movement
SSMO	Sudanese Standards and Metrology Organisation
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WBCSD	World Business Council for Sustainable Development
WNPOC	White Nile Petroleum Operating Company

LIST OF PUBLICATIONS AND CONFERENCE PAPERS

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Yousif Abdelbagi, Siti-Nabiha, A. K., & Amirul Shah Shahbudin. (2012). A study of environmental management control system of an oil and gas company in Africa. Paper presented at the 3rd Global Accounting and Organizational Change Conference, Kula Lumpur, Malaysia, July 14- 17.

**SATU KAJIAN KUALITATIF KETIDAK-GANDINGAN DI ANTARA
ISU-ISU ALAM SEKITAR DAN SOSIAL DARIPADA SISTEM KAWALAN
PENGURUSAN DI SEBUAH SYARIKAT PETROLEUM:
SATU PENDEKATAN INSTITUTIONALIS**

ABSTRAK

Matlamat utama kajian ini adalah untuk memahami dan menerangkan bagaimana isu-isu alam sekitar dan sosial telah dipertimbangkan dan dirangkumkan ke dalam Sistem Kawalan Pengurusan (MCS) syarikat petroleum dan gas di Sudan. Satu kajian kes interpretif telah dijalankan, di mana pengumpulan data melalui kaedah temu bual separa berstruktur telah dijalankan dengan individu-individu relevan dalam dan luar syarikat tersebut. Pemerhatian ke atas dokumen-dokumen, sesi perbualan tidak formal dan kaedah pemerhatian juga digunakan bagi menyokong data yang telah dijana daripada semua temu bual. Hasil kajian ini dipengaruhi oleh Teori Institusi Sosiologi Baru (NIS), yang menekankan bahawa konfigurasi MCSs bukan sahaja didorong oleh faktor-faktor ekonomi atau fungsian, tetapi turut didorong oleh faktor-faktor institusi.

Dapatan hasil kajian menunjukkan bahawa undang-undang kerajaan, tekanan dan keperihatinan organisasi bukan kerajaan (NGO), matlamat syarikat untuk melindungi dan mengekalkan reputasinya dan harapan tinggi daripada masyarakat tempatan adalah antara faktor-faktor utama yang telah mendorong syarikat tersebut untuk mempertimbangkan isu-isu alam sekitar dan sosial dalam operasinya.

Dapatan hasil kajian ini juga mendedahkan bahawa proses mempertimbangkan tanggungjawab alam sekitar dan sosial dalam MCS syarikat tersebut hanya diinstitusikan secara 'berupacaraan' (*ceremonially*), yang merupakan berlaku disebabkan tindak balas daripada tekanan-tekanan luaran. Namun, tanggungjawab alam sekitar dan sosial syarikat tidak diletakkan di bawah sistem kawalan dalaman dan tidak diamalkan dalam sistem operasi harian syarikat secara

sistematik. Walaupun sesetengah dasar HSE syarikat dan sistem pengurusan alam sekitar berada ditempatnya, namun sistem ini tidak diamalkan sepenuhnya dalam sistem kawalan. Pelbagai halangan wujud disebalik amalan nyahgandingan. Halangan utama dan cabaran yang menggabungkan isu-isu alam sekitar dan sosial dalam MCS syarikat adalah seperti ketiadaan dasar yang khusus terhadap tanggungjawab sosial, kekurangan strategi yang jelas untuk aktiviti-aktiviti sosial dan alam sekitar, penglibatan yang terhad dengan masyarakat setempat serta pihak-pihak berkepentingan, kekurangan pemantauan dan tiada tindakan susulan, serta tekanan institusi yang bercanggah.

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ABSTRACT

The main objective of this study is to understand and explain how environmental and social issues are considered and embraced in the management control system (MCS) of an oil and gas company located in Sudan. An interpretive case study is used whereby data are collected through semi-structured interviews with relevant individuals from inside and outside the company. Document reviews, informal conversations and observations are also employed to support the data generated from the interviews. The findings of this study are informed by the New Institutional Sociology theory, which emphasizes that MCS configurations are driven not only by economic or functional factors, but also by institutional factors.

From the case findings, it would appear that the governmental laws and regulations, the pressure from and concerns of NGOs, the company's goal to protect and maintain its reputation and public image, and the high expectations of local communities, are among the main factors that pushed the company to consider environmental and social issues in its operations.

Finally, this study reveals that the process of considering social and environmental issues in the MCS of the company was only institutionalized in a ceremonial way, which was done mainly in response to external pressure rather than really being incorporated in its internal control system and actually practiced in the

day-to-day operations. Although some of the company's HSE policies and environmental management systems are put in place, however, these systems are not fully embedded in the control systems. Several impediments are being behind such decoupling practice. The absence of a specific policy for social responsibility, the lack of a clear strategy for environmental and social activities, the limited engagement with the local communities and other stakeholders, the lack of monitoring and follow-up, and the conflicting institutional pressures; are all among the main obstacles and challenges of incorporating environmental and social issues in the company's MCS

CHAPTER 1

INTRODUCTION TO THE STUDY

1.0 Chapter Overview

This chapter explains the objective and background of the study. It starts with a brief discussion of the oil and gas industry, in general, and the development of the oil and gas industry in Sudan, in particular. This is followed by a discussion of the problem statement of this study. Next, the research objective and questions are discussed in this chapter. Finally, the chapter briefly explains the theoretical framework, the research method used, the significance, and the contributions of the study.

1.1 Background of the Study

Crude oil and natural gas, which, together, are known as the oil industry, have emerged over the last century as the world's primary energy source. The production and use of oil and gas have had a remarkable economic, social and environmental impact, which has not always been positive (Harris & Khare, 2002).

The main objectives of the oil and gas industry are to explore, develop, produce, and sell oil and gas resources. Usually, this industry requires considerable amounts of capital investment and long time frames to explore and produce oil and gas in very challenging and uncertain environmental conditions (IFRS, 2008). The output often needs to be transported significant distances through pipelines, and tankers. To share such substantial capital investments, the different processes for oil and gas often take place in joint venture contracts. The oil and gas industry has been

considered as one of the leading industries in supporting Corporate Social Responsibility (CSR). Moreover, oil and gas companies often claim that they pay greater attention to their social and environmental impact than they did in the past. This is evidenced by the significant growth of the social and environmental reporting (Frynas, 2005). However, the effectiveness of the CSR initiatives in this industry has been increasingly questioned. The oil and gas industry is acknowledged as being a major emitter and polluter of the environment, and there is increasing evidence of a gap between the stated intentions of corporate leaders and their actual behaviour and impact in the real world (Frynas, 2005; Riccaboni & Leone, 2010; Rowe & Wehrmeyer, 2001).

The environmental impacts of the oil and gas companies working in Sudan are no exception to their counterparts around the world. Oil is the Government's main source of income and the oil sector is driving the economic growth in the Sudan. A few years after its independence from Britain in 1956, Sudan started oil exploration. Oil exploration in Sudan was first started by Italy's Agip oil company in 1959 in the Red Sea area. After the end of the first civil war in 1972, it became possible to extend the oil exploration to the southern part of Sudan. The first oil discovery in Sudan was made by the American oil company, Chevron, in the south of Sudan in 1979. However, Chevron suspended its operations and bowed out in 1984 as the second war ignited in the south of Sudan in 1983 (Zaida, 2007).

Later, in 1996, Sudan started to attract oil companies from East Asia. For instance, the China National Petroleum Company (CNPC), PETRONAS (Malaysia), together with SUDANPET (Sudan), jointly formed the Greater Nile Petroleum Operating Company (GNPOC), which made considerable discoveries thereby increasing the amount of proven reserves in Sudan. The GNPOC also succeeded in

the construction of the pipeline from the oil fields to Port Sudan on the Red Sea (Zaida, 2007). In January 2005, the Comprehensive Peace Agreement (CPA) in Sudan ended Africa's longest civil war, which, consequently, improved the conditions for oil production and export. During late 2006, a second pipeline, together with some refineries, was constructed. As such, the country's oil production was almost doubled. Sudan was ranked as the fifth largest producing country in Africa, with more than 434,000 barrels per day (ECOS, 2006; Sudan Update, 2010).

1.2 The Problem Statement

Oil has become the backbone of the Sudanese economy, and represented 60% of government revenue and 95% of exports in 2008 (Shankleman, 2011; Sullivan & Nasrallah, 2010). However, the oil and gas industry in Sudan has been accused of tremendous negative environmental and social impact. Many United Nations organizations and non-governmental organizations have accused the oil and gas companies working in Sudan of not operating in a safe social and environmental manner in the areas of oil production. Heavy deforestation, water and soil contamination, and forced displacement of local people are among the environmental and social negative impacts resulting from the oil and gas industry. For instance, in 2004, and in Blocks one, two, and four alone; approximately 576 million trees disappeared. Most of the illegally logged wood was turned into charcoal for consumption in Khartoum and other Sudanese cities and villages (ECOS, 2008).

In addition, several of the local people became sick because the water was contaminated by the chemicals being used in the drilling process (ECOS, 2008). Moreover, the oil and gas companies have also been accused of dislocating the local people from their native homes during the field development stage (Fallet, 2010; Ives

& Buchner, 2011). Furthermore, people in most oil producing areas are very poor and few of them live on more than one \$1/day (ECOS, 2008). These are only a few examples of the enormous social and negative environmental impacts that have emerged from the oil and gas industry in Sudan.

The negative environmental and social impact has been more intense given that Sudanese oil has been developed against a background of war, international sanctions and political isolation. Since late 1997, Sudan has been subjected to U.S. economic sanctions over alleged human right abuses and sponsorship of terrorism. Thus, the Government is under pressure to push the oil companies to increase oil production, which is at the expense of the social and environmental aspects (MOP Seminar, 2010).

Furthermore, the legal framework that was established to regulate the environmental and social aspects of the oil and gas industry in Sudan is considered to be insufficient and not up to date. In addition, there is a state of confusion over the responsibilities and mandates of the relevant governmental ministries and institutions, which, in turn, results in the lack of coordination and cooperation between these institutions (MOEPD Seminar, 2010). Moreover, these institutions are understaffed and lack the capacity building to perform their responsibilities (Ali, 2007; MOEPD Seminar, 2010).

The oil and gas companies operating in Sudan often claim that they give substantial concern to their social and environmental impact. Although this concern is seen in the mission statements of these companies, there is a need for more than only statements of good intentions (Drucker, 2001; Frynas, 2005). The social and environmental issues need to be embedded in the strategic planning of these

companies, built into their management processes, and operationalized in their daily operations (Pedersen & Neergaard, 2008).

In the literature, there is an increasing interest in researching various social and environmental accounting issues (Deegan, 2002). However, most of this research focuses on the issues of corporate social reporting (Deegan, 2002; Durden, 2008; Gray, 2002; Owen, 2008; Parker, 2005). Social reporting alone is not enough unless those environmental and social issues are incorporated within the company's strategic planning process, capital allocation, and performance evaluation (Riccaboni & Leone, 2010). Likewise, Bebbington (2007) argued that organizations' reporting on their sustainable development (SD) activities is only effective if they already have sound internal controls:

If organizations are seeking to report on their contribution to SD, one may expect that there are some internal mechanisms which guide their activities towards this goal. (Bebbington, 2007, p. 6)

Thus, the literature in this area reveals that only limited attention has been given to address the question of how social and environmental issues are managed internally, rather than external social and environmental reporting alone (Durden, 2008; Norris & O'Dwyer, 2004; Parker, 2005; Riccaboni & Leone, 2010). Therefore, research linking the management control system (MCS) to sustainability issues is limited and an under researched area. Durden (2008) further explained that, "While some broad guidelines have been developed for social accounting at the external level the translation of these into the internal management level is problematic. Broad guidelines relate to mechanisms such as the Global Reporting Initiative, which is an attempt to develop a stakeholder-focused sustainability reporting framework. However, this does not extend to MCS design issues." (p. 675). Hence, companies should align their strategies, structures and management systems with stakeholders'

needs (Cresti, 2009). Likewise, Milne (1991, 1996) argued that the question of how corporate decision processes might be expanded to incorporate social and environmental issues would seem to be a valid and timely research problem. As such, this study is motivated to understand how environmental and social issues are considered and embraced in the MCS of an oil and gas company.

1.3 The Objective of the Study and Research Questions

The objective of this study is to understand and explain how environmental and social issues are considered and embraced in the MCS of an oil and gas company. At the same time, this is utilized to identify any particular problems or issues associated with this objective. Based on the issues at hand, the main question of this study is to investigate whether environmental and social issues are considered and embraced in the MCS of the company, and, if so, how? The study also suggests a number of specific research questions, as follows:

1. What are the institutional factors that drive the company to be environmentally and socially responsible?
2. How do such institutional factors influence the MCS in terms of:
 - i. developing policies and procedures,
 - ii. selecting, hiring, and training employees, and
 - iii. setting, monitoring and evaluation of social and environmental goals and plans?
3. Are environmental and social issues being considered and incorporated in the MCS of the company?
 - i. If yes, how were these issues incorporated in the MCS of the company?

- ii. If no, why were the environmental and social issues decoupled from the MCS of the company?

A case study of a petroleum company working in Sudan is undertaken to examine the above-mentioned questions. The following section provides a brief discussion of the theoretical framework that has been chosen to inform the findings emerging from the case study.

1.4 Theoretical Framework of the Research

This study is informed by the institutional theory, in particular, the new institutional sociology (NIS) as the main theoretical framework to address the issue of how social and environmental issues are considered in the management control system (MCS) of the company. The NIS is chosen as a theoretical perspective for this study because within this perspective managerial accounting practices are being considered as a socially constructed phenomena rather than just a technically rational function (Covaleski et al., 1996). With this view, NIS is considered to be consistent with the assumptions of the interpretive case study approach that is used in this study (Siti-Nabiha, 2009).

NIS is also considered to be a relevant framework in this study as it shows that the MCS configurations are driven not only by economic or functional factors but also by institutional factors (Dambrin et al., 2007; Granlund, 2001). The NIS emphasizes that organizations compete for gaining both economic resources as well as institutional legitimacy (DiMaggio & Powell, 1991).

There are three mechanisms of institutional isomorphism, as explained by DiMaggio and Powell (1991). The first mechanism of institutional isomorphism is coercive isomorphism, which results from both the formal and informal pressure

exerted on organizations by other organizations upon which they are dependent. A second mechanism of institutional isomorphism is mimetic isomorphism, which occurs when organizations seek to copy the practices of other successful organizations (Carruthers, 1995). The third mechanism of institutional isomorphism is normative isomorphism, which arises when the norms and rules of society and professional bodies influence the practices of the organizations. In this regard, NIS can help to identify and understand the institutional forces that shape and influence the process of considering and embracing the social and environmental issues in the MCS of the case company.

1.5 The Methodology of the Research

Usually, research objectives and questions influence the choice of the method to be used for the study. As in qualitative research, "... methods should be selected and evaluated according to their appropriateness to the subject under study" (Flick, 1998; cited in Siti-Nabiha, 2000, p. 101). This research is based on an interpretive case study to understand how social and environmental issues are considered in the management control system of the company. This phenomenon is examined in its natural organizational context and from the viewpoints of the participants. Therefore, this is a case study research, in which the researcher seeks to investigate a management accounting practice through engaging with the company through qualitative and field research.

Few studies in this area have been based on a case study approach. The use of the case study is appropriate in research that asks how or why questions (Yin, 2009). Moreover, case study research, as described by Ryan et al. (2002, p. 143), offers "the possibility of understanding the nature of accounting in practice; both in terms of the

techniques, procedures, and systems, etc. which are used and the way in which they are used”. Furthermore, the case study approach also offers the possibility of dealing with a multiple variety of data, such as, interviewing participants, making observations, and reviewing documentary materials. Such multiple sources of evidence form a triangulation of data, which provide the researcher with a full understanding of the phenomenon under study (Creswell, 2007).

The selection of the company was largely dependent on the availability of access to that company. In addition, the choice of the case company was also based on its commitment to environmental and social responsibility principles. This company often claims that it has environmentally and socially responsible objectives and initiatives, as shown in its mission statement. Moreover, this company has gained two international awards for its environmental management system – EMS 14001 and OHSAS 18001. This company was the first oil and gas company in Sudan to gain both of these international certificates.

1.6 Significance of the Research

The literature reveals that almost all the prior studies on social and environmental accounting practices have been examined in developed countries. Thus, there is a considerable lack of literature examining the social and environmental accounting practices in developing countries, especially those that seek the views of different stakeholders on this issue (Belal & Owen, 2007; Hossain & Rowe, 2011; Lodhia, 2003; Rowe & Wehrmeyer, 2001; Yang, 2011). Therefore, a study of the local practice in a developing country (Sudan as an example) is important because it is unclear whether the vast differences in economic development, expertise, culture and technology among the various countries could

lead to differences in the social and environmental accounting practices (Hossain & Rowe, 2011; Yang, 2011).

Moreover, although the importance of reporting the impact of corporate activities on the physical environment has long been recognized in the social accounting literature, very little research has been published on expanding the MCS to incorporate the social and environmental impacts associated with corporate activities (Milne, 1991). Therefore, this study will help to understand the process of how to configure MCS to embrace social and environmental issues.

Furthermore, this study responds to calls for researchers (see for example, Adams, 2002; Adams & Larrinaga-Gonzalez, 2007; Gray, 2002; Parker, 2005) to engage with companies through qualitative and case research, since few studies in this area have been based on a case study approach. As such, an in depth case study is needed to address the question of how environmental and social issues are managed internally.

1.7 Contributions of the Study

This study makes a number of contributions to the literature. First, hopefully, it will provide an understanding and explanation of the process of how the environmental and social issues are considered in the management control system of the company. In this respect, this study is one of the few studies to investigate social and environmental issues in the MCS context. Second, by adopting a qualitative methodology, this study will respond to calls for a greater level of field-based research in the social and environmental accounting area (Adams, 2002; Durden, 2008; Gray, 2002; Parker, 2005).

Third, in terms of the use of the NIS, this study will also offer explanation concerning how different types of institutional isomorphism could influence and shape the embracing of social and environmental issues in the MCS of the company.

In terms of practical and methodological contributions, it is hoped that by understanding how the company considers environmental and social issues in its management control system, a better management control system(s) could be reconfigured from the insights gained from this research. Moreover, the use of the case study method in this study to explain and understand the sustainability management practices in an oil and gas company in Sudan, might encourage other researchers to adopt such a research method in another context or industry. By using qualitative case study, a better understanding of the content, processes and contexts of management accounting practices in organizations will be obtained (Berry & Otley, 2004; Ryan et al., 2002; Scapens, 2004).

1.8 The Outline of the Thesis

This thesis consists of eight chapters, which are organized as follows. Chapter one is the introduction chapter, which concentrates on the background and the objectives of the study. In addition, this chapter provides a brief explanation of the research problem, research questions, the theoretical and methodological approach adopted in this study, the importance of conducting such research, and the contributions of the research.

Chapter two provides a literature review on the development of social and environmental accounting research. The chapter starts with a brief review of the conceptualization of management control systems (MCS) and corporate social responsibility (CSR). This is then followed by an overview of key developments in

social and environmental accounting research. The chapter concludes by highlighting the findings from existing literature concerning MCS design and operations in relation to environmental and social aspects.

The new institutional sociology (NIS) perspective, which is used to inform the findings of this study, is presented in chapter three. The first section of this chapter is devoted to briefly outline the theoretical perspectives that are often used in social and environmental accounting, such as the legitimacy theory and stakeholder theory, and the relationship between these theories and the institutional theory. Then, the chapter explains the main ideas and concepts of the NIS, such as the social legitimacy, institutional isomorphism, and decoupling or loose coupling; and to what extent these issues exist in the case company to explain how environmental and social issues are considered in the MCS of the company. The chapter also reviews the utilization of the institutional theory in management accounting and control research. Finally, the chapter discusses the criticisms and development in the NIS, as well as the arguments for using this theoretical framework in this study.

Chapter four discusses the research methodology that has been used in the study. The chapter starts by explaining the philosophical assumptions underlying the qualitative approach. Then, the chapter explains the reasons behind using the interpretive case study method to understand and explain how the environmental and social issues are considered in the MCS of the company. The chapter is concluded by discussing the research design employed in the study. The research design provides a brief background of the case company, and also explains how data were generated, analysed, and validated in this study.

Chapter five and chapter six present the findings from the case study. Chapter five reviews the legal and institutional frameworks of environmental management in

Sudan. This chapter begins with brief background information about Sudan before and after the country was separated into two countries in July 2011. The chapter also provides a description of the situations of civil war and peace in Sudan and the effects of these situations on the state of the environment and natural resources management in the country. Chapter five concludes with a review of the petroleum resources in Sudan. Chapter six of this study focuses on how environmental and social issues are considered in the MCS of the case company. At the outset, the chapter provides detailed information of the case company, and the NGO's concerns and accusations against the company. Next, the chapter discusses the factors that drive the company to consider environmental and social issues. Chapter six concludes by explaining how the environmental and social issues are considered and embraced in the MCS of the company.

Chapter seven provides the theoretical analysis of the case findings. The NIS perspective is used to inform the case findings. This chapter highlights the different types of institutional pressure that are exerted on the case company and how they influence and shape the decision of the company to consider social and environmental issues. The chapter also elucidates on how social and environmental issues are considered and embraced in the MCS of the company in a ceremonial way rather than an instrumental way. The chapter ends by explaining the major factors behind the company's ceremonial practices.

Last, chapter eight discusses the contributions and limitations of the study. The chapter starts with a recapitulation of the case findings. Then, the theoretical and practical contributions from the study are presented in this chapter. Next, the chapter offers some implications and recommendations for policy-makers and practitioners.

The thesis ends by highlighting the limitations of the study and some suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.0 Chapter Overview

This chapter reviews the existing literature on the development of social and environmental accounting research with specific emphasis on the field of management accounting. The first section presents an introduction about the concerns of environmental and social sustainability issues in contemporary business organizations. A brief review of the conceptualization of management control systems (MCS) and corporate social responsibility (CSR) is presented in sections two and three of this chapter, respectively. The fourth section provides a review of social and environmental accounting research. This section starts with some definitions of social and environmental accounting (SEA), which is followed by a brief overview of the key developments in social and environmental accounting research. Finally, this chapter concludes with a review of studies concerning management control design and operations in relation to social and environmental issues. In particular, this chapter looks at the insights and lessons learned from these studies, challenges and some initiatives undertaken under management control systems and corporate environmental and social responsibility umbrella.

2.1 Introduction

Contemporary business organizations operate in a society in which it is expected that they not only fulfil economic functions by producing goods and services but also take on a social and environmental role and responsibility (Panwar

& Hansen, 2009). Balancing financial performance and corporate sustainability is considered as a major challenge in today's economic environment (Busco et al., 2010).

The notion that business is now expected to take on a responsibility beyond the core economic responsibility and consideration is commonly known as corporate social responsibility (CSR) (Jamali, 2006; Panwar et al., 2006). For organizations to survive and develop, many scholars have argued that financial performance and efficiency may be necessary but not sufficient for business entities to reach their goal of continued existence and growth. Therefore, the sole responsibility of corporations is no longer perceived to be economic performance based, and organizations are expected to take economic viability into consideration, as well as the social and environmental role and responsibility (Gordon, 1991; Jamali, 2006).

The recent years have witnessed a substantial research interest in the areas of corporate social responsibility and social and environmental accounting among academics, governments, professional accounting bodies, environmentalists and various other interested parties (Brown & Fraser, 2006). In accounting research, in particular, there have been numerous studies in the field of CSR (Bebbington et al., 2008; Deegan, 2002; Gray et al., 1995; Owen, 2008). These studies have mainly covered the environmental dimension of CSR, with particular emphasis on CSR reporting (Deegan, 2002; Durden, 2008; Gray, 2002; Mathews, 1997; Owen, 2008; Parker, 2005; Riccaboni & Leone, 2010). Limited attention has been given to how social and environmental issues are managed internally, rather than external reporting (Durdén, 2008; Norris & O'Dwyer, 2004; Riccaboni & Leone, 2010). Social reporting alone is not sufficient. Social and environmental dimensions need to

be integrated into the company's management systems and decision making process (Cresti, 2009; Norris & O'Dwyer, 2004; Riccaboni & Leone, 2010).

2.2 Conceptualization of MCS

In the literature, there are many definitions for the management control system (hereafter MCS). The modern intellectual roots of management control systems design were developed by Robert Anthony in the early 1970s (Otley, 2003). Management control has been defined by Anthony (1965, p. 17) as:

The processes by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives.

However, Anthony's definition was criticized for placing too much emphasis on accounting information, and for separating management control from both operational control and strategic planning (Rouse & Putterill, 2003). In the same way, Simons (1987) defined MCS as "formalized procedures and systems that use information to maintain or alter patterns in an organizational activity" (Mersereau & Mottis, 2011, p. 7). According to Simons, if the information-based systems and procedures do not change or maintain the patterns in organizational activities, they would not be considered as control systems (Malmi & Brown, 2008).

Another view of management control system design was provided by Chenhall (2003) who provided a more comprehensive conceptualization of MCS than just providing financial information to broader scope information that assists the managerial decision making process. This information relates to external non-financial information, such as that related to competitors and customers, as well as information pertaining to other internal non-financial information, such as that concerning production processes.

In recent years, MCS has also been defined by Merchant and Van der Stede (2007, p. x), as “to include everything managers do to help ensure that their organization’s strategies and plans are carried out or, if conditions warrant, that they are modified.” Merchant and Van der Stede (2007) differentiated between two basic functions of management control systems: strategic control and management control. Strategic control mainly concerns the question: is our strategy still valid, and if not how should it be changed? Whereas, management control is generally concerned with the following question: are our employees likely to behave appropriately? This question can be divided into three parts. First, do our employees understand what we expect of them (Result control)? Second, will they work consistently hard and try to do what is expected of them (Action control)? Third, are they capable of doing a good job (Personnel control)? Finally, if the answer to any of these questions is no, what can managers do to solve such management control problems (Merchant & Van der Stede, 2007, pp. 6-7). Therefore, the three elements of control are interrelated (Moilanen, 2012).

Merchant and Van der Stede (2007) classified MCS into result controls, action controls, and personnel or cultural controls. Result controls are those actions taken by the managers to motivate employees to produce the outcomes desired by the organization, such as defining performance dimensions, setting targets, checking actual performance against desired targets, and rewards the employees based on the achieved results (Moilanen, 2012). The second element of the MCS, according to Merchant and Van der Stede (2007), is the action controls, which involve ensuring that employees perform certain actions that are known to be beneficial to the company. The third element of MCS is personnel and cultural controls. Whereas, personnel controls include any action that managers take to make it more likely that

their employees will perform tasks, the cultural controls include any action taken by the managers to shape organizational norms and to encourage employees to monitor and influence each other's behaviour (Merchant & Van der Stede, 2007).

The results and action controls are defined as the formal or bureaucratic controls, as they are based on rules and prescribed procedures. In contrast, the personnel and cultural controls – which are sometimes called the soft controls – are defined as the informal controls, since they do not usually have pre-defined forms and procedures (Moilanen, 2012). In conclusion, the conceptualization of MCS in this thesis is based on Merchant and Van der Stede (2007), as it helps to answer part of the study's research questions. Therefore, in this thesis the empirical findings will be reflected against Merchant and Van der Stede's (2007) conceptualization of MCS.

2.3 CSR: The Definition and Evolution

The concept of CSR has evolved over a number of decades, in which social responsibility has been defined in different ways (Carroll, 1979). However, it seems that the definitions for CSR revolve around Elkington's (1997) phrase of "the triple bottom line", whereby organizations integrate economic, social, and environmental considerations into the decision-making process. From a business approach, CSR has been defined by the World Business Council for Sustainable Development (WBCSD) as:

The continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large. (Moir, 2001, p. 18)

In terms of academic contributions to the definition, Carroll (1979) offered the following definition of CSR:

The social responsibility of business encompasses the economic, legal, ethical, and discretionary (or philanthropic) expectation that society has of organizations at a given point in time. (Carroll, 1979, p. 500)

Carroll (1979, 1991) explained that the definition of CSR is composed of the following four parts. First, economic considerations must be taken into account, in that business organizations have the responsibility to produce goods and services that are needed by the society and with the goal of making profit. Second, legal considerations must be taken into account. As a part of the “social contract” between business and society, business organizations must fulfil their economic responsibilities – provision of goods and services – within the legal requirements. Third, ethical responsibilities must be considered. Although, economic and legal responsibilities sometimes involve ethical norms in terms of fairness and justice, ethical responsibilities encompass those activities and practices that are expected or prohibited by society even though they are not stated by the law (Carroll (1991)). Thus, society has expectations of business organization to engage in activities that go beyond legal requirements. Lastly, discretionary or philanthropic activities should be undertaken, in that business organizations should engage in activities that are purely voluntary and not stated by law or expected of business as an ethical common sense. Examples of philanthropic activities include contributions of resources by the business organization to improve the quality of life of its community.

In sum, these four parts of the CSR definition constitute a pyramid with economic responsibilities at the base and the philanthropic responsibilities at the top.

Carroll (1991) concluded that these four parts or responsibilities are not mutually exclusive and each responsibility needs to be fulfilled at the same time.

Up to 1970, the concept of CSR in the academic literature focused on a philosophical approach, in which the corporation's obligation was to work for social betterment. However, around the 1970s and after, there was a move from focusing on the philosophical approach to stressing more on the managerial approach (Moir, 2001). As a result of this shift, concepts, such as "corporate social responsiveness" and "corporate social performance" started to be introduced. Whereas, the latter concept was defined as "a way to measure a firm's effectiveness in implementing CSR" (Wartick & Cochran, 1985, p. 758), the former concept refers to "the capacity of a corporation to respond to social pressures" (Moir, 2001, p. 18). Usually the concept of corporate social responsiveness has been linked with the stakeholder management concept, which is concerned with "developing and evaluating the approval of corporate strategic decisions by groups whose support is required for the corporation to continue to exist" (Roberts, 1992, as cited in Norris & O'Dwyer, 2004, p. 175).

The 1980s and 1990s witnessed the introduction of new issues and concepts that were closely connected and overlapped with CSR, such as the stakeholder theory, business ethics, corporate governance, corporate social responsiveness, corporate social performance, and corporate sustainability (Gray, 2010, Wood, 2010). This caused some confusion in the literature, as these issues are closely interrelated but not necessarily identical.

In this thesis, the definition of CSR of the World Business Council for Sustainable Development (WBCSD) is thought to be relevant since it represents a formal definition that resulted from the opinion and experience of several leaders and

practitioners from inside and outside the business corporations (Chih et al., 2010). Moreover, in the context of this study, the researcher agrees with Dahlsrud (2008) who argued that,

The challenge for business is not so much to define CSR, as it is to understand how CSR is socially constructed in a specific context and how to take this into account when business strategies are developed. (Dahlsrud, 2008, p. 6)

In the following section, the study reviews and discusses developments in social and environmental accounting research (hereafter SEAR) in order to describe what issues have been researched, those that remain under researched, and the issues that need to be researched.

2.4 Key Developments in Social and Environmental Accounting Research

As mentioned in chapter one, the literature of corporate social responsibility and social and environmental accounting witnessed a growing interest in researching various social and environmental issues among academics, governments, professional accounting bodies, environmentalists and other various interested parties (Deegan, 2002). Before reviewing the key developments in SEAR, it will be worth reviewing some definitions of social and environmental accounting (SEA). Gray et al. (1987), as cited in Mathews (1997, p. 483) defined SEA as:

... the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large. As such it involves extending the accountability of organizations (particularly companies), beyond the traditional role of providing a financial account to the owners of capital, in particular, shareholders. Such an extension is predicated upon the assumption that companies do have wider responsibilities than simply to make money for their shareholders.

Social responsibility accounting has also been defined by Mathews (1993) as:

Voluntary disclosures of information, both qualitative and quantitative made by organizations to inform or influence a range of audiences. The quantitative disclosures may be in financial or non-financial terms. (Mathews, 1993, p. 64)

Based on the above-mentioned definitions, there does not seem to be any clear agreement concerning the definition of social and environmental accounting (Owen, 2008). There are some differences about voluntary or compulsory disclosures and whether disclosure must be in quantitative or qualitative forms (Mathews, 1997). In addition, these definitions seem to be restricted to only the disclosure of corporate social reporting. However, there is a broadening of the concept of SEAR to include other areas in accounting rather than only focusing on corporate reporting as defined by Gray et al. (1993), cited in Mathews (1997, p. 483) as:

... it can be taken as covering all areas of accounting that may be affected by the business response to environmental issues, including new areas of eco-accounting.

According to a number of reviews of social and environmental accounting research (SEAR), in particular, Mathews (1997); Deegan, (2002); and Owen (2004; 2008), the development in SEAR has been examined in respect of the following periods.

The early 1970s is generally considered as the period when SEAR first started to emerge as a substantial discipline in its own right (Owen, 2008). In general, the research published in this period was largely descriptive empirical work (see for example, Anderson, 1980; Belkaoui, 1980; and Grojer and Stark, 1977). In addition, a number of researchers have attempted to develop and explain normative models designed to improve social and environmental accounting disclosure (see Estes,

1976a; Ramanathan, 1976; and Ullmann, 1976). Moreover, during this period, the social and environmental accounting literature was characterized as theoretically underdeveloped, and a few researchers attempted to investigate what motivates corporations to make such disclosure (see for example, Dowling and Pfeffer, 1975; Ullman, 1985).

In line with the development in SEAR, in the 1980s and early 1990s, more analytical empirical research was reported compared to the descriptive research that dominated the preceding period. Moreover, in this period, and as described by Owen (2008) and Campbell (2007), the researchers started to pay greater attention to the methodological and theoretical perspectives. For instance, some researchers employed content analysis as an analytical tool for their studies (Owen, 2008). Other researchers adopted theoretical perspectives drawn from the stakeholder theory, legitimacy theory, and other political economy theories; with the aim of explaining, rather than simply describing the SEA practice (Owen, 2008). Furthermore, attention was also given to what was perceived by some researchers as the shortcomings of the emergent SEAR (Mathews, 1997). This critical view was further elaborated by Mathews (1997), as follows:

Writers in the field of critical theory have noted that the new developments do not often challenge the status quo, in that considerable attention is devoted to reporting what is disclosed, but not to actions which could change the underlying system. (Mathews, 1997, p. 500)

During the period 1991 to 1995, greater concern was given to environmental and auditing issues, which represent further additional developments in SEAR (see for example, Gray, 1992). In addition, from the mid-1990s onwards new issues that were closely connected with the SEA field, such as, eco-justice, eco-efficiency,