TOWARDS IMPROVED CORPORATE SOCIAL AND ENVIRONMENTAL REPORTING IN SOUTH AFRICA

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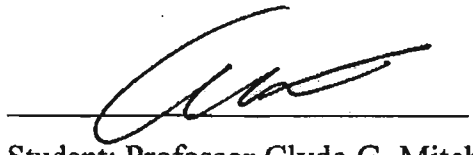
Preface

The research described in this thesis was carried out through the Faculty of Science and Agriculture, University of KwaZulu-Natal, Pietermaritzburg, under the supervision of Professor Trevor Hill.

This thesis represents the original work of the author and has not otherwise been submitted in any form for any degree or diploma at any university. Where use has been made of the work of others, it is duly acknowledged in the text.



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Abstract

This thesis contributes towards improving corporate social and environmental reporting (CSR) in South Africa, by determining what about CSR would need to be and could be improved. The sources of information for this were twofold. A comprehensive literature review, besides providing the background to the study, determined what specific criticisms have been levied against existing CSR disclosure and CSR systems. This thesis argued that many of these limitations arise out of the many primarily rule-based systems in existence and use, and that CSR should rather be based on sound fundamental principles and a conceptual framework, and be an enforceable standard i.e. with legal backing to ensure compliance. The second source of information on possible areas of improvement was from the users and or the stakeholders. In Part 1 of the thesis, these users or stakeholders were surveyed to determine which areas of reporting were important, and which needed to be better reported. What was important was that significant expectation gaps were found in CSR specifically regarding reporting the impacts on employees, the public and consumers and the physical and biotic environment. This provided evidence for the need for improvements in actual reporting in these traditional CSR areas, and hence justification for the work of this thesis.

Having identified areas of weakness and potential improvement in current CSR, an analysis was required to be performed to determine how these areas could be better reported. An assessment would need to be made if in fact these areas could be measured (and hence reported), which was undertaken in Part 2 of the thesis. The thesis revealed the need for improved CSR, and a greater degree of accountability and transparency by business that improved CSR could provide. It was argued that reporting, other than financial, which includes CSR should be prepared using a conceptual framework of principles, similar to that used in financial reporting, and thus a principle-based approach to CSR should be used as opposed to a rule based one. It was noted that such a principle-based approach would address many of the qualitative criticisms levelled against CSR practices, and current rule based systems. Using a systems based approach, a framework of interactions and impacts caused by businesses on social and physical systems was developed, which was used as the basis for a suggested CSR model. The model was validated using a peer and expert review

process, and by comparison to the Global Reporting Initiative (GRI), which was used to represent international and South African best practice. However, it was noted that potential measurement difficulties would be encountered if the proposed model were used.

It would also need to be determined what practical barriers would exist to implementing these CSR models in business, which was the objective of Part 3 of this thesis. When the practical implementation of a comprehensive CSR system was evaluated in industry, both the proposed model and the GRI were considered.

An important part of the measuring process was noted to be company risk assessment, often undertaken by the company's insurers. Where environmental impacts, health and safety, or other potential impacts (e.g. accidents or spills in the transport industry having significant impacts on other road users), were noted to be a significant risk, measurement systems and control procedures had been put in place by most companies. Perhaps the most significant part of risk, besides the potential loss in earning capacity, is potential litigation. Common law litigation would encourage companies to monitor and protect the health of their workers and consumers. Legislation e.g. National Environmental Management Act and Air Quality Act, would encourage companies to monitor their environmental impacts. Thus a combination of risk and legislation encourages monitoring and measurement. The findings of the third part of the thesis suggest that increased pressure should be placed on companies to become ISO14001 certified as this would facilitate increased CSR reporting, however, this in itself is unlikely to occur unless increased pressure is placed on companies by (legal of customer). The author suggests that ISO14001 certification would be more effective in ensuring environmental protection, than simple CSR disclosure.

Significant challenges exist to the possible implementation of many of the key areas identified in the proposed CSR model (specifically where measurement problems exist), and no companies were found to be in a position to report on these aspects comprehensively.

The findings of this thesis include that existing legislation and financial imperatives influenced measurement and recording of certain impacts and influences. At the same

time, many managers suggested that lack of financial (and other resources), as well as the absence of legal requirements were some of the reasons why other impacts and influences were not measured. Thus it could be concluded that legislation enforcing CSR, together with financial incentives (or penalties for failure to meet such standards), could play a significant role in improving CSR in South Africa.

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Abbreviations

AAA	American Accounting Association
ACCA	Association of Chartered Certified Accountants
AFS	Annual Financial Statements
AGIL	Adaptation, Goal Attainment, Integration and Pattern
Maintenance	
AICPA	American Institute of Certified Public Accountants
BS	British Standards Institute
CCC	Canadian Chamber of Commerce
CCL	Climate Change Levy
CEAS	Corporate Environmental Accounting System
CERES	Coalition of Environmentally Responsible Economies
CERLA	Comprehensive Environmental Restoration Liability Act
CEO	Chief Executive Officer
CEP	Council of Economic Priorities
CFA	Certified Financial Analyst
CICA	Canadian Institute of Chartered Accountants
CICA	Canadian Institute of Chartered Accountants
CIMA	Chartered Institute of Management Accountants
CONom	Conditional Normative Theory
CSR	Corporate Social and Environmental Reporting
EEA	European Economic Area Agreement
EIA	Environmental Impact Assessment
EMAS	Eco Management and Audit Regulation
EMS	Environmental Management Systems
EPA	Environmental Protection Association
ERAS	Environmental Reporting Awards Scheme
ESAP	Environmental Assessment Programme
FASB	Financial Accounting Standards Board
FEE	Federation of European Accountants
FSB	Financial Services Board
GAAP	Generally Accepted Accounting Practice
GATT	General Agreement on Tariffs and Trade

GDP	Gross Domestic Product
GEMI	Global Environmental Management Initiative
GM	Genetic Modification
GRI	Global Reporting Initiative
IAIA	International Association of Impact Assessors
IAS	International Accounting Standards
IASCF	International Accounting Standards Committee Foundation
IASSA	International Analysts Society of South Africa
ICAA	International Chartered Accountants Association
ICAS	Institute of Certified Accountants and Secretaries
ICAWE	Institute of Chartered Accountants of Wales and England
ICC	International Chamber of Commerce
IFRS	International Financial Reporting Standards
ISEA	Institute for Social and Ethical Accountability
ISO	International Standards Organization
IUPN	United Nations the International Union for the Protection of Nature
IUCN	International Union for the Conservation of Nature
JIF	Journal Impact Factor
JSE	Johannesburg Stock Exchange
King II	The King Report on Corporate Governance in South Africa
LCA	Life Cycle Analysis
LCC	Life Cycle Costing
LDC	Less Developed Country
MNE	Multinational Enterprise
MRR	Measured, Recorded and Reported
NEMA	National Environmental Management Act
NGO	Non-Governmental Organisation
NIC	Newly Industrialised Country
PAT	Positive Accounting Theory
PERI	Public Environmental Reporting Initiative
PWC	Price Waterhouse Coopers
SA	South Africa
SAAS	South African Auditing Standards

SAICA	South African Institute of Chartered Accountants
SEC	Securities Exchange Commission
SETA	Standardised Education and Training Association
SHE	Safety, Health and Environment
SMS	Safe Minimum Standard
SOCIE	Statement of Changes in Equity
SRB	Students for Responsible Business
UN	United Nations
UN CTC ISAR	United Nations Centre for Transnational Corporations Intergovernmental Working Group of Experts on International Standards
UNEP	United Nations Environmental Programme
UN SEEA	United Nations Satellite Environmental and Economic Accounts
VAS	Value Added Statement
WCED	United Nations World Commission on Environment and Development
WICE	World Industry Council for the Environment
WTO	World Trade Organization

CHAPTER ONE
INTRODUCTION

1.1. Introduction

In this chapter the study is introduced, and placed within the context of the importance of Corporate Social and Environmental Reporting (CSR) and its role of increasing accountability of business to affected and interested parties, the stakeholders. What is meant by CSR is defined and the justification for the study is provided. The aim and objectives, upon which subsequent chapters are based, are then presented. Finally the layout of the thesis is set out in this chapter.

1.2. Overview and context of corporate social and environmental reporting (CSR)

Environmental problems are recognised as being a direct consequence of economic activity, specifically industry and agriculture (Kneese 1977); in fact, the entire present economic world order is by its nature, unsustainable (Gladwin, Krause & Kennely 1995). As pollution and the destruction of natural resources has progressed over the last century, so too has the objection, in various forms, by many affected members of society to such destruction. Although in developed countries, business[1] and industry are largely perceived as being the perpetrators of this destruction, the pressures of the expanding human population are considered to be the primary driving force (McCormick 1989). The collective objection of many members of society to this destruction over the latter part of the last century, resulted in environmental issues becoming a matter of public concern leading to the development of the environmental movement. Pressure groups, agencies and international organisations were created by various concerned persons to address these environmental problems (McCormick 1989), and these organisations raised public concern about and awareness of the environment. The resultant public pressure on industry has led to the demand for environmental and social accounting and reporting as a means of ensuring accountability, and a necessary response by industry.

A response to this environmental crisis, the concept of sustainable development, although developed in the seventies (Fuggle & Rabie 1972), was highlighted in the

[1] For this thesis, businesses will be assumed to be primarily in the form of companies / corporations.

Brundtland Report of the United Nations (UN) (World Commission on Environment and Development (WCED) 1987), and became the overarching principle of Agenda 21, which was developed to promote sustainable development worldwide. In 1992, 165 countries became signatories to this agreement at the Rio Conference, which endorsed Agenda 21. The concept of sustainable development embodies the principle that all development should be such that it meets the needs of current populations without depriving future generations of resources to meet their needs (WCED 1987). Agenda 21 focuses largely on development issues such as land use, agricultural practices, and the provision of services and potable water, which are primarily the domain of governments, the UN and various other international agencies. However, as noted earlier, it is the impact of industry (not direct government action) on the environment, that is most significant, and hence the need exists for measures to promote sustainable business and the measurement thereof.

The direct impact of industry is very visible in developed Western nations and is the focus of much public attention and, as a result of strong democracy and accountability by the governments of such countries, appropriate legislation has been drafted and controls have been put in place. However, the effectiveness of such measures, as well as the true intentions of these governments is questioned (Ellwood 2001), and hence it is argued that there is room for greater accountability. Industry and business also impacts significantly on the environment both directly and indirectly, in less developed countries. It is common practice for multinational enterprises (MNEs) to use (and abuse) such countries as production sites because of cheap labour, cheaper or under-priced natural resources, and leniency or unenforceability of environmental regulations (Ellwood 2001). The lack of accountability in such countries, suggests that the only accountability over such activities would be through the controlling companies and the countries in which such controlling companies are registered. It should also be noted that the indirect impact of industry on the environment is far greater, than the direct impacts of production, particularly in some developing countries. Trade barriers and subsidies encourage the overuse and extraction of natural resources from such less developed countries (Ellwood 2001), and do not allow for an equitable return of funds to facilitate economic growth and sustainable development in such countries. This perpetuates the cycle of poverty and exploitation of the natural resources.

It was argued above that businesses, specifically MNEs should be held accountable for their activities. However, the power of such multinational corporations cannot be underestimated. Hert (2003) determined that of the world's largest 100 economies, 51 are corporations and that the turnover of General Motors and Ford combined is greater than that of the whole of sub-Saharan Africa. Several multinational enterprises are far more powerful and control more economic resources than do most countries in the world (Kaufman 2002), including developed countries such as Norway and Sweden and developing countries such as South Africa and India.

The power and influence of such businesses is felt not only by the less developed nations but also impacts on the more developed western nations. In such western countries, the activities of these corporations are controlled through self-regulation, government intervention, legislation, and the free market mechanism (Randall 1987). Clearly, self-regulation will never be self-defeating when such organisations are run by a profit motive, and will always remain within the bounds of competitive advantage. The free market system, as a regulatory mechanism, has been ineffective in regulating the utilisation of natural resources (Dewar 1994), in that only direct costs have been accounted for, and prices only respond to scarcity, when current supply is restricted. Thus, if the markets cannot control the impacts on the environment, it is argued that only the regulators, that is, governments, could possibly influence control measures. However, governments cannot effectively regulate the activities of industry without appropriate legislation, resources to enforce such regulations, and finally access to the necessary information. It is suggested that such information could be provided by effective environmental and social reporting systems. As early as 1931, Hotelling noted that it was widely known that natural resources were priced too cheaply, and were consequently being exploited at too rapid a rate to be sustainable. The provision of data on utilisation of natural resources and the impact on the environment, which is the function of environmental accounting and reporting, could aid in providing sufficient data for effective government regulation and the proper functioning of the free market mechanism, thus appropriately pricing these limited, scare and / or non-renewable resources, and hopefully reducing their over utilisation.

If information was available on companies' impacts on the environment, such companies could be held financially accountable for any pollution they caused in the past, despite such pollution being legally and technologically acceptable at the time it occurred. This was clearly illustrated by the Love Cannel incident in upper New York State (Dewar 1994) which Rubenstien (1991) summarises as a case of the past being judged by present (future) standards. In the light of this precedent, potential investors in companies should be fully aware of all potential environmental liabilities of companies, not only because they may give rise to losses in such companies and hence result in a diminution in the value of their investment, but also because it is conceivable that the shareholders themselves could ultimately be held accountable.

It is suggested above that environmental and social reporting could provide accountability, for pollution destruction and overuse of natural resources that Hotelling (1931) observed was apparent in the early 20th century. Such environmental and social reporting was only formally recognised in 1973 (American Accounting Association (AAA)), and has only really begun to be widely accepted in the business world, since the transference of the concept of sustainability to business which occurred in the 1990s (Gray, Owen & Adams 1996). Although leading countries such as Canada and the United Kingdom (Canadian Institute of Chartered Accountants (CICA) 1993; Institute of Chartered Accountants of Wales and England (ICAWE) 1992) have environmental accounting standards, there are no equivalent international accounting standards. Various voluntary international environmental reporting protocols and guidelines do however exist (Coalition of Environmentally Responsible Economies (CERES) 1989; Global Environmental Management Initiative (GEMI) 1992; Eco Management and Audit Regulation (EMAS) 1995; Global Reporting Initiative (GRI) 1997)[2]. Various international bodies are developing comprehensive environmental reporting guidelines (United Nations Centre for Transnational Corporations Intergovernmental Working Group of Experts on International Standards (UN CTC ISAR) 1991).

Legislation has played a key role in strengthening the environmental cause. The Comprehensive Environmental Response Compensation and Liability Act (CERCLA)

[2] Refer to section 3.6 for more details on these initiatives.

which was strengthened (Mathews 1997) by the Superfund Amendment and Reauthorisation Act of 1986 (SARA), requires complete remediation of contaminated sites, by the business or related parties in the USA. Canada, in 1990, passed legislation relating to the removal of contamination and restoration of sites (CICA 1990), while the UK passed the Environmental Protection Act in 1990. New Zealand's Resource Management Act of 1991 (Milne 1992), and Australia (Bates 1992) developed extensive legislation aimed at protecting the environment.

Pollution permits and eco-taxes are used in the USA (Norregaard & Reppelin-Hill 2000) to regulate emissions. These taxes can be a significant proportion of gross domestic product (GDP) for example 4% in Denmark. The UK also has significant environmentally orientated taxation (Simpson & Smith 2001), and recently introduced a Climate Charge Levy (CCL) (Marshall 1998). The accounting bodies in the US responded to CERCLA by issuing the Statement of Operating Practice 96-1 (Stevens 1996, Hochman 1998), which focuses on environmental remediation liabilities. In Australia, the Australian Institute of Chartered Accountants issued ED 65 the Consideration of Matters in the Audit of Financial Statements in July 1997. In South Africa too, a specific (South African Auditing Standard (SAAS) 2001) statement governs the audit of environmental remediation liabilities[3].

Public pressure on industry in response to the environmental crisis in the latter part of the Twentieth Century has led to the development of environmental and social accounting and reporting. However, despite some limited accounting standards, most CSR is compiled on the base of voluntary, limited and selective use of various protocols and guidelines without comprehensive, compulsory and externally verified standards. As noted in Section 4.2 of Chapter 4, such an approach has significant limitations. Further, it is suggested that without standards or enforcement, CSR presently serves as a marketing and publicity mechanism for many companies, rather than as an accountability mechanism, for which CSR was intended. Although significant work was done on CSR models in the 1970s and 1980s (Linowes 1972, Marlin 1973, Seidler 1973, Ramanathan 1976, Estes 1976, Ullmann 1976, Burke 1984, Brook 1986, Wartrick and Cochran 1985), little of these conceptual models has

[3] These legal and accounting responses will be discussed in greater detail in Chapter 3.

been incorporated into present models and systems such as the GRI (2002), CERES (1989) or International Standards Organisation (ISO) 14001 (2000).

If the existing reporting guidelines, protocols and standards do not provide full or effective disclosure[4] to the users of these reports, then these users cannot make meaningful assessments of the activities of the reporting companies, and are thus unable to take any appropriate action. The corollary of this, is that if these existing reporting guidelines, protocols and standards provide only partial or irrelevant information, the full impact of the activities of these companies would be hidden (Laughlin 1999). "There is no reason to think that shareholders are willing to tolerate any amount of non-profit activity which appreciably reduces either dividends or the market performance of the stock" (Hetherington 1973, cited in Gray et al. 1996:57).

CSR was developed, together with other measures, to address environmental damage being caused by business, and to ensure that such businesses met their social obligations with respect to employees, the community, consumers and other stakeholders. However, previous and current CSR is noted for suffering from limitations. This thesis aims to consider such limitations, and propose ways of addressing these, thus contributing towards improved CSR, specifically in the South African context.

1.3. Aim, research questions and objectives of study

1.3.1. Aim

The aim of this study is to determine what measures could contribute towards improving present CSR in South Africa.

1.3.2. Research questions

To achieve this aim the following research questions are to be answered from both a theoretical / conceptual and practical perspective, considering both user (stakeholder) and preparer (business) perspectives, within a South African context:

1. What is current South African and international CSR practice, and specifically what are the inadequacies and limitations of such CSR?

[4] 'Disclosure' refers to the presentation of information, facts or data in any form of public report, specifically including annual corporate reports and the annual financial statements (AFS).

2. What activities and impacts should be reported upon in CSR?

3. Can this be achieved and what are the barriers to this happening?

It is not the aim of this study to qualitatively measure CSR in South Africa[5], although evidence of other studies in this regard will be considered.

1.3.3. Objectives and approach

To answer the above research questions (considered separately from a theoretical and practical perspective), the following objectives have been developed, for which an overall approach has been suggested.

1. *What are the limitations of present CSR?*

1.i) To determine what the theoretical limitations of present CSR and existing CSR models are (specifically including those in South Africa).

Overall Approach: Literature review of critical reviews of CSR and other relevant prior research.

1.ii) To determine what the inadequacies and limitations of present CSR are from stakeholders' perspectives.

Overall Approach: Stakeholder survey, which will not directly ask for opinions of what inadequacies exist. Rather it seeks to determine what aspects and areas of CSR disclosure are considered to be important and how effectively these specific aspects are considered to be presently reported. Thus, where significant differences exist, (where aspects have been rated as important), these represent deficiencies that need to be addressed.

2. *What activities and impacts should be reported upon in CSR?*

2.i) To determine what theoretically should be reported.

Overall Approach: Develop a conceptual framework of interactions and impacts of business activities identifying all significant (perceived) interactions that should be reported.

2.ii) To determine what stakeholders believe should be reported upon.

Overall Approach: Stakeholder survey as in (1.ii) above.

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[5] Extensive work has been conducted internationally and in South Africa, measuring CSR disclosure. Further work in this regard would not be generating any new knowledge.

3. *Can all significant aspects and disclosure of an ideal CSR be reported upon?*

3.i) To determine theoretically if all proposed aspects, (that is activities and impacts of businesses), can be measured.
Overall Approach: Interviews with acknowledged experts.

3.ii) To determine if proposed disclosure can be practically implemented
Overall Methodology: Multiple case studies of existing companies.

The sequence of the above approaches is important. The starting point of all research, including this study, should be an extensive literature review of prior research. Both objectives (1.ii) and (2.ii) require the opinions of stakeholders from a survey, which has been combined into one such study. Before such a survey could be undertaken and the relevant questionnaire developed, it was necessary to develop a framework of interactions as described in (2.i) above. Further, such a framework needed to be developed into a reporting model, before undertaking objective (3) above, to assess whether all aspects could be measured.

1.4. Layout of thesis

The remaining chapters of this thesis are briefly described below:

Chapters Two to Four contain the literature review. In Chapter Two the theoretical and philosophical principles that pertain to CSR, accountability, and power and ethics/ rights are reviewed. The chapter also contains justification of the paradigms and approaches selected for this thesis. In Chapter Three the context of the development of CSR as a form of accountability by businesses is elaborated upon. In Chapter Three the factors that have influenced the development of CSR are outlined, and the main forms of CSR that have emerged as principles, charters, guidelines and standards are detailed. In Chapter Four the literature relevant to this specific study is discussed, and a review of prior research into CSR over the last three decades, internationally and in South Africa is included. Prior research relevant to this thesis, namely that concerned with the effectiveness of CSR, stakeholder perceptions, and theoretical model building is specifically focussed on.

In Chapter Five the methodology, is briefly outlined. The instruments, data collection techniques, methods of analysis, limitations and assessment of validity and reliability

are discussed. Practical limitations encountered in the proposed techniques are reviewed.

In Chapter Six the results of the first part of the thesis, the stakeholder survey, to identify CSR disclosure relevant to stakeholders, and how well these are perceived to be currently reported are detailed. The findings are discussed and deficiencies in current reporting are highlighted for prioritisation for future reporting models.

Chapters Seven and Eight comprise the second part of this thesis, the conceptual development of a CSR model. In Chapter Seven CSR principles and practice are critically reviewed, as are general criticisms of CSR together with the limitations of financial reporting. A principle-based approach to CSR is proposed, and a suggestion made that a conceptual framework be developed encapsulating the proposed principles, similar to the accounting conceptual framework, as originally developed by the Financial Accounting Standards Board (FASB) (1976). The proposed principles, as well as the findings of the stakeholder survey of Chapter Six, are then incorporated into a proposed CSR model. In Chapter Eight the validity, and completeness of the model proposed in Chapter Seven is assessed. Two techniques are used, firstly using a peer and expert review to invite criticisms that are then defended, and secondly conducting a line-by-line comparison with the GRI model, which is used to represent international best practice.

In Chapter Nine the work of the third and final part of the thesis can be found. In this chapter the feasibility of businesses implementing a comprehensive CSR system is considered, either as the model proposed in this thesis or the GRI. This is achieved by using a multiple case study approach, reviewing several businesses in major industry groupings, to determine to what extent measuring systems presently exist, and to determine what are perceived to be the barriers to implementing necessary measuring and monitoring systems that would facilitate the collection of data required by such CSR systems.

In Chapter Ten the findings of all the preceding chapters are discussed and evaluated, as the three parts to the study, while Chapter Eleven contains the conclusion of the

thesis. The specified aims and objectives are examined and the extent to which they where achieved are noted.

CHAPTER TWO
THEORECTICAL BACKGROUND AND PHILOSOPHICAL CONTEXT TO STUDY

2.1. Introduction

Gray, Owen and Adams (1996) summarise various objectives of CSR as formulated by other authors (Perks & Gray 1978, Gray & Laughlin 1991, Maunders & Burrit 1991, Gray 1992) as well as their own, which include:

- To enhance corporate power,
- To discharge accountability and increase transparency,
- To enhance corporate image,
- To deflect criticism of corporates,
- To increase the rights of special interest groups,
- To illustrate the imbalances of power in society, and to illustrate the limited picture traditional accounting shows of business impacts, and
- To present new ways of accounting for such impacts.

Thus, in this study, issues of power, accountability, rights, ethics and new approaches to accounting (research) need to be considered. The theoretical and philosophical underpinnings of these concepts in the context of CSR are considered, and justification is made for the paradigms and approaches selected. The four major categories of research paradigms are reviewed, and it is noted that a functionalist / structuralist approach is the most suitable for the purpose of CSR (which is concerned with regulation), and any underlying reporting model.

2.2. Theories behind accounting research

Gray et al. (1996) group accounting research theories into four broad categories, and evaluate their relevance to CSR as follows:

- *Classical inductive theories*, which evaluate current practice to determine the themes and principles upon which they are based. The author of this thesis suggests that reviewing current practice could provide explanations for current disclosure, however it will contribute little towards developing a relatively new field such as CSR.

- *Income theories*, which try to measure the true profit of a company. These are based on economic principles, which do not (adequately) incorporate the key elements, which CSR aims to report on.
- *Decision usefulness theories*, which are orientated towards providing information that is useful for making decisions internally (management accounting) and externally for investors (financial accounting). Gray (1994a) argues that this is based on the perspective of investors only, and cannot be supported in CSR, which in principle reports to a wide range of stakeholders.
- *Information economics/ agency theories*, which aim to provide insight into goods and services, their provision and consumption, based on economic theories including supply and demand. This essentially represents the problem that CSR is trying to overcome, i.e. the overuse and abuse to free natural products and services, which are not appropriately valued by current economic systems.

Belkaoui (1981) takes the above theories and divides them further into six separate research paradigms, however this is not considered here as the author of this thesis argues that the basis of CSR research should be decision usefulness. This represents a form of accountability to stakeholders and should thus provide them with information useful to their needs and decisions they may take regarding future interactions with the reporting entity.

2.3. Power and Accountability theory

2.3.1. The influence of power on CSR theory and this study

Gray et al. (1996) argue that the minimum form of CSR must be compliance with a standard report, and it is this argument that the author uses to justify the approach to this thesis, namely that all business should present CSR, in accordance with a specified standard[6]. The process leading to the development, then regulation and control (if any) of such a reporting standard, should consider the role of power. A neo-pluralist view of society assumes that power is widely distributed between individuals and that power is not located in a single group (Gray et al. 1996). Using a systems perspective, it is assumed that the economic domain is located within the societal, cultural and ethical domains, and society with its cultural and ethical values

[6] Which may be rule-based or principle-based as argued later in this thesis.

exerts power to determine acceptable modes of behaviour in the economic domain, by both natural and juristic persons i.e. companies. However, society will react to a change in information, such as accounting and CSR could potentially produce this (Gray et al. 1996), which then reflects a change in society and represents a change in influence and power between groups. Regretably, accounting has traditionally restricted itself to considering the relationship between companies and a very limited set of stakeholders (Gray et al. 1996), in a strictly economic domain, ignoring the influences that accounting and business have on these wider systems, thus ignoring power in these wider systems, and hence placing greater importance on the role of CSR.

Power is not ignored in this thesis, however it is widely acknowledged that power and changes therein are very difficult to measure (Glegg 1989). It is the potential change in power that may result from the information disclosed by CSR that is primarily considered in this thesis.

2.3.2. Accountability, the goal of CSR

"Modern political thinking suggests that characteristics such as fairness and justice can be married with other desirable characteristics such as freedom and opportunity through a re-democratisation of society" (Gray et al. 1996:37) returning the power "to the people" which would require that "information flows themselves are more democratic". These authors suggest that in a participative democracy there must be a flow of information from those who control resources, to provide an account to society of their use of such resources, which is embedded in the notion of accountability.

Gray et al. (1996: 38) define accountability as: "The duty to provide an account (by no means necessarily a financial account) or reckoning of those actions for which one is held responsible". They suggest that accountability thus requires responsibility to undertake certain actions, rather than account for those actions, and therefore management and directors of a company have the responsibility to manage the resources entrusted to them and to account for this management. The actions and accountability between two parties will be a function of the relationship between such

parties, which in the case of a company is determined by the importance that society places on the flow of capital and then the right of information and limited liability.

Society in turn consists of a series of individual contracts between its members and society itself, some of which are legal but many of which are not, i.e. moral (or natural) which depend upon the ruling ethics, values and principles of society. Likierman (1986) suggests that in order to clarify what accountability is, it is essential to distinguish between legal and moral rights and responsibilities. Legal rights are those embedded in the laws of that country (Tinker, Lehman and Niemark 1991), but these tend to be limited to very specific CSR disclosures regarding policies and details of their employment equity and disabled employees. Gray et al. (1996: 40) suggest that if accountability were to be left solely to legal forces and voluntary initiatives, the "demand for accountability" would never be met, which is why they argue that CSR must be mandatory, and there is significant evidence that voluntary CSR will have little impact on reporting (Adams & Roberts 1995). This demand for accountability can be classified as a non-legal right. Non-legal rights can be split into quasi-legal rights, such as those embodied in codes of conduct and statements from authoritative bodies, and philosophical rights, which can be either absolute or relative. Most of these philosophical rights are continuously changing over time (Tinker et al. 1991). CSR, it can be argued, is an evolutionary mechanism, designed to answer this need and demand for accountability.

Gray et al. (1996) note that accountability relationships, can vary dependent upon power and control, and that whereas at one time, states could be said to control companies, now many MNEs indirectly through their economic power, control states, and hence the lines of accountability are reversed. Thus CSR disclosure as a form of accountability by MNEs is of extreme importance. Gray et al. (1996) suggest that CSR has moved from considering an investor's response to information (Ingram 1978, Ullmann 1985) to more progressive practices with a systems orientated view of organisations and society, which include Legitimacy theory, Stakeholder theory and Political Economy theory, which will be discussed in the following subsections.

2.3.3. Accountability theories

2.3.3.1. Legitimacy theory

Gray et al. (1996: 46) define legitimacy theory as the principle that: "Organisations can only continue to exist if the society in which they are based perceive the organisation to be operating to a value system which is commensurate with societies' own value system". Thus, the basis of legitimacy theory is that businesses (organisations) continuously strive to legitimise their existence and behaviour, through various techniques. Lindblom (1994) identifies four broad legitimisation strategies that a company may use at various opportunities:

- To educate its stakeholders about the organisation's intentions to improve,
- To change the perception of stakeholders about a specific event,
- To draw attention away from the issue of concern by highlighting other positives (Sappi's 1992 annual report, shortly after the Ngodwana spill, had their most extensive CSR component to date), and
- To change external perceptions about its performance.

Organisations strive to "close the legitimacy gap" (Linblom 1994, cited in Gray et al. 1996:47)

Stander (2003) has documented extensive evidence on how corporate America has, since the 1970s, and again in the 1990s, embarked on a collective campaign to 'make America more conservative' thereby legitimising the activities of industry, through mechanisms such as:

- Funding conservative parties, and candidates,
- Sponsoring 'environmental educational material' aimed at school children,
- Sponsoring selected university chairs in free enterprise,
- Funding of controversial but pro-industry research,
- Setting up 'think tanks' and organisations, with pro-industry agendas, and
- Targeting individual, vociferous activists by means of lawsuits.

This can be thought of as an extreme version of Legitimacy theory, where the organisation/s strive to change societies values to meet their own needs. A more liberal form of Legitimacy theory (Gray et al. 1996) seeks to question the legitimacy of society itself and the capitalist system.

2.3.3.2. Stakeholder theory

Gray et al. (1996:45) define a stakeholder as being: "Any human agency that can be influenced by, or can influence, the activities of the organisation in question". Company stakeholders include employees, trade unions, communities, society, pressure and advocacy groups, the state, customers, suppliers, competitors, local government, stock markets, financial markets and intermediaries, media, industrial bodies, peers, foreign governments, future generations and non-human life.

Stakeholder theory is a systems-based approach to CSR, suggesting that an organisation is accountable to all its stakeholders. An adaptation of this theory (Tricker 1983) is empirical accountability, where the organisation identifies stakeholders of concern, whose interests need to be managed by the organisation for its own interests. Robberts (1992) has argued that CSR has been a very useful tool for companies to negotiate and manage their relationships with key stakeholders. Clearly, empirical accountability is a very important and useful theory, as it helps explain specific CSR disclosure, aimed at managing specific stakeholder groups. A review of the sustainability or stakeholder reports of many large South African businesses, would focus on themes of interest to specific stakeholder groups, with glossy booklets filled with pictures and broad (but often vague) details of community interventions targeting disadvantaged groups, of empowerment and equity schemes as well as activities aimed at reducing the impact on the environment or at supporting other organisations that do work for the environment. The author suggests that in the early 21st century in South Africa, these represent the core themes that businesses sell in their CSR disclosure, to manage the opinions of the powerful stakeholder groups, specifically represented by the dominant ruling political party in South Africa, at this time. Thus empirical accountability represents perhaps the most relevant accountability theory at the time of this study in South Africa.

2.3.3.3. Political Economy theory

Gray et al. (1996: 47) define the political economy as being: "The social, political and economic framework within which human life takes place". This again is clearly a systems approach to CSR.

There are two distinct versions of the political economy theory, namely:

- Classical political economy (legitimacy theory falls under this), which focuses on structural inequality, conflict and the state, and
- Bourgeois political economy (stakeholder theory falls under this), which focuses specifically on interactions between groups.

Gray et al. (1996) suggest that both versions are useful, in explaining CSR. One of the major criticisms of the bourgeois political economy theory, however, is the lack of emphasis placed on relative differences in power and wealth that are generated and maintained[7]. Classical theory also explains mandatory CSR disclosure, as the state acting to protect disadvantaged groups to maintain legitimacy within the system. This fails in many developing countries such as South Africa, where there are no compulsory CSR standards i.e. the state does not act, and even where it has set environmental standards e.g. National Environmental Management Act (NEMA) (1998) and Air Quality Act (2005), it lacks the resources to enforce such standards. Bourgeois political economy theory does, however, explain the lack of CSR in South Africa, while Classical political economy theory explains why industry increases its CSR when bad publicity occurs, or when a stakeholder group achieves increased power.

2.4. Ethics and norms

The ethical approach to accounting theory emphasises the concepts of justice, truth and fairness (Hendriksen & Van Breda 1992). Scott (1941) as cited in Hendriksen (1982) suggested the following principles:

- Accounting procedures must provide equitable treatment to all interested parties,
- Financial reports should present a true and accurate statement without misrepresentation, and
- Accounting data should be fair, unbiased, and impartial, without serving special interests.

Many of these principles have been incorporated into the accounting framework[8] FASB (1976). These concepts have been questioned by later writers, for example

[7] Refer to Chapter 6, for criticisms of the proposed model (based on stakeholder theory) of this dissertation, by Cooper for lack of reflection of power in relationships.
[8] Refer to Chapter 7 for details: includes concepts of 'equitable treatment, true and fair, accurate, unbiased, impartial'.

Belkaoui (1992) and Yu (1976) who believed that such concepts should be separated into value statements and true ethical norms. These principles are embodied in the concept of fair presentation, which is the underlying basis on which all accounting reports are based. However this should also be applied to accounting and reporting for and to people who represent the various segments of society (Belkaoui 1992).

The challenge to a study of this nature, which by definition is based on the conditional normative paradigm, would be to identify the norms on which it is based. Clearly these would be culturally based (Western society) and would reflect the views of the writer. These views would then need to be justified using one of many possible ethical systems. Among the possible systems that could be considered would be (des Jardins 1993):

- Natural Law or Teleological tradition,
- The Utilitarian Tradition (based on works of Jeremy Bentham and John Stuart Mill),
- Deontology, the ethics of duty and rights, specifically including the principles of Kant,
- Biocentric ethics, which include among others Schweitzer's 'reverence for life' principles,
- Hume's dichotomy for environmental ethics,
- Religious ethics, including but not limited to the Judaeo-Christian system, and the Buddhist system,
- Anthropocentric ethics, and
- Eco-feminist ethics.

Various viewpoints have been developed including that of 'sustaincentric' (Lamberton 1998), which include both people centred and conservation based, which assumes ecological, social and economic interdependence, which amongst other factors includes the maintenance of critical natural capital. Other authors have discussed issues and strategies related to sustainable development (Hart 1997, Magretta 1997).

With regards to the principles upon which this thesis is based, the concept of sustainability is used i.e. using resources in such a way that future generations are not deprived of access to such resources. This is a broad statement and it can imply:

- Protection of biodiversity, and or key species,
- Maintenance of ecosystems, and their functioning,
- Protection of water systems (for future use),
- Protection of the air, and related atmospheric systems,
- Protection of wilderness areas for the aesthetic beauty, and for future generations, and
- Protection of non-replaceable or substitutable resources.

This study also considers social issues, and thus the rights of individuals, children, disabled, minorities, women, workers, tribal peoples, communities and consumers all need to be considered.

Any one of the ethical philosophies could be used to build an argument that would justify comprehensive CSR, in terms of stakeholders' ethical rights. However, the author chooses to apply the Kantian principles, namely that people (which includes the juristic person of a company) can be held responsible for that which they control (des Jardins 1993), and that other people should be treated with respect, with the right of equality and freedom. Thus, all people (including future generations) have equal rights, and have equal rights to the environment (in a pristine condition).

2.5. Philosophical paradigms

2.5.1. Introduction and paradigms of accounting and CSR research

Accounting is a powerful instrument not only in the business world but also in politics, development and just about anything that involves the use of funds and the recording of costs, budgets, and fund allocations (Ross, Westerfield, Jordan & Firer 1996). The strength of accounting has been its independent, neutral and unbiased nature, upon which all can rely, due to its objectivity. However, the principles upon which accounting rely are based on positivist, descriptive and empirical theories. Watts and Zimmerman (1980) propose that accounting research can be divided into two types of theories: those that commit value judgments (normative), and those that

do not (positivist), and suggest that all accounting policy should be based on the latter. The positivist theory is supposed to be more relevant, factual and realistic than the normative one. However, Tinker, Merino and Neimark (1982) argue that positivist approaches are in fact normative and value laden, and serve to hide the conservative ideological basis of accounting. They suggest that the terms 'positivist' and 'empirical' are part of a 'realist' theory, which is inappropriate as a basis for an accounting theory. The 'realist' theory is based on the principle that reality objectively exists and can be reliably measured. This is clearly flawed since it can only be measured through the perceptions of the measurer (Mattessich 1995), who is operating in a shared reality. If these measurers or recorders are accountants by profession, this qualification has been achieved through seven years of rigorous training and examination to demonstrate that they think exactly according to the discipline norms, which in accounting is encompassed by the principles of generally accepted accounting practice (GAAP). These accounting principles are founded on economic philosophies, which have been based on positivism or realism since Keynes (1891) and subsequently Friedman (1963) who, states that: "there are no value judgments in economics" (Friedman 1963:85). This assumption has become the basis of all subsequent accounting theory.

An alternative to 'realism' is 'materialist' theory. It differs from 'realism' theory (Tinker et al. 1982) in that it recognises that the theory will come to form part of the reality it is trying to describe. Accounting theory is also interlinked with 'value' theory, and Tinker et al. (1982) argue that 'value' theory has been central to the development of accounting. 'Value' theories have developed into two distinct and separate lines, namely the labour based and the utility based, and Tinker et al. (1982) suggest that accounting has aligned itself with the latter.

In the 1970s there was significant criticism of the accounting profession, financial accounting and corporate responsibility (Brilof 1972). However, this criticism was tempered by the belief that the state was an independent and 'well meaning body' that could act freely (Nader, Green & Seligman 1976), to control such aforementioned activities. It is questioned, by the present author, whether such a view is valid in most circumstances, due to the influence business has on such states (refer to conceptual framework in section 3.7).

Research in environmental accounting and reporting has, in the past, adopted a largely positivist paradigm and has examined only what is there, (not what is not shown), looking at for example, the statistical relation between corporate disclosure, characteristics and performance (Gray & Bebbington 2001). Since the United States has led the way in such disclosure, the bulk of such research has been conducted on United States corporations and multinationals. However, in recent years these studies have been mirrored in other countries such as South Africa (Dewar 1994, Savage 1994, Vorster & Lubbe 1994, De Villiers 1996).

Accounting serves many purposes such as in reporting, control and the support of decision-making. These are all the domain of management. Thus, accounting can be considered to be 'managerialist' (Gray & Bebbington 2001) in that it supports the function of management and the objective of business organisations, which is the pursuit of profits. In fact, it can be considered to be essential to that function, since businesses can neither function nor achieve their objectives, without accounting support. 'Managerialist' research supports the social, ethical and economic rightness of the corporate perspective (Gray & Bebbington 2001), which is to make profits and achieve economic growth. However, this managerial perspective and the notion of sustainability as noted previously, are clearly in conflict. Thus, much previous research has had a 'positivist' and pro-managerial bias, and it is assumed, in most literature on environmental accounting and reporting, that the status quo, namely the pursuit of profits, is the norm and is acceptable, and thus this needs to be questioned (Tinker et al. 1982, Arnold & Hammond 1994). Gray and Bebbington (2001) question if the generation of profits and economic growth is in fact 'good'. Clearly from most ethical perspectives it is not, since the greatest benefits are not generally for all humans, but are reserved for the rich and powerful, to the exclusion of all others, and further it is suggested that harm is done in the pursuit of such profits (des Jardins 1993).

Having considered the ethical basis of this thesis, it is necessary to establish the philosophical paradigm on which the study is based.

2.5.2. Burrel and Morgan's (1979) overview

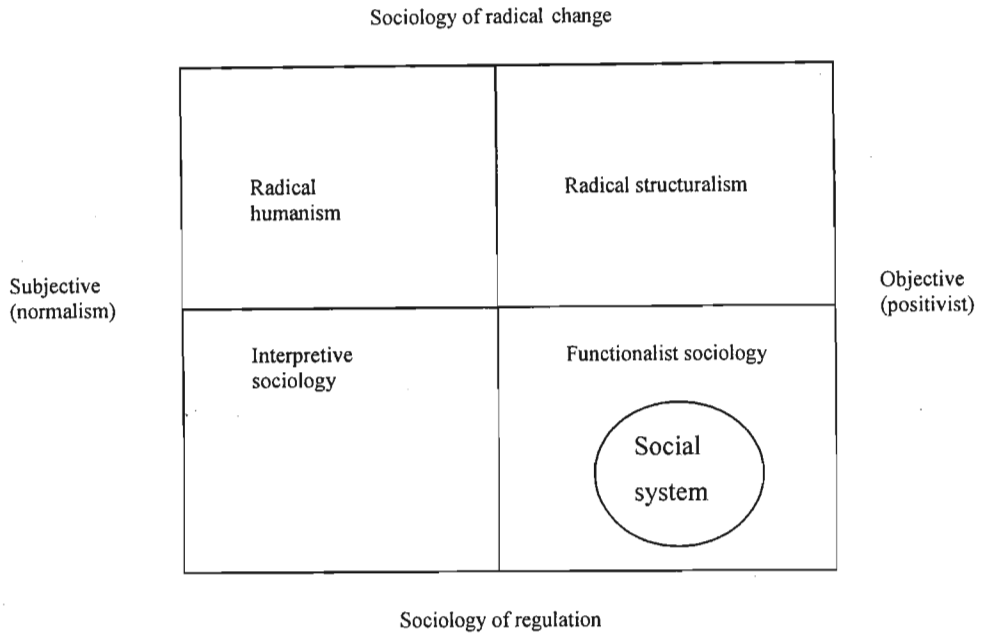
Selection of an appropriate paradigm means considering which ontological and epistemological approach to use, where ontology is considered to be the true nature of the subject, which can be subjective (i.e. nominalism), or objective (e.g. realism) (Burrel & Morgan 1979). Epistemology is the nature and form of knowledge on that subject, which can be subjective (i.e. anti-positivist), or objective (i.e. positivist).

It is important to consider the divergent views on society i.e. conflict versus order. The Order approach such as advocated by Darenhoff (1979) views the normative structure of society as a system legitimising power. In such a view, values and norms are the framework, which preserves the structure of a social system, and prevent its disintegration. The degree of influence of these values and norms represents the degree of success of the forces of domination. Functional theories tend to look at the processes, which tend to maintain the patterns of the system as a whole. At the opposite end of the debate is the Marxian theory, which is concerned with the contradiction and incompatibility of the components of the social system, and the heterogeneity, and imbalance of the divergent social forces. Cohen (1968) suggests that these models are not mutually exclusive, but are reciprocal of each other. Burrel and Morgan (1979) suggest that this debate should be seen as between regulation and radical change. This thesis, which seeks to improve CSR systems is in the regulation camp, and must be normative and structuralist in nature, to achieve these ends. This is not to say that this researcher will not consider the social forces that have contributed to the present social and ecological crises in the world. It is critical to consider these, as they limit and use CSR to maintain existing power bases. However, effective CSR could lead to accountability, a change in information and hence power, and slow[9] but effective 'radical change'. This thesis is not focused on how such change can become effective, but only on how CSR as a social mechanism could become effective, possibly to be used as an instrument for social change.

The following diagram, which is adapted from Burrel and Morgan's work (1979: 29), illustrates the matrix of paradigms.

[9] The author suggests that such change is unlikely to be revolutionary.

Figure 2.1: Burrel and Morgan's (1979) representation of the range of philosophical paradigms



Note: only social system theory has been shown on the above diagram, the various theories would fall into the appropriate quadrants

This thesis is concerned with the sociology of regulation, which are represented by the lower two quadrants in the above diagram. It is also concerned with the interaction between a company and all its stakeholders and surrounding systems, which falls into the domain of social system theory, (in the lower right-hand quadrant), which is positivist. It is not however, concerned with understanding such reporting systems, or how they work in society, but is rather concerned with improving them. Although the concept of improvement is a subjective one, it is based on opinions, which can be measured, and hence is positivist (the lower right-hand quadrant). Within this quadrant are the following theories (not all of which have been shown above):

- Interaction and social action theory,
- Integrative theory,
- Social system theory, and
- Objectivism.

The functionalist paradigm is concerned with the sociology of regulation. It is concerned with providing explanations of the "status quo, social order, consensus,

social integration, need satisfaction and actuality" (Burrel & Morgan 1979:26). It is concerned with understanding society and generating knowledge that can be used, thus it is problem solving, and seeks to provide practical solutions. Emphasis is placed on understanding order, equilibrium and stability and the maintenance thereof, and is concerned with the regulation of social affairs. Early pioneers of this approach include Aguste Comte, Herbert Spencer, Emile Durkheim and Vilfrede Pareto. It assumes that the social world is composed of empirical artefacts and relationships, which can be identified, studied and measured using methodologies applied in the natural sciences.

Durkheim (1938) viewed modern society as consisting of the division of labour, functionalist differentiation, and a unit from interdependence of parts. This unity was based upon normative systems of values, beliefs and sentiments. Radcliff-Brown (1957) viewed the structure as consisting of a set of relations amongst unit entities, the continuity of the structure being maintained by a life-process made up of the activities of the constituent units. He viewed social institutions as contributing to integration, stability and maintenance of the social system.

Parsons (1959) introduced the concept of functional prerequisites or functional imperatives as being the functions which society must perform in order to survive. These, which were incorporated into his AGIL[10] scheme (and have been used as the basis of the model in this dissertation, refer to Chapter 7 section 7.5), are:

- Adaptation, where the units act to establish relations between the system and its external environment,
- Goal attainment, which are the actions which serve to define the goals of the system and to mobilise and manage resources and effort to attain goals and gratification,
- Integration, where the units act to establish control and maintain co-ordination between the parts,
- Latency or pattern maintenance, which provides actors with the necessary motivation.

[10] A: adaptation, G: goal attainment, I: integration, and L: pattern maintenance.

Parson's work (1951) is inextricably linked with systems theory (refer to section 2.5.2. below). This work was continued by many others including Buckley (1967)[11]

This functional model (Parsons 1959) assumes strong normative elements to maintain the structure of society. Burrel and Morgan (1979) note that this functional model assumes that modern industrial society is the pinnacle of human achievement, and that the predominant problem is that of regulation. Burrel and Morgan (1979) propose that ontologically, epistemologically and methodologically structural functionalism has been based on models derived from the natural sciences.

2.5.3. Positivist, systems based and structuralist theories

Gray et al. (1996) propose that when approaching CSR, one should strive to not alienate traditional accounting scholars, but lead all scholars to a better understanding of society and allow for the possibility of serious social change. The author supports the latter principle, and argues that unless the study will contribute to change, it is of little value. This is consistent with the aim of the thesis, which is to contribute towards improved CSR. This was also the guiding principle in the selection of the paradigm for this study, namely the conditional-normative approach, (see discussion later), and the underlying theory, namely the Ethical stakeholder theory. Mattessich (1996) notes that to be of practical use accounting theory must have an analytical approach, produce empirical evidence, as well as provide normative direction. Gray et al. (1996) suggest that an accountability framework is the most useful way to analyse accounting information.

Mattessich (1996) argues that when animals or humans interact, a social reality is created with legalistic, moral and economic domains, and this is the reality in which accounting and it predicate of income, expense, debt, assets and capital exists. Accounting is based on the concept of duality i.e. an input for one area must be an output for another (input-output-conservation). Although it would be possible to add a third element (Ijiri 1989), when addressing the basic fundamentals of CSR, it is essential that at least this duality is reflected as a key component. However, one of the

[11] Note: the model developed in Chapter 5 is based on structuralism.

contentious issues in CSR is the question of measurement, as even in pure accounting the concepts of measurement are far from resolved (Denman 1994).

Fundamental to theory are the basic principles upon which it rests, such as postulation and axiomatization. Early studies including those of Moonitz (1961) and Sprouse and Moonitz (1962) are attributed by Mattessich (1996) to have contributed to the FASB's conceptual framework of 1974, as adapted by many countries and now embraced by the International Accounting Standards Board (IASB or IASFC (Foundation Committee)). However, this has been criticised as having been formulated without complete deductive reasoning (Mattessich 1995). Mattessich (1995) argues that the basis of any framework requires a clear understanding of one's overall goal, or in the case of multiple such goals, a hierarchy of objectives, and that basic assumptions should constitute the frame on which accounting systems in general could be based. This is the basis of his conditional normative theory, that is defining the information objectives of a system, which will vary between cost accounting, financial accounting and social and environmental accounting.

These positivist systems-based and functionalist principles are the foundation of the framework for this study as developed in Chapter 7 and defended in Chapter 8. This framework is also considered in developing the methodology in Chapter 5 and is the basis upon which the stakeholder survey of Chapter 6 is designed.

2.5.4. Systems and soft systems theory

Systems theory, is considered to have been originally developed by Von Bertalanffy, who defined a system as "complexes of elements standing in interaction" (1950: 8). Weiner's cybernetics theory (1954) was also instrumental in developing systems theory, although it predated such work. Much of systems theory is orientated towards attempting to determine the principles of organisational theory, which underlie such systems. Jackson (2000) notes that the relationships between the parts are more important than the parts themselves when dealing with systems.

Closed systems are characterised by their reaching a state of equilibrium. Open systems are characterised by an exchange with their environment, with input and output transactions, and are thereby continually transforming themselves. However,

even open systems may, in specific circumstances, reach a state of equilibrium or homeostasis. Parson's work (1959) rested on the assumption that social systems tended to reach a state of equilibrium, which is what it focused on, as opposed to the change in such systems. His models recognised all the equivalent characteristics of traditional systems (which are used in the sciences, particularly environmental science), including subsystems and elements of systems. This is a significant part of the justification for using his work in Chapter 5, as it links social systems, with natural (ecological) systems.

Checkland (1983) made the important contribution of moving away from purely rigid scientific systems, to 'soft systems', which adopt an interpretive approach to systems theory, focusing not on trying to balance the systems, but more on understanding very complex, social systems. This 'soft systems' approach played a key role in organisational theory, and looked at the dynamics of organisational processes and power and conflict (Checkland 1994, Jackson & Mingers 1997).

Although the purpose of this study is to contribute towards improved CSR, and that means change, the aim of CSR is concerned with the sociology of regulation that means understanding the status quo: what are businesses doing and what are the impacts thereof? This is the functionalist paradigm. Jackson (2000: 15) notes that such an approach strives to find "regularities in relationships between the subsystems and the whole" and facilitates the construction of a model of the system and leads to understanding of the system, and "facilitates predication and control of the system". This would be the ideal, that is, if a CSR model could facilitate control of the system, and thus the impacts that businesses have on society and the environment could be controlled. This 'predication' and 'control' is beyond the scope of this work, but it does substantiate the approach (systems theory) and paradigm selected (functionalist).

Included in this thesis will be a component of model building. Boland and Gordon (1992: 163) note that: "It is easier to build models that assume personal utility maximisation, than to build models that have a concern for the social consequences of their action". This is precisely the challenge that this study faces, as model building, particularly as applied to CSR that considers and attempts to report on the impacts of business activity upon society and the environment, will be easy to criticise, and hard

to defend (because it is not based upon empirical findings). However, the paradigm and theory of this study does concern itself with such impacts and thus such a model building exercise will be attempted.

The basis of 'structural functionalism' developed by Radcliff-Brown (1952) was that society performed recurrent activities in order to survive. Parsons (1959) extended this idea by building an overall model of society, an 'equilibrium-function' model concentrating on the functional prerequisites for society to survive, that is to maintain its equilibrium. That is not to discount the significance of change or, in the case of CSR, to discount the significance of the impacts of business on changing the environment or society. However, as noted in Chapter 5, 6 and 7 such change may, at present, be impossible to measure. The writer therefore argues that the focus in CSR should be to measure what businesses have done. When a comprehensive CSR model is considered in Chapter 5, such change is not ignored. However, if the choice in CSR is between focusing on change, and reporting on what has happened, using the basis of measurability and usefulness as a guideline, it is suggested that a functionalist paradigm would be most relevant to the users of CSR.

Thus, if one ignores interpretive (systems approach), emancitipatory (systems approach), post-modern (systems approach) and critical (systems thinking) as being outside of the functionalist paradigms, there are still, however, still within the selected paradigm a variety of approaches which can be applied on an organisational level. However, CSR does not represent internal or managerial reporting, but external reporting to stakeholders who are concerned with the external impacts of businesses.

Criticisms of the structuralist or functionalist approaches are largely based on viewing these systems theories from different paradigms (Jackson 1990). Specific criticisms as applied to this study are considered in Chapter 6 in response to reviewer's criticisms of the study.

2.5.5. Normative and conditional normative paradigms

The first question any study has to answer is on what paradigm is it to be based? Kuhnian (Kuhn 1962) logic suggests that at any time a certain paradigm will prevail. However, when certain inexplicable flaws are noted in this, it is then replaced by a

new paradigm. Stegmuller's (1979) structuralist approach was to identify certain core features of theory, which were rigorously established, as well as a set of intended applications. Mattessich (1995) identifies Bunge's (1974) critical scientific realism as another key view to link science and accounting, which suggests that certain paradigms may come back into favour, and that paradigms need not be contradictory but may be merged.

Mattessich identifies the paper by Ball and Brown in the Journal of Accounting Research (1968) as "the beginning of the empirical revolution" (Mattessich 1996: 158) in accounting, which "became linked with this positive accounting theory" (PAT) associated with North American Universities in the subsequent decades. PAT has been linked to the work of its original proponents, Watts and Zimmerman (1978, 1979). This approach has been criticised by many authors (Tinker et al. 1982, Mattessich 1984, Whittington 1987, Whitley 1988, Hines 1988, Boland & Gordon 1992, Chambers 1993). Major criticisms of PAT include:

- It does include value judgements and motives,
- It is based on economic models which have severe limitations,
- It attempts to produce predictions which are at best, indicators, and
- It does not consider any other theory as being valid.

It is also in contrast to the British critical-interpretive approach, which takes a more liberal approach to accounting research, not relying upon empirical techniques borrowed from the sciences, but rather focusing on understanding the issues of concern (Tinker et al. 1982).

Normative accounting and critical-interpretive accounting have many sub-fields, and have a long history (e.g. Schar 1890). Included in this field are: German ethical normative theories; pragmatic normative theories; behavioural–organisational theories; British critical-interpretive school; organisational (interpretive) accounting; and the critical-radical perspective. Key features of the interpretive perspective include: seeking to explain action, and intension and to understand social order: social reality is subjectively created, through human interaction; and actions have meaning and intention. Key features of the critical perspective include the following views (Chua 1986): theory is always context bound, it is concerned with human potential

which is restricted by the environment; intention and rationality are accepted but are considered in light of possible false ideology and this critical theory seeks to liberate people from false ideological practices.

The principle of conditional normative theory (CONom) (Mattessich 1995:183) is the "merging of the PAT[12] and critical interpretive approaches, minimising their shortcomings, and harnessing their strengths. It accepts that research will be normative, with specific goals, and pre-established norms, but strives to maintain the rigour a discipline of empirical research with its procedures and testing of hypothesis". The critical–interpretive model suggests that no accounting is value free (Mattessich 1995). The CONom model does not presuppose that there can be any absolute values and objectives, but that these need to be considered, and clearly and explicitly identified in any research. It is concerned with recommendations (prescriptions) based on revealed (as opposed to hidden) norms. It is based on 'the ends determines the means' philosophy.

Mattessich (1995) links four elements in the process: positive conceptual relations (i.e. positive theory); norms (accepted/ alterative objectives); instrumental hypothesis (means and end relations i.e. how can one achieve what one is trying to do); and pragmatic conceptual representation (e.g. in annual financial statements (AFS) or specifically in CSR).

2.6. Summary and Conclusion

This chapter reviewed the four major categories of research paradigms, and noted that a functionalist and structuralist approach was most suitable for the purpose of CSR (which is concerned with regulation), and any underlying reporting model. This thesis is not focused on how such change can become effective, but rather on how CSR as a social mechanism could become more effective (that is, be improved), and could possibly be used as an instrument for social change.

It outlined ethical principles and identified the Kantian principles as being relevant to this study, namely that people (this includes the juristic person of a company) can be

[12] Positivist accounting theory.

held responsible for those (people, activities and impacts) that they control (des Jardin 1993) and that other people should be treated with respect, with the right of equality and freedom. Thus, all people (including future generations) have equal rights, and have equal rights to the environment (in a pristine condition). It also considered the significant theories which explain CSR and noted that the Ethical stakeholder theory, was congruent with the stated aim of the study, namely to contribute towards improving CSR, from a stakeholder perspective.

Thus, in summary, in this thesis:

1. Positive theory will underlie the research, which will be using means and modes to represent expectations, perceptions, correlations to determine relations, and other statistics to indicate reliability. This will be applied to stakeholders and to business representatives.
2. The norms (assumed) will include the following beliefs:
    - Business is necessary, and
    - The environment is critical to maintain life, and must be preserved as a functioning system.
3. This thesis will assume that people (including future generations) have rights to health, safety, protection, freedom and choice.
4. By identifying key stakeholders' expectations of CSR in this study (assuming they have a right to this form of accountability), and that CSR in this form is theoretically possible, and reasonable to implement, then this thesis will attempt to develop CSR models to address these expectations.
5. The output should be a comprehensive, useful, and a practical CSR model / system that can be implemented.

In the following chapter, the context of CSR is reviewed, and the impacts of businesses on the physical and social environments critically evaluated. The emergence and development of CSR, as well as specific forms, protocols and guidelines of CSR that have been established are discussed.

CHAPTER THREE
THE DEVELOPMENT AND CONTEXT OF CSR

3.1. Introduction

This chapter examines the impacts of business on the various stakeholders and the physical and biotic environments. CSR emerged as a response of business to increased public pressure concerning these impacts. This chapter details this emergence of CSR into prominence. The various influences on the development and process of CSR, including the emergence of the principles of sustainable development are reviewed. Finally, the various specific forms of CSR that have emerged as principles, charters, guidelines and standards are examined.

3.2. The impacts of business on stakeholders

3.2.1. Stakeholder groups

Hopkins (1999) states that practice has shown that there are at least seven stakeholders groups that business is involved with, namely:

- Owners and investors,
- Management,
- Employees,
- Customers,
- The natural environment,
- The community, and
- Contractors and suppliers.

In the following sections, the impacts of business on these groups, is briefly considered. The nature of these impacts is important, in that where these impacts are considered to be material or significant to the relevant stakeholders, then such an impact should be disclosed by relevant CSR.

3.2.2. Environment (biotic and abiotic)

Concerns over the environment can be traced back to early civilisation, including the work of Plato (in Critias cited by Hopkins 1999). The increase in the seriousness of impacts of mankind's activities on the environment began to become apparent in Europe during the time of the industrial revolution (McCormick 1989). Luthans,

Hodgetts and Thompson (1984) noted that by the 1970s, the change and the rapid deterioration in the environment both worried and angered the public: this was also the time that CSR started to emerge as a business response to these concerns. The extent of the varied and specific impacts of business and industry on the environment are beyond the scope of this thesis to describe. What is significant to this study is to note that the affected plants and animals have no rights in human society, and thus these stakeholders are represented by concerned persons, both individually (as activists) and collectively as concern, interest and or pressure groups.

Stakeholders are not only concerned with the well-being of these creatures and plants, as living creations, but are also concerned with the impact that this destruction has on the well-being of humans (Ehlrich 1986). Other stakeholders are concerned with the impact that the destruction of the environment will have on the economy of the world. As early as the 18th century, concern was raised by Malthus who believed that land use and agricultural production could not keep pace with human population growth. Hopkins (1999) argues that Adam Smith countered the Malthus position by suggesting that the markets would respond to the scarcity of natural resources. However these scarcities have not become apparent until recently (Goodland & Daly 1992); these include an intact ozone layer, clean air, clean water and bio-diversity. These goods are (presently) untraded and hence unpriced and therefore the market does not consider them. Regardless of the inefficiency of the markets (Gray & Bebbington 2001), the seriousness of the impact of business on the environment is undisputed (McCormick 1989).

3.2.3. Management

In the USA, 58% of the CEOs of Fortune 1000 companies (Students for Responsible Business (SRB) 1997) believe that corporations have a responsibility to address social and environmental issues, whilst only 14% believe that companies are satisfactorily addressing these issues. Thus social and environmental issues do represent an area of concern for management of top companies. Hopkins (1999) notes that the increased attention in Business Schools and MBA programs throughout the US and the developed world indicates the priority social and environmental responsibility is achieving in management.

3.2.4. Employees

Employees are the physical representation of the company. Looking after employees should be a priority, with Hopkins (1999) suggesting the following priorities:

- Career development,
- Flexible work practices,
- Training on and off the job,
- Profit sharing and incentives, and
- Representation in management / corporate governance.

Clearly, employees are a key stakeholder group in the activities of a business, with a vested interest in their own well-being as well as that of the company. There are various activities of companies that can significantly impact on the employees. These are activities in which employees should be interested, and hence expect CSR disclosure about them.

Hopkins (1999) states that employees share the burden of changing times, such as downsizing and outsourcing (especially off shore), which is can also be to the detriment of the company (Collins & Porras 1994). Positive attention to employees and suitable training programmes not only benefit employees, with greater earnings potential, but also can increase profitability and return on equity (Palazzi & Starcher 1997). Other relevant issues include the hiring of employees who are female, disabled or from minority or disadvantaged backgrounds; and significant progress has been achieved through legislation in this regard. In the US, the turning point was the Civil Rights Act of 1964, which prohibited discrimination on the basis of race, colour, religion, or national origin (Luthans et al. 1984). In South Africa, the founding of the new constitution, and the transition to democracy in 1994, has led to the development of various progressive legislation which protects the rights of employees. This legislation includes the Employment Equity Act (1998), which prohibits discrimination on the basis of race, colour, religion or gender. Another issues of importance to employees and a major component of job satisfaction is 'quality of life' (Luthans et al. 1984). As early as 1978, authors in Psychology Today, found in a major study that pay was ranked only 12th in importance by employees, with first being able to feel good about oneself, and second being able to make a difference.

3.2.5. Customers and the physical and psychological impacts on consumers

Although the concept of the 'customer is King' is taught in business schools it has not been translated into a reality throughout the world, especially in the public services (Hopkins 1999). Harrison (1997: 26, cited by Hopkins 1999:45) notes that there are several ways consumers can respond to inappropriate corporate activities, these include:

- Consumer boycotts,
- Direct action,
- Shareholder action,
- Letter writing (to editors),
- Setting up ethical competitions,
- Labelling,
- Specialist campaigns,
- Specialist consumer guides,
- Ethical screening (e.g. by investment funds), and
- Anti-consumerist agitation.

The author of this thesis suggests that corporations should be taking pre-emptive measures such as product labelling, establishing codes of ethics, and social audits to address these issues.

In the US, the movement towards consumer protection was started by the Food and Drug Act of 1906 (Luthan et al. 1984), which began the emphasis on quality and product labelling. In South Africa, similar protection exists, with legislation enacted to ensure product labelling and requiring registration and approval of products that could impact on consumer health, particularly in the food, beverage and pharmaceuticals sectors.

3.2.6. Indirect effect on public and their health (community & government)

Business relates to the community in a variety of ways (Hopkins 1999)by means of:

- Charity,
- Social investment and support of local educational and social initiatives,
- Partnerships with local organisations such as providing human or physical resources, and

- Providing, in a responsible and ethical manner goods and services that society really needs.

Hopkins (1999) suggests that businesses should focus on local communities from whom they source their human capital, taking costs and benefits into consideration, since these industries indirectly support these local communities by providing employment and economic growth.

3.2.7. Shareholders (the owners and investors)

Shareholders, the ultimate owners of corporations, have long been provided for in the external reporting by businesses. For example, in South Africa the Companies Act of 1973 (as amended) requires companies to produce annual reports, including the Annual Financial Statements, with disclosure deemed necessary and useful for shareholders and potential investors in such companies. However shareholders are increasingly expecting greater of non-financial disclosure, specifically on social and environmental issues (Gray & Bebbington 2001). Hopkins (1999) notes that the increase in socially responsible investment funds had increased to over one trillion $ in the US by 1997, and $2.4 billion in the UK, indicating an increase in the social and environmental expectations of investors.

3.2.8. Contractors and suppliers

Businesses that create a demand for specific inputs and or raw materials can influence their suppliers. Large corporations such as Proctor and Gamble and General Motors, have undertaken active programmes to 'green up' their supply chains. Other corporations famous for their programmes include Nike, The Body Shop, Levi-Straus, and Grand Met (Cannon 1994). Such businesses would look to their suppliers for evidence of compliance with environmental and social responsibility norms, evidenced by certification, such as the ISO14001, and or CSR disclosure.

However, Hopkins (1999) notes that world trade would come to a standstill if the same standards for human and labour rights, and environmental protection, where to be applied in developing regions such as China, South East Asia, Africa, and South America.

3.2.9. Corporate strategy

The goal of management is to manage all externalities and internalities to facilitate the achievement of the corporation's objective i.e. to maximise the profit. These externalities include social and environmental impacts, to the extent that they do, or could, potentially impact on the businesses' profitability, by for example affecting public opinion of that business.

It is necessary to briefly consider the corporate strategies, which emerged largely in the 1970s at the same time that CSR did, to achieve similar but different goals. It has already been argued that in terms of legitimacy theory, which has been shown to explain the nature and extent of CSR disclosure (Griffith 2002), CSR aims to provide support for corporate activities, by legitimising what they have done. Beder (1997) argues that from the early 1970s many large multinationals, independently and in collaboration, have undertaken specific strategies to legitimise their activities to the public and various ruling governments. These strategies include:

- Establishing lobby groups including Alliance for Reasonable Regulation, Alliance to keep Americans Working, Wise up Movement, the Institute for Educational Affairs, Chamber of Commerce, National Association of Manufacturers, and the Business Roundtable,
- Establishing industry front groups e.g. Information Council on the Environment Coalition for Sensible Regulation, Alliance for Sensible Environmental Reform, Consumer Alert, Coalition for Vehicle Choice. These organisations typically use phone-calls, letters and postcards to lobby politicians to promote the aims of business,
- Using front groups such as the Wise Up Group to lobby for relaxation of property rights, including the use of public land, and reduced restrictions on the use of private land,
- Using law-suits against protesters in their private capacity, thus attempting to silence their critics,
- Establishing conservative think-tanks to address economic and social issues,
- Use of public relations to promote their aims,
- Creating scientific controversy e.g. Dioxins (Beder 1997), to delay or defer legislation and other civil action that could harm business,

- Targeting young children through television and schools, promoting business products as well as the image of business,
- Working with the media, producing press statements to promote the positive impacts of business activities, and
- Reporting on the environment, using CSR to present the positive impacts of what they have been doing, and either covering up or omitting the negative impacts.

It is important in the context of this thesis to bear in mind that CSR represents to business a potential corporate strategy to legitimise business activities, and not necessarily a form of accountability to the stakeholders. In South Africa Griffith (2002) looked at CSR as a legitimisation strategy. The present author however adopts the approach of trying to determine what could be changed to improve CSR, as a form of accountability. This could involve measures adopted to prevent CSR being used as a legitimisation strategy.

3.3. The emergence of CSR and environmental accounting

By the early 20th century, accountants began to question the purpose of business (and the role of accounting therein), suggesting that it should not be solely about maximising profits (Mattessich 1995). The devastation of the great depression of the 1930s and subsequent World War II, gave rise to an opportunity for industry to rebuild itself, which ultimately led to an economic boom in the 1950s and 1960s (Ellwood 2001). This period of massive growth and development had a major negative impact on the environment, which, together with several environmental disasters, played a key role in raising public awareness (McCormick 1989). It was against this backdrop, and as a response to these growing environmental concerns, that environmental accounting first emerged in the 1960s and 1970s.

Environmental accounting can be defined as all aspects of accounting that relate to environmental issues and the company's response thereto (Gray & Bebbington 2001). It incorporates traditional techniques, in the accounting for environmental issues in: contingent liabilities, capital budgeting decisions, cost analysis, and cost benefit analysis.

Environmental accounting includes the development of new accounting techniques to account for the environment, such as converting ecological expenses, assets and liabilities into financial terms. These developments have impacted on accountants working in a variety of roles (Gray & Bebbington 2001) such as; financial accountants, management accountants, systems accountants, project accountants, and auditors (both internal and external).

Environmental accounting and reporting is thus a relatively new concept in the field of accounting, which has, as a discipline, remained largely unchanged for several centuries. The AAA published the first significant report on environmental accounting, in 1973. The impact of this report was far-reaching in that it suggested that companies should report on:

- Identifiable environmental problems,
- Specified abatement goals,
- Progress towards meeting such abatement goals, and
- Disclosure of all material effects on current and future financial performance (Income Statement) and position (Balance Sheet).

The AAA report (1973) also suggested that the above-mentioned environmental data should be independently verified. These recommendations which were "mild persuasion at best" (Mathews 1997:489) were not, however, translated into standards (for compliance) for almost another 20 years. However, this report was not the first work in this field, and was preceded by contributions by Mobley (1970), Beams and Fertig (1971), Churchman (1971), and Linowes (1972).

Since the initial AAA report (1973) and up until the 1990s, environmental accounting has remained largely a sub-field of social accounting. Social accounting was defined by Ramanathan (1976 cited in Dewar 1994: 49) as being "the process of selecting firm-level social performance variables, measures and measurement procedures; systematically developing information useful for evaluating the firm's social performance; and communicating such information to concerned social groups, both within and outside the firm." Among the objectives of social accounting as defined by Ramanathan (1976 cited in Dewar 1994: 75) was the one "to identify and measure the

periodic net social contribution of an individual firm", which implies that such social cost should be quantified in monetary terms. The Accounting Framework[13] AC000 (South African Institute of Chartered Accountants (SAICA) 1996) upon which all other accounting standards in South Africa are based, clearly identifies the public and interest groups as users of financial statements.

Traditional accounting ignores the natural capital or common property, and hence it ignores sacrifices of 'capital' outside the entity, hence ignoring such costs (and overstating its profits) and any associated potential liabilities (Dewar 1994). The role of environmental management accounting is seen as assisting with the calculation of flows of energy and materials, emissions and wastes (Schaltegger, Meuller & Hindrichsen 1996). It is contended that theoretically, accounting for changes in the environment should not be dissimilar to traditional accounting, i.e. should reflect these changes as costs, income and changes in assets and liabilities. Only if these changes are material, should they be accounted for separately. One problem in environmental accounting is that most of these changes are isolated and individually appear to be immaterial, however their cumulative effect is significant (Gray & Bebbington 2001).

Accounting has a critical role to play in reporting full costs to management and shareholders. Industry, specifically MNEs are rapidly using the limited natural resources of the planet, destroying habitats, polluting the air, water and earth, and disrupting communities (Ellwood 2001). These organisations show a profit (as determined by accounting), signalling to management that the organisation is doing well, and since the sole purpose of management is to maximise the shareholders' wealth (Ross et al. 1996), which is often reflected in short-term profitability. False signals are generated by the accountants who are supplying management with this limited information which is flawed in that it is incomplete since it ignores true (full) costs. Hence accountants are responsible for misleading management (or rather providing evidence to support management's decisions). For example, Maunders and Burritt (1991) examined land degradation in Australia and inferred that traditional accounting and reporting resulted in misinformation and subsequently misguided

[13] An equivalent international framework exists (International Accounting Standards (IAS)) and a similar framework applies in the US FASB.

business decisions. This supports the notion that there is a link between accounting, business and environmental degradation (Gray & Bebbington 1993).

One of the major concerns driving the various initiatives on environmental reporting is the need for more information. Randall (1987) noted that the free market system works only if information is freely available. The market mechanism cannot respond to scarcity of natural resources unless this scarcity becomes known. Most developed nations work with mixed economies where government intervention is expected when the market mechanism fails (Randall 1987). However, this again requires that information be available to the respective governments to respond to. It is questioned whether many powerful Western governments, who are supported in the form of campaign funding by industry, are likely to pressurize their sponsors into releasing such information. In the case of the wholesale lack of such environmental information, neither a truly pure nor mixed market economy can work. Furthermore, the public are being denied the information that they would require to respond appropriately. The perpetrators of the environmental destruction (namely industry) retain this key information and are not currently required to disclose it[14]. In this context, and considering the influence industry has over governments, it is questioned whether this information will ever be made freely available. Puxty (1986) suggests that the voluntary disclosure of selected environmental data would not necessarily result in increased legislation, or increased disclosure. It is also questioned whether or not governments will respond, until such time as environmental degradation becomes so extreme, impacting so significantly on an overwhelming proportion of people that it would force governments to act. However, at that stage it would most likely be too late, as the carrying capacity of the earth would have been exceeded or reached irreversible proportions.

The 1996 KPMG[15] International Survey on Environmental Reporting found that less than 20% of large international companies reported environmental costs. However, on a national scale (considering the top 100 companies), the results differed per country, from a modest 39% in New Zealand to 95% in Norway, of companies which referred

[14] Disclosure requirements vary across the world, however, there are currently no enforceable CSR standards in South Africa.
[15] KPMG is one of the 'big four' (formerly 'big five' before the demise of Aurther Anderson), international firms of accountants and auditors.

to environmental issues in their annual reports. It is argued that the majority of companies, particularly the smaller and medium ones will not voluntarily report such information (Bebbington, Gray, Thompson & Walters 1994). Gray and Bebbington (2001) contend that environmental reporting in annual reports will remain the domain of the larger companies, being standard in the top 100, but scarce below the top 300. It is questioned whether bodies setting international standards are perhaps unwilling to set and enforce meaningful and comprehensive standards because industry is so strongly represented in such bodies, and any comprehensive standards, would be against the wishes of industry. Without such information, the public is unaware of the consequences of the activities of companies, and without such public knowledge the market mechanism (Randall 1987) (such as using product boycotts and selective buying to influence such companies to improve their performance and change their production techniques) cannot operate.

Research in the UK has shown that increasing numbers of accountants in the larger ('big 5') firms are becoming increasingly aware of environmental issues (Collison 1996, Collison & Gray 1997). Thus, accountants working in the auditing field (the attest function), are becoming concerned with potential or contingent liabilities; and procedures to test for such liabilities are now commonly built into most auditing procedures. Many auditing firms, including those in South Africa, are becoming involved in environmental reporting, thus, extending the range of their traditional services. This correlates with the fact that environmental reporting is now considered to be part of normal business activities (Gray & Bebbington 2001), whether as part of the statutory reports or as stand-alone reports.

3.4. Influences on CSR development

3.4.1. The law and accountants' roles in influencing CSR development

The view of some sociologists, 'deep' ecologists and more liberal groups, is that although there may be some benefits to CSR, it may do more harm than good in that it may give the appearance of concern and change, and hence slow any real change (Cooper 1992, Power 1994 as cited in Gray et al. 1996). It is suggested that ecologists would view current business, accounting and economic thinking as certain to create an environmental crisis (Gray 1992a) and that economic values need to be attributed to nature, and then need to be integrated into economic decision-making (Milne

1991). However, others (Hines 1991, Maunders & Burritt 1991) suggest that 'juridification', i.e. using the mechanism, which caused the problem, may well make it worse. Such a viewpoint suggests that new ways need to be devised for accounting for social, environmental and political issues, other than using traditional accounting approaches. Within the context of the corporate response, it is suggested that the extensive training of professional accountants (Gray et al. 1996) would equip them with the necessary skills to report to a wider range of stakeholders. CSR requires the design and management of information systems, the collation and verification of data and the reporting of this information externally, which is exactly the function that accountants perform with respect to financial information. Developing and administering such CSR would have significant financial consequences. In the 1990s, many accountants and accounting firms identified and became involved in business opportunities associated with environmental accounting and auditing. However, there are potential problems with such involvement. Since accountants are trained to follow rules, they will encounter difficulties due to the lack of standards and guidance in this area. It is also suggested (Bebbington et al. 1994) that accountants are not very innovative due to their rigid training and education, and are unlikely to take on new initiatives, and have limited freedom in terms of their job descriptions. There is also concern (Gray & Perks 1982) that involvement in a field such as CSR might be detrimental to their reputation, as many business leaders view environmental issues in a negative light. Despite this, Gray et al. (1996) argue that accountants should be involved as CSR is a matter of public interest, which accountants stand to uphold, and it seeks to overcome deficiencies of traditional accounting systems, thus accountants would be contributing towards positive change.

Accounting operates under the juristiction of the law (South African Companies Act of 1973 as amended, Financial Reporting Bill 2005). The state through legislation, specifies allowable treatment and potential impacts that businesses may have on environment through the National Environmental Management Act (NEMA) (1998) in SA, and also specify what disclosure is necessary, that is it also provides for accountability[16]. Gray et al. (1996) suggest that the significant emphasis in the law on primarily financial disclosure indicates that the state places the needs and wants of the

[16] In South Africa, disclosure by law is limited to specific outputs and impacts, often limited to specific industries, and not necessarily on public record.

financial participants above those of other participants, and that the law reflects the preferences of the more powerful elements of societies rather than protecting the weak and the disadvantaged. From a Marxian point of view, this indicates that the state has been 'captured' by capital and strives to protect the interests of capital. It is suggested that even though social and environmental problems are clearly problems in the eyes of society, the reasons the state does not act could be that it will only act if it has the backing of capital, or it is apparent that one element of society is abusing the system to the detriment of other companies. In view of the above arguments, Gray et al. (1996) state that they find it hard to support a notion that the state is a force for democracy and accountability.

Companies must make strategic choices on selecting stakeholders (normally which can influence its profitability), and then manage them, including CSR (Gray et al. 1996). Companies are likely to compile disclosures at a minimum level. Because they run on a profit basis, they will undertake additional disclosure only if it will enhance their corporate goals, unless the law forces them to do so, which as has been suggested above is unlikely to occur.

3.4.2. Business and other influences on the development of CSR

The green agenda, emerged in business, specifically in economics, after World War II (Barrow 1999), but only became popular in the 1970s which is the same time as CSR emerged. During this period there was a prolifieration of papers on environmental economics (Meadows, Rondes & Behrens 1972, Schumacher 1973, Krutilla & Fischer 1975, Hanson 1977, Kneese 1977), and thus expanded after the mid-1980s (Low & Lewis 1980), becoming mainstream economics in the 1990s, with notable work by Pearce, Markandya and Barbier (1990), and Turner et al (1994), as referred to later in this chapter. A large component of environmental economics has become the preparation of environmental accounts for specific regions. Various forms of environmental taxes have emerged in the EU and USA, as have trading in carbon credits and in the USA, sulphur credits. Barrow (1999) notes that international aid and debt relief have been linked to environmental criteria. However, he also notes that the free trade agenda of the WTO may do more harm than good to the environment, by increasing competition, and hence encouraging more pressure being placed on 'cheap' natural resources.

Gray et al. (1996) cite the most important influences on CSR as being:

- Growth of international capitalism,
- International government e.g. UN,
- Growth of international business e.g. International Chamber of Commerce (ICC),
- Growth in international capital markets, and
- International non-governmental organisations (NGOs) e.g. Amnesty International, Friends of the Earth, Green peace and Oxfam.

They cite two major influences as being greater international co-operation, and the willingness to try to address social and environmental issues. While certain international government organisations have been vital in promoting CSR such as the UN, others, such as the World Bank, GATT and the IMF, have promoted free trade at the expense of accountability.

Key activities of the UN include the influence of the Brundland Report (WCED 1987) and the World Summits, specifically the 1992 Rio Summit, and the United Nations Environmental Protection Organisation (UNEP). The UN also established a United Nations Centre on Transnational Corporations (UNCTC)[17], which played a key role in establishing guidelines for corporations on environmental practice and reporting, with a key report being the UNEP's Technical Report No 24, Company Environmental Reporting (UNEP 1994). Unfortunately, since 1997 the UNCTC has been incorporated into another UN body, and has lost its high profile visibility.

Included in the above report four stages to sustainability were identified as being necessary, which were:

- Reactive stage (defending activities),
- Transitional stage (adopting guidelines, dialogue, data collection),
- Proactive stage (pressurizing their own industry, benchmarking), and
- Final stage, with the achievement of sustainability.

[17] This unit has been incorporated into another UN unit, and much of its work has been discontinued.

The authors of the report (UNEP 1994) suggest companies would go through five stages in reporting:

1. Newsletters and glossies,
2. Once off reports,
3. Annual reporting linked to EMS system,
4. Full triple bottom line reporting, in annual report, and
5. True sustainability reporting.

The UNEP (1994) surveyed 100 pioneer companies, (that is early adopters of CSR), and found these companies reported mostly up to level 3, with only 5% reporting on their triple bottom line and none presenting true sustainability reports.

Table 3.1: UNEP findings of their 1994 study on the stages of reporting of pioneer companies

Stage of reporting	**Percentage of surveyed companies at a minimum of that stage**
1& 2	39%
3	36%
4	5%
5	0%

Gray et al. (1996: 133) state the power of MNE in influencing government, which feed into the international government organisations has prevented the development of "real international accountability", and this explains the above findings, that is no companies report on their true sustainability. The growth in the power of business has reduced the ability of governments to attempt to control them, which has reduced the need for businesses to legitimate their activities and hence the need for CSR. There is evidence (Roberts 1990) to suggest that companies in developed countries, including Europe, Australasia and South Africa are most likely to report on employment policies, health and safety, employment data, and value added statement (VAS).

The following diagram represents a conceptual framework of the forces driving and affecting international environmental accounting and reporting standards (adapted from Mitchell and Quinn (2005)):

Figure 3.1: Conceptual framework of the driving forces of environmental reporting

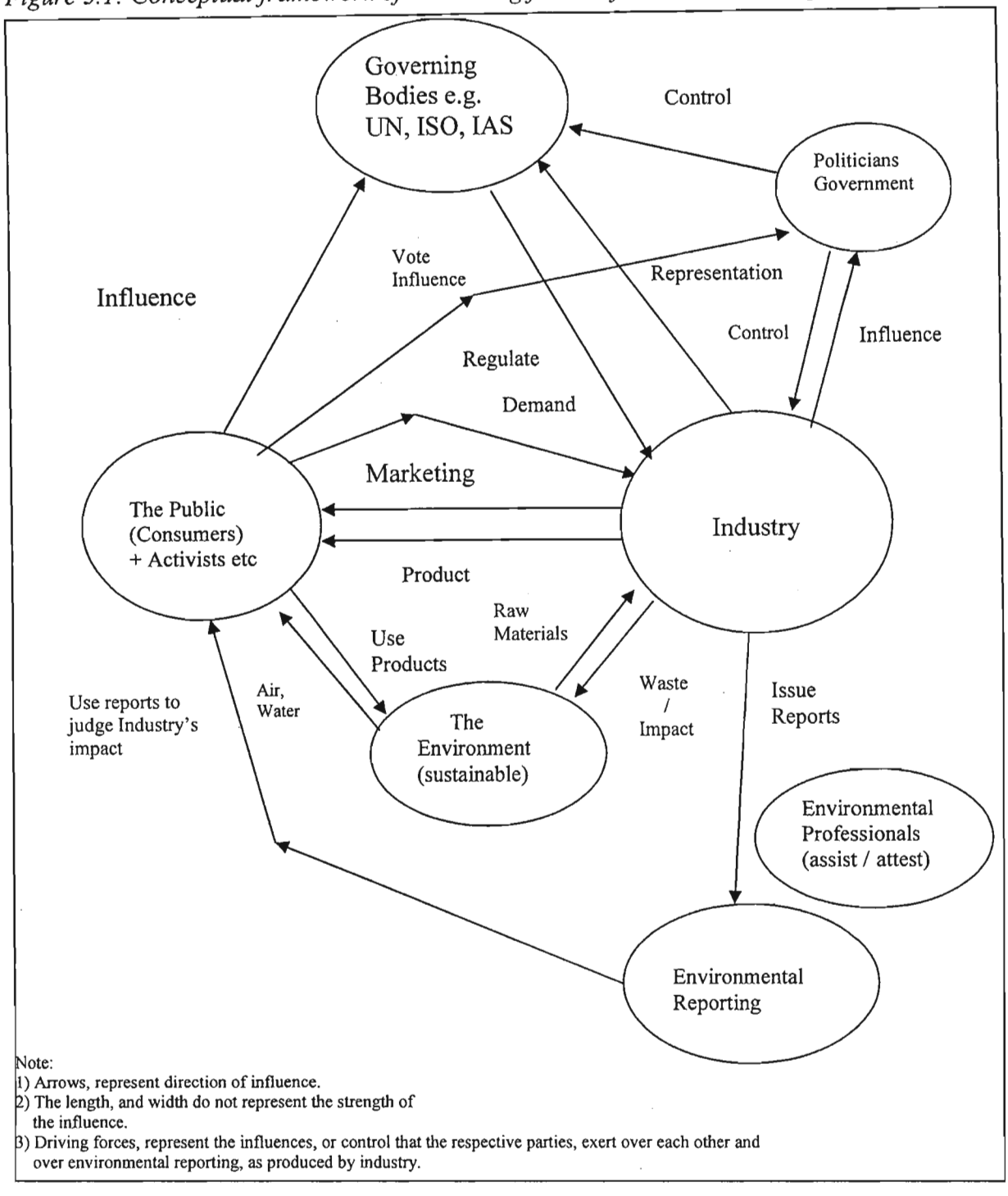


Figure 3.1 encapsulates various principles and issues identified earlier in this dissertation, namely:

- Existing international environmental accounting and reporting standards. have been developed by various international governing bodies such as the UN, ISO, IAS, GRI, and the ICC.

- These bodies have representation from governments, business and other influential parties or experts.
- Politicians who, in democratic countries, are elected by means of campaigns, which are often funded by businesses, run governments. Thus these bodies can be significantly influenced by business, and hence the standards themselves often represent largely what business leaders think should be reported on, and what they are prepared to disclose.
- The public has significant power to influence the bodies, which set international standards. This is done through the governments that represent the public, and directly through elected representatives.
- However, the public itself is influenced by the marketing campaigns of business and the commercial bias of the media.
- Environmental reporting can influence the public. However due to the existing limited nature of this reporting it tends to present an 'all is well' signal.
- The public is also part of the problem. Since it buys into the marketing campaigns of business, purchases the products and services, the production and consumption of which, ultimately impacts on the environment.
- A stronger, enforceable and externally verified reporting standard could make the public more aware of the impacts of industry on the environment. This could lead to the public both, directly through campaigns and indirectly through governments, being more strict on the regulation and monitoring of these industries.
- A more aware public could also influence industry into adopting more sustainable production techniques and materials, and could utilise their purchasing power by shifting its product demand.

3.4.3. Sustainability

Corporate Social Reporting is often also referred to as sustainability reporting, and hence it is necessary to briefly review what is meant by the term 'sustainability'. Central to the notion of the environment and business is the concept of sustainability and sustainable development. Sustainable development is defined as:

> "Meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987:8).

Pezzey (1989) raised the following questions regarding the meaning of sustainability:

- What does the term mean?
- What is ideologically and politically acceptable?
- How can it be practically applied?

Other concerns regarding the concept have been raised by other authors (Rubenstein 1989, Gray & Bebbington 2001).

The following table is adapted from Rubenstein's work (1989), and is known as the three 'Es' of sustainability.

Table 3.2: The 3 'Es' of Sustainable Development

Economically sustainable	• Costs competitive • Demand sustainable • Profits sustainable
Equity of demand and distribution	• Equitable distribution of wealth • Equitable distribution of product
Ecologically sustainable	• Natural capital sustainable • Stress load sustainable • Web of life sustainable

Source: Rubenstein (1989: 39) *Environmental Accounting for the Sustainable Corporation, Strategies and Techniques*

Conceptually, sustainability consists of three core principles, namely:

- Eco-justice: "the equality between people and generations",
- Eco-efficiency: "reducing inputs of material and energy per output", and
- Eco-effectiveness: "reducing mankind's overall environmental impact (footprint)" (Gray & Bebbington 2001: 296).

Gray and Bebbington (2001) argue that all three of these principles need to be adhered to in order to achieve sustainability. However, of the three ecological goals the only one that might be considered practically achievable by industry is eco-efficiency. This

would be achieved through the reduction of inputs, waste and energy usage per unit of production, technological development and improvements in production processes.

Although the WCED (1987) definition of sustainability is widely accepted, there is much confusion about what it means and what the realities are that are embodied in true sustainability. This has given rise to widely differing uses of the term, in a variety of contexts, which are sometimes not only misleading, but incorrect. This misuse, although not necessarily all deceitful, has been used in a variety of business and development ventures to gain acceptance from the public for various business initiatives and developments (Gray & Bebbington 2001).

The question of what needs (present or future) are to be met, and how these needs are to be met, requires further investigation. To maintain western lifestyles and standards, requires continuous economic growth to support development, to meet consumption needs, and generate capital for future growth (Randall 1987). However, there is no evidence to suggest that any reduction in consumption or degradation will occur in the future, and it is likely that only economic growth will be pursued. It is argued by Gray and Bebbington (2001), that it is this Western growth ideology that has caused the current environmental crisis, and hence the premise of growth and development is contradictory to the concept of sustainability. The implication of this assumption is that in order to achieve sustainability, present western lifestyles (replicated throughout the world) need to fundamentally change (Ellwood 2001). It is suggested that such an idea would be untenable to most people from developed nations and completely contrary to most business interests. Rubenstein (1989) notes that for an individual, most forms of transport are unsustainable, as are appliances and utensils, (since these all use limited resources, even with partial recycling being possible). Energy consumption for heating, lighting or entertainment, is largely from unsustainable sources. Food, as currently grown, with Genetic Modification (GM), herbicides and pesticides cannot be sustainable in the long term. Thus, the core components of the lifestyles of developed countries are unsustainable (Rubenstein 1989).

There are three pioneers in this field from an economic perspective, namely Daly, Pearce and Turner. They have extended the rather vague concept of sustainable development into a more precise one. The definition by Pearce et al. (1990) is that

"sustainable development means maintaining constancy of natural capital 'stock'. More strictly, this equates to the requirement for non-negative changes in the stock of natural resources such as soil and soil quality, ground and surface waters together with their quality, land biomass, water biomass, and the waste assimilation capacity of the receiving environment." (Pearce et al 1990: 48)

Turner (1988) puts the capital available to humankind into three categories:

- Critical Natural Capital: which represents those parts of the biosphere, that are essential to support life, i.e. life would fail without such.
- Other Natural Capital: this includes other elements of the biosphere that are renewable, sustainable or for which substitutes can easily be found.
- Artificial Capital: this represents products produced by man from elements of the biosphere, that are non-naturally occurring e.g. machinery and equipment.

The premise of Turner's (1988) work is that the production of artificial capital implies a reduction in natural capital unless it stems from a sustainable source. Reductions in critical natural capital theoretically cannot be allowed to occur (Pearce et al. 1990) although they do, and reductions in other natural capital should be replaced, renewed or substituted for. The problem is to identify which are the critical natural assets and what are their thresholds (Hamilton 1997). This has led to the concept of safe minimum standards (SMS), i.e. the use of resources beyond which irreversible damage will be done (Farmer & Randall 1998).

Gray and Bebbington (2001) argue that the problem with the current economic and financial systems of the world is that they only report on artificial capital, for example the gross domestic product (GDP) that shows success and growth, and hides reduction and loss of the natural capital. Clearly, the measures of income (increases in artificial capital) have been incorrectly reported, since they do not take into account the reduction in natural capital. It is proposed that in almost any foreseeable situation in most business sectors, it would be theoretically impossible to generate an income, since the reduction in natural capital would almost always exceed the increases in artificial capital (Gray & Bebbington 2001). The only exceptions might be in industries based on natural resources for example forestry, agriculture and perhaps

fishing. Only where natural capital is self-renewing (or can be easily regenerated) would a true profit be possible. The implications of this idea are enormous, as it implies that only if industrial manufacturing were to cease and people were to resort to a pastoral existence (with an associated lifestyle) would true sustainability be achievable (Gray & Bebbington 2001).

This concept is likely to be rejected by most people of developed countries who enjoy comfortable lifestyles with electricity, cars and appliances. However, since the world's resources (which are not being renewed), are diminishing, the implications are that in a world with an ever-increasing human population (Ellwood 2001), the following would occur:

- Natural resources will decrease at ever-increasing rates,
- Possibly fewer people will be able to enjoy the same levels of 'developed' nation lifestyles as in the past, and
- The resources left for the poor and developing countries will diminish rapidly, increasing the poverty of their people.

Three main methods have been developed experimentally, which factor in account the implications of sustainability, and are based on the principles of natural capital (Bebbington & Tan 1996). These are:

- The inventory approach: This focuses on the recording and monitoring of all forms of natural capital impacted upon by a company. The company will then report all changes therein i.e. depletion or enhancement. The limitation of this approach is that quantities need to be classified by non-financial standards.
- The sustainable cost approach: To be truly sustainable an organisation must leave the environment no worse off at the end of a period than at the beginning. Thus, this approach attempts to estimate the costs of restoring the environment to its former condition at the end of each period. The implications of this however, are that in the case of the depletion of even the smallest amount of critical natural capital, the costs are theoretically infinite.

- The resource flow-through (otherwise known as the input-output) approach: This is also known as the Mass Balance System ('Oboblianz' system). All inputs are accounted for (normally in non-financial terms) as outputs, wastes, losses or emissions. This model has been extensively developed and described by Schaltegger et al. (1996). The problems of confidentiality and disclosure present obvious obstacles to the full-scale adoption of such a model.

Any institution operates in society through an expressed or implied social contract whereby its continued existence and success are according to Shocker & Sethi (1973) based on the delivery of some socially desirable service or product to society, and the distribution of economic, social or political benefits to groups from which it derives its power.

When considering the concept of sustainability, questions arise such as current distributions of wealth, levels of consumption in the West and population growth and the difference between production and consumption (Gray et al. 1996). It is questioned whether a sustainable way of life is possible at all, and perhaps it is reasonable and natural that human life should become extinct (Gray 1992b, Maunders & Burritt 1991). Gray and Owen (1993) suggest that something has gone wrong with the economic system that it produces pollution and waste, negatively impacting upon the quality of human life. Maunders and Burrit (1991) argue that it is cultural attitudes (including selfishness, nationalism etc.) towards the desirability of economic growth, efficiency and property rights that are the primary agents of ecological problems.

3.4.4. Influences on employee reporting

Employee related reporting was influenced in Europe by: the Treaty of Rome (1957); a single European Act (1986); the Community Charter of Fundamental Rights of Workers (1989); and the Treaty on the European Union (Maastricht Treaty 1992). These focused attention on issues such as: working conditions, health and safety, training, collective bargaining, equal pay and full employment.

European law required many of the above issues to be legally reported, in a variety of countries, and several surveys were conducted on employee reporting in Europe (Schoenfeld 1978, Brockhoff 1979, Lyall 1982, Roberts 1991, Adams et al. 1995).

Similarily, in South Africa, legislation such as the Employment Equity Act (1998), Workers' Compensation Act (1964), and various labour related acts have influenced employee reporting.

3.5. Internal businesses responses

3.5.1. Environmental management systems

EMS represent industry's initial and perhaps most effective response to date, to the emerging environmental crisis. The systems arose out of three separate needs: to minimise the potential risks from possible incidents such as spills, which could give rise to environmental liabilities in terms of standing legislation; to respond to public pressure and to improve the company's environmental profile; to provide the core system to be compliance tested and certified as the main objective of an environmental audit.

The typical steps in an EMS programme would include: an environmental review assessing the impacts; development of a company policy, translation of policy into overall objectives, followed by subsidiary targets and objectives; implementation of the system, putting controls and procedures in place to ensure compliance; measurement and reporting; and continuous improvement, response and adjustment.

3.5.2 Environmental auditing

Gray and Owen (1993: 37) suggest that the environmental audit has "become synonymous with organizational response to the green agenda". Newton and Harte (1997) contend that many businesses view a successful response to environmental issues as simply adopting appropriate new technology and an environmental management system, which normally incorporates an environmental audit. The ICC (as noted in 3.6.3 below) has played a key role in promoting the concept of the environmental audit. The ICC (1989) has stated that it perceives the environmental audit as a key management tool. The environmental audit is well developed in South Africa, with individual practitioners registered with the International Association of

Impact Assessors (IAIA). Currently legislation is being promulgated to regulate the function of impact assessors.

3.5.3. The social audit

The social audit was developed to address broader stakeholder needs (Gray et al. 1996), but has become prominent recently by a report by the Association of Certified Chartered Accountants (ACCA) and the Institute of Social and Ethical Accountability (ISEA)(Gonella, Pilling & Zadek 1998) and the Copenhagen Charter (1999) published by Ernst and Young, KPMG, Price Waterhouse Coopers[18] and the House of Mandag Morgan. The ISEA published its first standard in 1999, AA1000, a framework to judge the validity of ethical claims.

3.5.4. Life cycle analysis (LCA)

No discussion on environmental management and protection would be complete without mentioning LCA. This analysis considers all inputs and outputs, through the various stages of production from materials acquisition, manufacturing, distribution, use and reuse, to waste management. It is a useful tool to assist in identifying where the greatest environmental impacts occur, and hence where attention needs to be paid in order to minimise the greatest negative impacts. It has been a key element in corporate responsibility programmes where manufacturers have identified, for example, their suppliers as being the largest culprits with respect to environmental impacts. Hence these programmes have resulted in the purchasing power of these multinationals being used to pressurize their suppliers into adopting cleaner production technology and processes. Epstein (1996 a, b & c) used these principles including life cycle costing (LCC) in the accounting of environmental costs.

3.6. Industry initiatives

Largely as a result of continued public pressure, business and governments began responding to concerns about the environment by developing a series of international reporting guidelines and environmental management systems in the 1990s. Several of these key standards and systems are discussed briefly in the following sections. Except where specified below, these initiatives were developed independently of each

[18] Ernst and Young, Price Waterhouse Coopers, KPMG and Deloittes make up the 'big four' as noted earlier.

other, but are all responses to the pressing environmental agenda and the emergence of the concept of sustainable development.

3.6.1. The CERES principles

The CERES principles were developed in response to the Exxon Valdez accident in 1989 when 11 million tons of oil spilled into the Prince William Sound off Alaska, with a clean-up cost of $3 billion. These principles, as developed by the Social Investment Forum in the US, are used extensively by ethical fund investment organisations (Miller 1992).

The basic principles of CERES are that there should be:

- Protection of the biosphere,
- Sustainable use of natural resources,
- Reduction in and responsible disposal of waste,
- Energy conservation,
- Risk reduction,
- Safe products and services,
- Environmental restoration,
- Informing of the public,
- Management commitment, and
- Audits and reports.

As seen from the above principles, public disclosure in the form of an environmental report is included in the requirements of this standard. This standard is considered to be one of the most stringent of all environmental protocols and charters (Holcroft 1999), and has wider acceptance by corporations in the US than in the European Union (Brophy 1996). These principles have subsequently been incorporated into the Global Reporting Initiative (referred to in section 3.6.8).

3.6.2. GEMI

This non-profit organisation was founded in 1990 to address environmental management issues (GEMI 1992). Its objectives include:

- The provision of principles of business ethics for EMS,

- The improvement of environmental performance of businesses, and
- The facilitation of communication between business and interested stakeholders.

GEMI also developed an Environmental Assessment Programme (ESAP), to evaluate the implementation of EMS, which has found widespread acceptance (Holcroft 1999).

3.6.3 ICC Business Charter for Sustainable Development

The ICC is a non-governmental organisation (NGO) established to represent businesses from over 100 different countries and has established environmental guidelines since 1974. Its current charter, passed in 1991, is internationally considered to be one of the most widely supported charters. The charter is called the 'Business Charter for Sustainable Development', with over 1000 adoptees (Brophy 1996). The charter's principles have however been criticised (Gray & Bebbington 2001) as being somewhat vaguer than other protocols, such as the CERES principles. Furthermore, the principles do not make disclosure or other specific measures mandatory, and they do not have compliance or monitoring mechanisms.

In 1993, the ICC established the World Industry Council for the Environment (WICE) which developed a reporting matrix that reported on qualitative factors management, quantitative factors and products to ten specific stakeholder groups. However, Gray et al. (1996) suggest that this initiative was aimed at reducing future mandatory reporting.

3.6.4. BS 7750 and EMAS

The BS 7750 standard was developed by the British Standards Institute's Environment and Pollution Policy Committee (BS 7750 1992). This standard encourages the implementation of environmental management systems. It does not have specific standards regarding performance, nor does it require compulsory reporting.

The EMAS programme, which is based on the BS 7750, was developed by the European Union and is aimed at increasing the sustainability of industry. It became effective in 1995. Its aims are to:

- Promote continuous environmental performance improvements in industrial activities by encouraging the adoption of policies, programmes, environmental management systems and the audit of such systems, and
- Provide reports thereon to the public (Holcroft 1999).

Gray and Collision (1991) note that the audit (specifically the environmental audit), upon which the EMAS programme is based, is a poorly defined concept, and does not comply with specific standards or regulations unlike the financial audit. Furthermore, they suggest that the EMAS scheme was weakened by industrial lobbying which made the scheme voluntary and allowed companies to focus only on selected sites.

This audit process is of significant interest to CSR and has been the subject of several papers (Hilary 1993, Maltby 1995, Langford 1995). Power (1997) noted how accountants had started to adapt to the style of EMS, while others have encouraged auditors to become involved in the environmental audit process (Dittenhofer 1995, Black 1998, Tucher & Kasper 1998).

3.6.5 Public Environmental Reporting Initiative (PERI)

This initiative was set up in 1993 by nine major American businesses to guide businesses when producing environmental reports. Included in these guidelines are the following disclosure requirements:

- Company profile,
- Environmental policy,
- Environmental management system and structures,
- All environmental releases (quantified),
- Resources conservation,
- Environmental risk management,
- Compliance with environmental legislation,
- Product stewardship,
- Employee recognition, and

- Stakeholder involvement (UNEP 1994).

The guidelines suggest that companies include details of their profile and environmental policies. However, because these are guidelines they are not prescriptive, nor are they binding on participating companies, and are hence not enforceable. On the positive, side they are very flexible and encourage accountability to a wide range of stakeholders.

3.6.6. ISO 14000

ISO 14000 was established under the auspices of the International Standards Organization, with negotiations beginning in 1991 and the final standard being adopted in June 1996. It includes the following elements:

- ISO 14001, EMS (specification standard),
- ISO 14010, Environmental Auditing,
- ISO 14020, Environmental Labelling,
- ISO 14030, Environmental Performance Evaluation, and
- ISO 14040, Life Cycle Analysis (ISO 1996).

Only ISO 14001 is a specification standard, all the rest (including those not stated) are merely guidance standards.

ISO 14001 has become one of the most widely accepted international environmental standards. This standard's wide acceptance in Europe and America has established it as the baseline environmental standard for business. Companies in developing countries are being encouraged to adopt this standard to enable them to compete in international markets and advocates of this standard suggest that market forces will make it a prerequisite for doing business globally (Krut & Gleckman 1998). The significance of ISO 14001 cannot be understated (refer to conclusions in Chapter 11).

In a book entitled *ISO 14001: A missed opportunity for sustainable global industrial development*, Krut and Gleckman (1998) raise the following six issues regarding the basic standard:

- They argue that public-private partnerships, participation and transparency are missing from ISO 14001.

- They submit that few major environmental stakeholders were not involved in the conceptual process until after the first draft was accepted in 1995. Hence their views and priorities would not have been incorporated, and therefore these authors raise questions about the legitimacy of the standard.
- As the WTO in their General Agreement on Tariffs and Trade (GATT) rules, recognised the authority of the ISO, and therefore ISO 14001 could be challenged by developing countries as an unfair trade barrier.
- The ISO 14001 is perceived as being a means to market access and as a result, it could encourage rapid adoption without companies taking proactive measures towards responsible environmental management.
- ISO 14001 will not of itself bring about improved environmental performance. Rather it will depend upon how successfully its principles are integrated into public law and policy.

Krut and Gleckman (1998) propose that the initiative towards global sustainable industrial development has lost momentum, and that many may see ISO 14001 as representing the end of the road. They suggest it might be used to stall future progress. However, newer versions of the ISO 14001, known as 'ISO 14001 Plus' have been developed. These place stronger emphasis on sustainable development and corporate responsibility.

3.6.7. EPAA (Economic Priorities Accreditation Agency)

The EPAA Council in the UK, issued SA8000 in 1998 on Social and Labour related issues (Mathews 2002). This standard sets guidelines for social and labour related practice and disclosure, which is however only part of the scope of CSR.

3.6.8. The GRI

CERES initially developed the GRI in conjunction with the UNEP in 1997. Since then it has been developed further and continues to do so, with the input of several large MNEs as well as other key players such as the:

- Association of Chartered Certified Accountants (ACCA),
- Canadian Institute of Chartered Accountants (CICA),
- Council of Economic Priorities,

- Green Reporting Forum,
- Institute of Social and Ethical Accountability,
- Investor Responsibility Research Centre,
- New Economics Foundation,
- World Business Council for Sustainable Development, and the
- World Resources Institute.

It is perhaps the significance of these contributing parties that adds credibility to this initiative and makes it possibly the most widely acceptable environmental reporting initiative in the world. The present form of the document was released in June 2000. The GRI is characterised by its flexible nature that encourages the use of certain sections and formats, as well as the use of independent verification. The suggested report contents (as detailed by the GRI), encourage disclosure of both 'aspects' e.g. greenhouse gas emissions, and 'indicators' e.g. the number of tons of CO_2 that were released, of the reporting corporation's performance.

The GRI specifies that the use of the guidelines is voluntary and can be applied flexibly and in an incremental manner. The suggested format of the guidelines (which is included in part 'C' of their guideline document) need not be complied with and organisations are given flexibility in adapting or selectively applying the suggested report format (GRI 2000). Furthermore, the guidelines encourage, but do not make verification mandatory. They suggest that the company's policies and management systems should be disclosed and that the chief executive officer's (CEO) report should be included, and the company's profile be detailed together with its performance.

With regard to a company's environmental performance, they suggest that the following broad areas ('aspects') be covered:

- Energy,
- Materials,
- Water,
- Emissions, effluents and waste,
- Transport,
- Suppliers,

- Products and services,
- Land-use and biodiversity, and
- Compliance with legislation, protocols and treaties.

The GRI (2000) provides specific details for each of the above categories regarding what is expected to be disclosed.

The significance of the GRI is not only its wide international acceptance, but also that it has been endorsed by the *King II Report on Corporate Governance in South Africa* (Institute of Directors 2002). Thus, theoretically all companies listed on the Johannesburg Stock Exchange (JSE) are required to report on social, economic and environmental aspects of their business activity, namely the triple bottom line (GRI 2000). In Chapter 9, when the CSR systems of existing business are reviewed, distinction is made between those that form part of a listed group of companies (and hence encouraged to comply with the GRI), and those that do not.

The wide acceptance of the GRI makes it the baseline of best international practice, and thus the GRI has been used as a checklist for the validation (Chapter 8) of the model developed in this thesis (Chapter 7).

3.7. Summary and Conclusions

In this chapter, the various potential impacts that a business can have on stakeholders and interested parties, as the context to the development of CSR was considered. The emergence of CSR in the 1970s and its subsequent development, as well as the various factors that influenced its development was reviewed. The influence that the principle of sustainability has on business and CSR was specifically noted.

Internal environmental reporting and assessment mechanisms were reviewed, as well as all the major principles, charters, guidelines and standards of CSR that were developed to report businesses social, economic and environmental impacts to external stakeholders. Specific emphasis was placed on the ISO14001 standard, which utilises the market mechanism to encourage adoption, and on the international GRI which is the only officially endorsed guideline in South Africa, and represents best practice in South Africa.

In the following chapter, research that has been conducted on CSR will be discussed, specifically considering the perceived effectiveness of CSR to convey the impacts of business activities, to affected parties and stakeholders.

CHAPTER FOUR

LITERATURE REVIEW OF CSR RESEARCH

4.1. Introduction

In this chapter a literature review of prior research into CSR is presented. Research into CSR during the last three decades is reviewed, briefly considering what research has been done in various parts of the world (in section 4.2). Also presented is research specifically relevant to this thesis, which includes the following areas:

- The first part of the original research in this thesis (Chapter 6) represents a stakeholder survey, which considers the importance and effectiveness of CSR. The findings of international and the limited South African research in this regard are considered in this chapter in sections 4.3 and 4.4.
- In the second part of this thesis (Chapters 7 and 8) the conceptual principles behind CSR are developed, and a framework for a CSR model is proposed. In Chapter 4, section 4.5, previous research on the theoretical aspects of CSR is considered and prior modelling research is considered.
- In the third part of this thesis the potential practical application of the proposed CSR model in Chapters 9 and 10 is considered. However, as this was the first such attempt in South Africa, no relevant prior research was found for inclusion in this chapter.

4.2. Prior CSR research relating to the development of CSR

4.2.1. Progression and development in the nature of CSR research

Early research on CSR, following the emergence of CSR in the 1970s, and focussing on the frequency and nature of environmental and social disclosure (Mathews 1997) includes a variety of studies primarily about environmental disclosure (Abbot & Monsen 1979, Anderson & Frankle 1980, Belkaoui 1980, Bowman & Haire 1975, Ernst & Ernst 1972-1979, Grojer & Stark 1977, Trotman 1979). During the early period of CSR (the 1970s), limited environmental and social reporting became popular amongst leading companies, which reported on, for example their environmental and social policies, as well as selected indicators. The Ernst and Ernst (1972-1979) study of Fortune 500 companies in the United States found that 90% of these companies had some form of environmental disclosure.

During the 1980s researchers moved away from general social reporting and focused on value added statements and employee reports (Burchell, Clubb & Hopwood 1985). Studies in the 1980s were largely focused on methodologies ensuring reproducibility and reduced subjectivity (Mathews 1997), and also focused on content, direction and type of disclosures (Trotman & Bradley 1981, Arlow & Gannon 1982, Freedman & Jaggi 1982, Shane & Spicer 1983, Mahapatra 1984, Ullmann 1985, Guthrie & Mathews 1985, Brooks 1986, Belkaoui & Karpik 1989, Guthrie & Parker 1989a). These studies were criticised for their lack of theoretical basis, and indirect support of such disclosure, which merely backed the maintenance of corporate images, and did little to promote the disclosure corporations' actual performance (Wiseman 1982, Burke 1984).

It was not until the 1990s, after the transference to business of the principles of sustainable development, that the sub-discipline became truly established, with a proliferation of papers (Hart & Owen 1991, Power 1991, Gray 1992b, Cooper 1992, Bebbington & Gray 1993, Tilt 1994, Collison & Gray 1997, Deegan & Rankin 1997, 1999, Laughlin 1999) and the publication of several books (Schaltegger et al. 1996, Welford 1997, Gray & Bebbington 1999) on the subject. These studies focused on the quantitative and qualitative aspects of financial statement reporting. There have been a few such studies conducted in South Africa[19] (Dewar 1994, Savage 1994, Vorster & Lubbe 1994, De Villiers 1996, De Vries & De Villiers 1997, Roberts 1997, De Villiers 1998, Ernst & Young 1998, KPMG 2000, Griffith 2002). However, due to the lack of local standards and guidelines (until recently, Institute of Directors 2002), environmental reporting has been limited and voluntary.

The period after 1990 has been characterised by a complete dominance of environmental accounting over social accounting (Mathews 1997), at the expense of social accounting, which almost ceased during this period (Mathews 1997). Extensive empirical studies on the extent and nature of environmental disclosures were carried out (Harte & Owen 1991, Roberts 1991 and 1992, Blaza 1992, Adams et al. 1995, Gibson & Guthrie 1995, Deegan, Geddes & Staunton 1996). Empirical studies continued throughout the nineties and into the current millennium, testing for

[19] Vorster and De Villiers have been conducting annual surveys with KPMG since the late 1990s

relationships with size, industry and performance (Gamble, Hsu, Jackson & Tollerson 1995, Fekrat, Inclan & Petroni 1996, Walden & Schwartz 1997, Krueze, Newell & Newell 1998, Hughes, Sonder & Reier 2000, Alnarjjar 2000). Other studies looked at motivation for voluntary disclosures in terms of legitimacy theory (Deegan & Gordon 1996, Deegan et al. 1996, Deegan & Rankin 1997, Brown & Deegan 1998, Deegan & Rankin 1999, Deegan, Rankin & Voght 2000, Tilt 2001). However, Hackson and Milne (1996), and Milne and Adler (1999) have motivated for refinement in these techniques, which attempt to link disclosure and performance to a specific theory, such as legitimacy theory.

4.2.2. CSR research in North America

There have been numerous studies on CSR in the US, starting in the 1970s and continuing throughout the 1980s, 1990s and into the current millenium (Nikolai, Bazly & Brummett 1976, Estes 1976, Ernst & Ernst 1978, Chan 1979, Johnson 1979, Belkaoui 1980, Cowen, Ferren & Parker 1987, Freedman & Jaggi 1988, Belkaoui & Karpik 1989). There have also been similar studies undertaken in Canada during this period (Maxwell & Mason 1976, Preston, Ray & Diekes 1978, Brooks 1986, Zeghal & Ahmed 1990).

The launching of Business for Social Responsibility in the USA in 1992 was a strong influence on CSR (Stone 1995). In North America the FASB, Securities exchange commission (SEC) and CICA issued regulations requiring the disclosure of environmental liabilities, which further increased the accounting focus on CSR. The CICA and CCC (Canadian Chamber of Commerce) and Canadian Standards Association developed the first guidelines and a framework for environmental reporting (CICA 1993).

4.2.3. United Kingdom (UK) and Europe

Environmental reporting, as in North America, has a long history in Western Europe emerging in the 1970's (Lessem 1977, Preston et al. 1978, Brockhoff 1979, Schreuder 1979). The election of the conservative party in the UK in 1979, reduced the influence of employee reporting, and increased the focus on environmental issues. In France, the Sudreau report focused attention of businesses on relations with employees, and ultimately contributed to the Bilal Social (1977) being passed, which required

companies to produce an annual social balance sheet. During this time 70% of German companies had some form of social disclosure (Brockhoff 1979).

However, as in the case of North America, it was not until the late 1980s and early 1990s that CSR overtook Social and Employee reporting. Gray et al. (1996) note that the early 1990s was when the accounting profession became involved (ICAEW 1992, KPMG 1993, Tonkin 1991, Touché Ross 1990), with the ICAEW, Institute of Certified Accountants and Secretaries (ICAS), ACCA, Chartered Institute of Management Accountants (CIMA) as well as bodies from Belgium, Denmark, Germany and the Netherlands all of which had projects and initiatives in progress by the mid-1990s. They ascribe much progress in the development of CSR in the EU to the European Economic Area (EEA) agreement, which required prevention of damage to the environment and incorporated the 'polluter pays principle'. The EMAS was also developed by the European Union (see section 3.6.4.). Other initiatives that Gray et al. (1996) cite include: the Hundred Group of Directors of the UK; the Advisory Committee of the UK's Department of Environment; and the Confederation of British Industry's Agenda for Voluntary Action.

Significant studies on CSR trends and disclosure (in western Europe) include those of:

- Roberts (1991) for Germany, Sweden, France, Switzerland, Netherlands
- Adams et al. (1996) for Germany, Sweden, France, Switzerland, Netherlands and the UK
- Roberts (1990), Harte & Owen (1991), Kirkman and Hope (1992), KPMG (1993) for the UK.

UK companies are considered to have led the way with descriptive and performance reporting (Gray et al. 1996). However, in Europe (Germany, Austria and Switzerland) more holistic and quantitative corporate reports emerged, the most notable of which was the Okoblianzen (eco-balance), which included an input analysis. Also of significance was the attempt to report on micro- and macro-levels of environmental and economic activity as was done in France, Italy and the Netherlands (Christophe & Bebbington 1992, Anderson 1991, MacGillivray 1993).

4.2.4. Australasia

In Australasia several studies on CSR disclosure have been conducted since the 1970s (Trotman 1979, Pang 1982, Guthrie & Parker 1990, Robertson 1978a, Hackson and Milne 1996). Specific mention is made of work by Deegan and Rankin (1997, 1999) on stakeholders' perceptions, which will be discussed in Section 4 of this chapter. Guthrie and Parker (1989a, 1989b) also considered the application of Legitimacy theory, and Critical accounting theory from an Australian perspective.

4.2.5. Japan

Although Japan had lagged behind in CSR, much work has been done on reviewing such disclosure (Tokutani & Kwawano 1978, Yamagami & Kokubu 1991, Kokubu, Tomimasu & Yamaganu 1994, Kokubu & Tomimasu 1995).

4.2.6. Developing countries

In the case of less developed countries (LDC) and newly industrialised countries (NIC), Ellwood (2001) suggests foreign MNEs need to be held accountable for their actions in such countries. It is unlikely that the governments of such countries would be able to control these MNEs, since they would have little bargaining power since they are heavily dependent upon these MNEs to bring in capital and investment. Key data, which these host countries and communities should know about, include: the purchase of local inputs, capital repatriation, local equity participation, participation in management, employment provided, training of local personnel, environmental protection, the use of local infrastructure, and taxes and levies paid to local governments. Unfortunately, to date little research has been undertaken on CSR in developing countries.

4.2.7. South Africa

Research on CSR did not start in earnest in South Africa till the 1990s (Dewar 1994). South Africa, which is also a developing country (refer to 4.2.6 above), had significant research studies of CSR disclosure conducted during the 1990s and 2000s, including studies by Dewar (1994), Savage (1994) KPMG (2003); while De Villiers

(1996) looked at support specifically for environmental reporting and Griffith (2002) tested the legitimacy theory[20].

4.3. Research relating to CSR users, legislation, regulation and accounting

An important part of this study will be determining what the information needs of stakeholders are. Dierkes and Antal (1985) determined that the usefulness of specific information in financial statements varies according to the user group, and such environmental disclosure which would be most relevant to environmental concern groups. Rubenstein (1991) outlines what the information needs might be for four groups of 'invisible' stakeholders, namely: 'green' consumers, environmental activists, employees, and communities living in affected areas.

Current thinking tends to focus on 'green' accounts and environmental indicators to be prepared by companies. These micro-accounts can then be summated and compared with the macro-accounts of districts and entire countries. These are the principles that are used for the greenhouse gas quotas (Kyoto Principles 1997) applied in Europe and elsewhere in the world. Currently, the United Nations Satellite Environmental and Economic Accounts (UN SEEA), serve the overall coordinating function of collating and synthesizing all the national 'green' accounts (Atkinson, Dubourg, Munasinghe, Pearce, & Young 1997). One of the leading bodies in the development of environmental accounting has been the United Nations Centre for Transnational Corporations Intergovernmental Working Group of Experts on International Standards (UN CTC ISAR), which has been working on developing guidelines of what environmental disclosure companies should be presenting in their annual corporate reports. The following are some of the items that are specified for disclosure (UN CTC ISAR 9th Session 1991):

- Environmental issues relevant to that industry,
- The company's environmental policy,
- The company's emission targets and performance,
- Material environmental litigation the company is involved in,
- Effect of environmental protection with respect to earnings and investments,
- Costs incurred,

[20] Research conducted in South Africa, relevant to this thesis is discussed in detail in Section 4.4.4.2.

- Costs capitalized,
- Policies for recording environmental provisions,
- The amount of provisions and liabilities raised,
- The amount of contingent liabilities, and
- Tax effects and government grants.

Besides employee and environmental reporting, attention has been given to other ethical issues, including the rights and protection of consumers and communities and the need for socially beneficial products. To protect these consumers and their rights, various legislation has been promulgated in many countries. Ethical investment trusts have also built this into the criteria for portfolios for clients seeking ethical investments (Rockness & Williams 1988). Research surveys have been conducted to assess the relevance and support for such ethical investment portfolios (Adams et al. 1996).

The ISAR have issued guidelines, (for measures of best practice), for the recognition and measurement of costs and liabilities. Much of these have been reflected in relevant standards in many leading developed nations. Leaders in this field are the United States, Canada, the United Kingdom, Netherlands, Australia, New Zealand, and the European Union, making the guidelines legally enforceable within their accounting standards. Many other countries are following suit, if not to such a great degree (Choi 1998). Various accounting bodies including the American Institute of Certified Public Accountants (AICPA) (United States), CICA (Canada), the ICAEW (UK) and the IAS have implemented either one or both accounting standards for the recognition and disclosure of environmental liabilities, and / or auditing standards for the verification thereof. Various other accounting bodies have also become significantly involved, including: The UK Accounting Standards Steering Committee (1974); CIMA (Gray et al. 1996); and the ACCA.

Despite the involvement of the accounting bodies mentioned above, Mathews (1997) identifies several factors that have contributed to the slow acceptance of CSR into mainstream accounting, which include:

- The normative / deductive paradigm is not currently fashionable,

- Methodologies are under-developed,
- The nature of disclosures looked at in empirical work is not in fashion, as they do not generally test hypothesis, and
- The work does not fit within the scientific paradigm required by many accounting journals.

Traditional accounting methodologies ignore environmental issues (Gray & Bebbington 2001) and hence are in conflict with the concept of 'green' business and sustainable development. Central to environmental accounting is the concept of full cost accounting, which is, "accounting for an entity's internal and external costs generated as a result of its economic activities" (CICA 1997:4). External costs are those costs imposed as a by-product of an entity's activities on third parties. This concept of full cost accounting "provides a comprehensive framework for evaluating corporate economic activity" (Atkinson et al. 1997:157). Where possible, full cost accounting does not only report on a variety of indicators but also tries to incorporate the estimated financial cost of those activities.

Annual reports, prepared by corporations and normally the responsibility of the accounting function, now include more social and environmental disclosure than before (Mathews 1997), despite a lack of statutory and regulatory frameworks. Mathews (1997:503) suggests that although CSR may reflect the view of accountants and mangers, it is at the "very light green end of the spectrum" and is inadequate in terms of the expectations of environmentalists.

Mathews (1997), amongst other points, suggests that research into CSR should focus on:

- More normative deductive work, including human resource accounting theory,
- Normative / philosophical research that led to model building in the early years, and
- Being interdisciplinary in nature.

In light of the suggestions of Mathews (1997), it needs to be noted that a major component of this thesis is dedicated to normative philosophical work, and the

formulation of a CSR framework and reporting model (Chapters 7 and 8). The very nature of this study is interdisciplinary, bringing the principles of accounting, reporting, social theory and environmental science together in an integrative manner.

4.4. Effectiveness of CSR

4.4.1. Market effectiveness

Pristine capitalists (Gray et al. 1996:62) see value in CSR only to the extent that it is in the "interests of the corporation's own interests or if it contributes to greater efficiency in the markets". Numerous studies have been conducted to determine the impact of CSR disclosure on the market price of the shares of the reporting companies, that is the market effectiveness. Bowman and Haire (1975) found the highest return on equity with corporations that had moderate CSR disclosure; however, Abbot and Monsen (1979) found no correlation between return on investment and social disclosure in 450 of the 1975 Fortune 500 companies. Belkaoui (1976) noted that disclosure of pollution control expenditures had a large positive, but temporary, effect on share price, whilst Spicer (1978) outlines a similar relationship when comparing a wider range of value indicators, that is, not just the share price. Ingram (1978) determined that the value of the information of social disclosures varied according to industry segment. Anderson and Frankle (1980) established that the market does value social disclosure positively. Wiseman (1982) found that there was no relationship between disclosures and independently assessed social performance, which is consistent with the notion that environmental and social disclosures are presented largely to improve the corporate image of the organisation and not to reflect the reality of its performance. Shane and Spicer (1983) determined that there were predictable share price movements in relation to independently monitored social performance, done by the Council on Economic Priorities. However, Mahapatra (1984) established that investors considered expenditure on pollution control to be a drain on the company's resources and hence such disclosure adversely affected the long-term share price. On the other hand, Freedman and Jaggi (1986) found that the extensiveness of the environmental disclosure had no impact on investors' decisions. There were however, several subsequent studies that criticised the methodology of Freedman and Jaggi's study (Cooper 1988, Haw & Ro 1988).

4.4.2. External assessments of effectiveness

Any study on corporate environmental reporting would not be complete without considering the effectiveness of corporate social reporting (CSR), which includes both social and environmental aspects. This has been done in two different ways, namely:

- A reputation index monitored by external bodies and experts. The Council of Economic Priorities maintained such indices in the 1960s and 1970s. However, such indices were criticised as being subjective (Dewar 1994), and
- Content analysis. In this approach, reports are rated on whether they contain specific disclosures or not. Although the selection of which types of disclosures to be considered is subjective, the remaining application of these techniques is entirely objective (Dewar 1994). Independent research studies use content analysis, typically to compile a disclosure index. These disclosure indices are based on the selected items that need to be disclosed, then an appropriate weighting is applied. This weighting is often established by surveying users' needs and preferences to establish the relative importance of the specific items of disclosure.

Prominent examples of the latter, that is social reporting indices, from academic literature (prior to the emergence of sustainable development) are included in the following table:

Table 4.1: Significant use of social reporting indices, to evaluate the corporate reports of companies

Year/s	**Person/s credited with development**
1971	Singhvi and Desai
1974	Buzby
1976	Barret
1982	Wiseman
1978, 1984	Firth. Adapted for South Africa in 1986 by Firer and Meth.

These indices enjoyed significant popularity during the 1970s and 1980s (Dewar 1994). However, it must be borne in mind that despite their wide acceptance, they are not without limitations, such as they might not be applicable to certain types of

companies for example in the financial service sector, where no tangible product or services are generated. Extensive research has been conducted using indices (referred to Table 4.1 above) to establish the relationship between environmental disclosure and performance. Other significant studies that used objective measures on disclosure, include:

- In a study of Swedish corporations, Cooke (1989) established that there existed a correlation between asset size and extent of the disclosure. He also found that listed, as opposed to unlisted companies, presented better disclosure. Cooke (1989) established that there was a relation between environmental disclosure and financial performance.
- Barret (1991) determined that there was a correlation between quality of disclosure and efficiency of the markets in seven different countries.
- Wiseman (1982) determined that there was no relationship between the company's disclosure and its actual environmental performance, (not financial).

It is argued by Mathews (1997) that there is a correlation between 'greenness' and a preference for regulation and prohibition i.e. legislative measures, as opposed to market forces. Thus, he argues that it is the unregulated market (that is a lack of appropriate and enforceable legislation) that has contributed to many environmental and social problems. In the absence of statutory requirements, environmental reporting in many countries is predominantly a voluntary matter. Thus the standardisation, comparability, relevance and even reliability (in the case of a lack of audit verification), have become major issues. Organisations choosing to present such voluntary information need to compare the costs against potential benefits such as (Gray & Bebbington 2001):

- Legitimising their activities,
- Improving corporate image ('green washing'[21]),
- Distracting attention away from other social or environmental areas where they had not performed well ('green washing'),
- Anticipating impending legislation,

[21] 'Green washing' is a term that is loosely used to indicate where companies provide selective environmental related information in order to intentionally mislead or manipulate users of environmental or annual reports.

- Creating goodwill and a competitive advantage,
- Manipulating share price ('green washing'), and
- Gaining possible political advantages.

According to Gray and Bebbington (2001) some companies have chosen not to become involved in voluntary disclosure, because of any of the following: What they have to hide, the costs involved, lack of knowledge and expertise, or hoping the 'fad' would pass.

Additional problems have arisen from recent trends, which have firmly established Internet reporting as a norm for listed companies. Unfortunately, this has been unregulated (Fairhurst 2001), resulting in selective disclosure of both financial and non-financial data. The implications of this are similar to that of unregulated environmental reporting, namely, both suffer from a lack of validity.

4.4.3. Effectiveness of traditional accounting

Most accountants operating in the auditing field, acknowledge that verifying the existence of potential environmental liabilities (Collision & Gray 1997) is a very difficult and onerous task, and most financial auditors recognise that they lack the knowledge and understanding to adequately perform this task. At the same time, there is growing pressure on financial auditors to verify environmental data in their attest function and there has been a global trend of increasing numbers of companies providing more environmental data in their annual financial statements (De Villiers 1996). This increase in data does not necessarily improve reporting but rather, if anything, it represents an attempt to 'green wash' (Welford 1997) both investors and the public into believing that they are contributing positively to the environment. It forms part of the concept that the environment is 'safe in the hands of business' (Gray & Bebbington 2001).

Much accounting research supports this notion, largely by the incorrect application of the concept of sustainability, applying it solely to mean eco-efficiency[22] (Gray &

[22] As previously defined to mean reducing inputs of material and energy per unit of output.

Bebbington 2001). What has been lacking is a critical approach. Laughlin (1999), suggests three limitations of traditional accounting, namely:

- Accounts / financial statements are only a partial reconstruction of the real world, and hence by making some things visible the rest becomes invisible and effectively hidden.
- Since environmental reporting as it now exists is voluntary, corporations disclose only what they want others to see, and what they are willing to release, consequently establishing it merely as a legitimisation mechanism, not an accountability exercise.
- The voluntary nature of such reporting brings the role of law in society into question i.e. justice for all or imposing the will of the powerful on the rest.

Further, traditional accounting is perceived to support the status quo, that is capital over labour interests (Cooper & Sherer 1984; Tinker 1985; Laughlin & Puxty 1986). Thus, Power (1991) argues that it would not be advisable to incorporate CSR into mainstream accounting and institutionalise it, as it would then be subject to the interests of capital. It would also be subject to possible 'management capture' which, many recent studies have focussed on (Mouck 1995, Wamberganass & Sanford 1996, Owen, Gray & Bebbington 1997, Miller 1998).

Essentially, the approach to date has been to use existing accounting conventions and principles to determine the framework for environmental accounting. However, this is criticised by leading academics (Gray & Bebbington 2001) as being inadequate. These inadequacies are twofold:

- Firstly, they do not convey the full potential costs that companies could face, as they are based only on existing legislation and the extent to which this legislation has been enforced. The full and retrospective costs are indeterminable, should the companies ever become accountable for all pollution and damage done.
- Secondly, they inadequately convey the impact of the company's activities on the environment, where these impacts are not or cannot be converted into financial terms.

Partly as a result of mainstream attitudes towards CSR, many radical and/or critical accountants have undertaken to expose the value systems implicit in traditional accounting (Mathews 1997), and it has been suggested that accounting is not free of value systems (Tinker 1985, Tinker et al. 1991).

Rubenstein (1989) proposes that traditional accounting suffers from six limitations, namely:

- First, traditional accounting only accounts for legislated social and environmental costs e.g. where fines or taxes have been imposed. It does not account for the full costs of the use of natural resources, as companies do not have to pay for these costs.
- Second, it discourages (actually disallows) accruing for provisions for environmental restoration, unless an existing legal obligation exists. Hence, there can be no matching of these costs.
- Third, it does not deal with inherent limits to economic activity i.e. for the environment to support this.
- Fourth, although new trends in accounting take a forward view (e.g. in valuing assets based on present value of future cash flows), these are constrained to existing rules and conventions, hence future environmental implications and possible obligations are ignored. They are also limited in the case of assets, to only those a company legally controls.
- Fifth, it only accounts for the legal bounds of the entity, ignoring the environment and common property e.g. air, water etc.
- Sixth, profit is viewed as a return on risk, but environmental and other social risks are ignored unless they are accidentally encountered e.g. as Exxon discovered when the Valdez ran aground. Rubenstein (1989) refers to Walker Stone's (unpublished) theory on this single most significant limitation. Profit is a return on risk together with rental on capital used. This is where the problem lies. Rental on the artificial capital is accounted for, but the rental for the use of natural capital is ignored, hence increasing the apparent return on risk, which as noted above, is significantly understated.

4.4.4. Perceptions of effectiveness of CSR

4.4.4.1. International perspectives

International studies have considered the needs and expectations of stakeholders, specifically including environmental reporting (Dierkes & Antal 1985, Tilt 1994, Deegan & Rankin 1997, Deegan & Rankin 1999, Woodward, Edwards & Briken 2001, Adams 2002, Buhr 2002), and have found that users of annual reports believed that environmental disclosure was material to their decisions (Deegan & Rankin 1997). Other studies have been conducted internationally (Hussey 1979, Mitchell, Sims & White 1981, Craig & Hussy 1982, Firth & Smith 1984, Mackintosh 1984), looking at stakeholder needs and expectations with respect to employee reporting as a separate component of CSR.

4.4.4.2. CSR research and South African stakeholder perceptions

Several important studies have been conducted in South Africa on CSR, concentrating on various aspects of CSR such as:

- Quantitative disclosure in listed companies (Savage 1994, Steyn & Vorster 1994, Holcroft 1999, De Villiers & Barnard 2000, Antonies & De Villiers & 2003, KPMG 2003)
- Employee reporting (Booysen 1993, Everingham 1994, Stainbank 2003). Booysen (1993) determined that employees, from a Trade Union's perspective, expect financial information on current and expected performance, and specific employee related information.
- Dewar (1994) considered the use of indices for evaluating CSR, and Griffith (2002) tested the Legitimacy theory against the backdrop of socio-political developments in South Africa.

Stainbank (2003) conducted an extensive survey of public accountants and listed companies (as the employers) in South Africa to determine their views on employee reporting. She found the following (2003):

- There was a recognised need for employee reporting,
- Most respondents preferred a separate stand-alone report i.e. separate from the annual report,

- Most employers (the companies) preferred regular meetings i.e. stakeholders' forums, as the means of reporting to employees,
- Involvement of public accountants in employee reporting was considered to be undesirable, and
- Further research was needed.

De Villiers was involved in three studies (De Villiers & Vorster 1995, De Vries & De Villiers 1997, De Villiers 1998) that looked at the commitment of stakeholders (users represented by portfolio managers of unit trusts), and preparers (represented by corporate mangers, and auditors) to support CSR (specifically environmental reporting). The findings of these studies supported the notion as revealed by the second study, that the majority of the surveyed stakeholder groups: wanted more voluntary environmental disclosure, wanted more compulsory environmental disclosure, and wanted environmental disclosure as part of annual statements. The second study revealed an overwhelming positive response to the need for specific disclosure. The third study focused generally on CSR (not just environmental reporting (ER)), and the needs of portfolio managers, and again found overwhelming positive support for increased CSR.

Mitchell and Quinn (2005) surveyed the top 300 listed companies on the JSE, environmental professionals and environmental activists and pressure groups and looked specifically at environmental reporting aspects of CSR. They found that most environmental professionals and environmental concern groups expected quantitative disclosure of all outputs and impacts (including monetary cost), with comparisons against best practice and industry standards; while industry representatives mostly expected quantitative disclosure of all outputs and impacts (without monetary cost), with comparison against best practice and industry standards. They further note that all three stakeholder groups felt strongly that:

- Users / stakeholders should have access to an environmental reports,
- An environmental report should be included in the annual reports of companies,
- The full cost of environmental impacts must be included in the annual financial statements (AFS), and

- Where no government standards of environmental reporting exist, the JSE or SAICA should set such standards.

These findings are consistent with that of De Villiers (1996) that stakeholders, including companies, support comprehensive levels of CSR disclosure, including those in annual reports.

4.4.5. Effectiveness of CSR

Internationally, the ISO 14000 and GRI systems have perhaps been the most widely adopted of any guidelines. However, specifically in the case of the ISO 14000 series, these amount to essentially environmental management systems (EMS), and the reporting thereof. These systems are concerned with minimising a company's impacts within the constraints of its commercial activities. These EMS systems are voluntary and self-implemented without predefined (minimum) standards, and are essentially about self-improvement. The problem with this is that these EMS systems have often been established at the lowest denominator (Krut & Gleckman 1998) i.e. at the lowest acceptable level of performance. They have also missed the essential element for sustainability, that is eco-effectiveness, which is critical when considering the limited resources of the world. Traditionally, these EMS systems merely strive for eco-efficiency[23] (Gray & Bebbington 2001).

The last decade has seen a proliferation of reporting guidelines, which in itself has forestalled any attempt to establish comprehensive and binding international standards, by reducing any apparent need for such standards. Gray and Bebbington (2001) conclude that the substance of such reports is fundamentally similar and essentially differ only on whether they report on social dimensions of sustainability, and the degree of completeness of their disclosure. They postulate that on the basis of this similarity of CSR, there are no legitimate arguments as to why a fundamental framework common to most of the guidelines cannot be incorporated into legislation since these guidelines are generally accepted[24].

[23] Refer to Section 2.3.1 on for discussion of these terms.

[24] Gaap (to be differentiated from GAAP the legally promulgated standards), stands for generally accepted accounting practice represents practice, which once it becomes common practice, it becomes legally acceptable, not unlike common law.

It must be noted that there is an informative debate regarding the advantages and disadvantages of voluntary initiatives as opposed to enforceable legislative intervention. Power (1991) advocates that legislative or compulsory interventions may allow industrialists to abdicate their responsibility of pursuing the fundamental objective of environmental improvement. It might also lead to a mindset of trying to develop ways to counter and avoid regulatory initiatives (Cannon 1994). Jorgenson (2002) supports this notion and highlights the following aspects of a voluntary approach:

- It encourages insight and understanding in identifying significant impacts,
- It allows for stakeholder involvement,
- It does not face the logistic difficulties of legislative enforcement,
- It encourages innovation, and
- It can ensure compliance (if only in applying a EMS) in such cases where industrialists opt for ISO 14001 certification.

However, Jorgenson (2002) does acknowledge some shortfalls of voluntarism, such as:

- Difficulties in getting free-riders on board,
- The obligation of governments to protect their citizens, and not to just leave it to the goodwill of business, as well as the rights of citizens to public participation and to demand CSR, and
- There are inherent difficulties with degrees of compliance, improvement and standards of implementation, and quality of certification.

Bronner (1994) questions the efficacy of relying upon voluntarism since the regulatory agencies are dependent upon the information and expertise of the very industries they seek to regulate. Gray et al. (1996) point to the significant shortcomings of a voluntary approach. Held (1988) notes that in the present age of the domination of MNEs, the markets are anti-democratic, and hence one cannot rely on market forces. Gallhofer and Haslam (1996) point out that it is the lack of global democracy and absence of bureaucratic structures that has led to limited progress in international regulation in this area and they advocate an interventionist approach. It

is suggested that pressure groups, activists, researchers and educators should play a leading role in trying to influence transnational practice (Bailey & Poteau 1994).

However, without legal backing or regulation, what mechanisms can guide and influence the effectiveness of environmental reporting? Many companies can choose to have their reports externally verified, defending their accuracy but not, however, their completeness and hence validity. Ultimately, the process is left in the public domain. Various monitoring initiatives play a key role here, such as the United Nations Environmental Programme's (UNEP) Sustainability Monitoring Process, ACCA's Environmental Reporting Awards Scheme (ERAS), and KPMG's awards programme. The UNEP's initiative, started in 1994, has grown, and in 1997 developed into 'The 50 Reporting Criteria' (Gray & Bebbington 2001).

Very little accounting research and few companies, have ventured to investigate possible directions corporate reporting might take in the future (Bennet & James 1997). Brown and Goulding (1993) suggest that this can be ascribed not only to researchers and companies not wanting to look at these difficult and unpleasant issues, but also to a more fundamental fault in the accounting education system, in which little or no attention is paid to promoting critical thinking and consideration of social or environmental issues.

In the 1992 European Union plan *Towards Sustainability*, it was noted that for effective and meaningful responses from business, it would be necessary to change accounting concepts, rules, conventions and methodology in order to enable businesses to account for external environmental costs (Bebbington 1993). Such changes would require active participation of professional and academic accountants in this process. It is suggested that accountants are resistant to such fundamental change (Bebbington et al. 1994).

Newton and Harte (1997) suggest that environmentalism is viewed as a 'feel good' matter, with most literature on the matter filled with missionary zeal, and an evangelic tone trying to convince readers of the 'rightness' of the environmental cause. They attribute much of this to the best selling book of Peters and Waterman's (1982) *In Search of Excellence*, which revolutionized business thinking in the 1980s. In their

book *The Green Capitalists*, Elkington and Bruke (1987), refer to this stating: "many of the 'excellent' companies highlighted by Peters and Waterman (1982) have also built up a reputation for environmental excellence. For while environmental excellence many not be a sufficient condition for business success in today's world, it is a necessary one" (Elkington & Bruke 1987:14).

In studies by Epstein and Freedman (1994) and Deegan and Rankin (1997), it was determined that various user groups do expect environmental reporting and do rely, in part, on corporate reports for partial information on the environmental practices of specific companies. This information can be best used to decide whether to invest in that company, purchase its products, work for them or interact with them in other ways.

The key issue for many companies is what levels and areas of environmental disclosure, do they provide. This is largely determined by the individual attitudes of the senior management of such companies towards the environmental agenda. This has been incorporated into the following table:

Table 4.2: Business attitudes towards the environmental agenda, their response and the implications for the business

Business Response / **Management's Attitude**	**Passing fad, not really a problem**	**Environmental issues are important, but not a crisis**	**Environment is in crisis, needs urgent response**
Do nothing	OK	Dilemma for management, not doing anything, could lose business	Dilemma for management, not doing anything, will lose business
Follow law and public opinion	There are costs, but also competitive advantages	OK	Dilemma for management, not doing enough, could lose business
Aim for sustainable business	Crisis, unnecessary costs and extra work	There are costs, but also competitive advantages	OK

OK: Appropriate response Source: Gray & Bebbington (2001: 37) *Accounting for the environment*

There have been trends of increasing environmental disclosure. Deegan and Gordon (1996) reported that 36% of their sample of Australian companies reported environmental data in their 1991 financial statements, and they found that most of the reports were descriptive or qualitative in nature and commented on positives, ignoring the negatives. Gibson and Guthrie (1995) undertook a study of the 1994 annual reports of listed Australian companies and found that 53% of their sample reported environmental data, suggesting an increasing trend[25]. Similar studies in the US (Gamble et al. 1996) and the UK (Harte & Owen 1991) have noted significant increases in the amount of environmental disclosure in annual reporting in this period.

Tilt (1994) surveyed pressure groups and found that they use annual reports as an important source to access environmental and social data on companies. She found that 82% of lobby groups used social disclosure in corporate reports, and 52% actively sought such social information. These findings are supported by a study by Deegan and Rankin (1997), which surveyed users who believed that environmental data was material to their decisions, and that they referred to annual corporate reports for such information.

Within the accounting profession, findings suggest that a significant proportion of accountants support the view that accounting should address environmental issues and that users of annual reports need such information (Bebbington et al. 1994). However, despite all this agreement there has been little change in or response by the accounting profession (KPMG 1992, Gray & Owen 1993).

Until recently, society considered economic performance as the sole criterion to assess the legitimacy of an organisation (Heard & Bolce 1981), however this no longer holds true. Modern society now also expects business to " make outlay to repair or prevent damage to the environment, to ensure health and safety of consumers, employees and those who reside in communities where products are manufactured and wastes are dumped" (Tinker et al. 1987: 173). The premise of corporate social reporting is based on the legitimacy theory where "an organisation

[25] These studies (Deegan & Gordon 1996, Gibson & Guthrie 1995) were not conducted on the same sample of companies, and were undertaken three years apart, and thus only general comparison many be made between their findings.

must appear to consider the rights of the public at large, not just those of its investors"(Deegan & Rankin 1997: 565). Deegan and Rankin (1999) found that most shareholders and individuals within an organisation consider environmental information to be material to decisions that they make. However, external users still consider financial data to be the most important factor in their decisions.

In their study, Deegan and Rankin (1999) found significant differences in factors that influenced users and preparers of environmental data, including the following:

- Users considered the information important to their decisions,
- Users did not believe that environmental disclosure should be voluntary, and
- Users also believed that the government and the accounting profession should provide guidelines on such reporting.

These differences amongst others, give rise to an expectation gap, that is, there is a significant difference in disclosure expected by users and preparers of CSR.

The concept of an expectations gap is not a new concept (Liggo 1974) nor is it peculiar to environmental reporting. It is most commonly encountered when auditors explain the differences between the functions that they perform and what the users and general public expect of them i.e. the degree of reliability that their report adds to the statutory accounts (Power 1991).

Gray and Bebbington (2001) suggest that the causes of the expectation gap include:

- Users having greater knowledge of what information they need,
- Users having greater expertise in terms of what information may reasonably and affordably be presented (which is what they would expect), and
- Some preparers have far less knowledge, and present less than others.

Users have more specialised knowledge, and it is asserted by Gray and Bebbington (2001) that people's attitude towards the environment is shaped by their knowledge and how they think.

4.4.6. Conclusions on the perception of effectiveness and adequacy of CSR

There is strong evidence to indicate that markets do take into consideration CSR disclosure (Belkaoui 1976, Ingram 1978, Anderson & Frankle 1980), and hence such disclosure is considered to be significant by shareholders and financial institutions. There is significant international evidence (Tilt 1994, Deegan & Rankin 1997, Adams 2002, Buhr 2002) as well as South African evidence (De Villiers 1996, De Villiers 1998, Stainbank 2003, Mitchell & Quinn 2005) to indicate stakeholders' perceptions of the significance of CSR, as well as the need for greater amounts and details of such disclosure. The South African work has tended to concentrate specifically on employee reporting (Stainbank 2003) or environmental reporting (De Villiers 1996, Mitchell & Quinn 2005), and thus a need exists to survey stakeholders' perceptions regarding all aspects of CSR.

4.5. CSR modelling

4.5.1. Review of Modelling

Early models of CSR tended to focus on developing the equivalent of financial statements, for example Linowes (1972) and Dilly and Weygandt (1973), developed a funds flow statement. Ramanathan (1976) proposed objectives and concepts for social accounting, including the concepts of social return and overhead.

Corcoran and Lieneger (1970) suggested that companies should produce environmental exchange reports considering inputs and outputs of physical and human resources. Beams (1970) proposed creating an 'Industrial Site Deterioration' account (debit = expense) and a contra-account, the 'Allowance for Industrial Site Deterioration' (credit = balance sheet provision[26]). Marlin (1973) argued that companies should report on pollution output, comparing with legal standards and also possibly with best available technology standards. Marlin (1973) noted that if environmental liabilities were not being accrued, this would imply that these costs were not being incorporated into the determination of profits. Seidler (1973) developed social income statements for profit and non-profit organisations, while Estes (1976) developed a comprehensive social accounting model that accounted for all the impacts of a company, the activities of its directors, shareholders and

[26] The equivalent of accumulated depreciation on plant and equipment.

employees. This was (and still is) a very powerful model. Subsequent to the emergence of the concept of sustainable development, Rubenstein (1991) proposed the creation of a natural capital account, which could be separately disclosed in the financial statements, and Gray (1992) suggested the use of non-financial accounts to account for the biosphere.

Of the early contributors, two names stand out, Ullmann (1976) and Estes (1976). Ullmann (1976) proposed a corporate environmental accounting system (CEAS), using non-monetary 'equivalent factors', and a balance sheet with inputs and outputs, and reducing for the cost of outputs to other manufacturers as their inputs. The model of Estes (1976) reflected social impacts as benefits or costs, and included significant environmental factors. It was a complex model (Mathews 1997) in that it required valuations of such impacts and discounting of future costs. Estes (1977) developed this model further by developing columns to show the impacts for major stakeholders. Although models Estes developed have been criticised as being unrealistic and overcomplicated, they represent perhaps the most sophisticated models developed to date, and are congruent with many of the concepts suggested in this thesis. It is argued that both valuation models and environmental modelling have developed to such an extent that data required for these models, while still difficult to determine, can now be reliably estimated.

In contradiction to the work of Estes (1977), Dierkes and Preston (1977) argued that while a proposed reporting system needed a systematic framework, this did not necessitate bringing everything to a common financial valuation. They proposed a model of inputs and outputs, described in non-financial terms. Their model consisted of inputs and outputs, giving descriptions, a measure and further relevant data for each core area. They identified energy, air-pollution, noise, water-pollution, solid-waste, landscape despoliation, raw materials, packaging and transport as being core environmental areas for reporting. They also went as far to as suggest appropriate measurement scales for the various inputs and outputs.

Mathews (1997) notes that the 1980s saw a limited amount of work on model building, with Burke (1984) designing a social accounting information system and Brooks (1986) recommending a corporate social performance framework. Mathews

(1984) suggested a conceptual model for the categorisation of socially orientated disclosures while Wartick and Cochran (1985) developed a corporate social performance model.

The 1980s was a period in which much debate occurred regarding whether accountants should be extensively involved in social and environmental accounting at all[27] (Benston 1982, Schreuder & Ramanathan 1984). In this period, the social audit was introduced by Social Audit Limited amongst other bodies (Gray, Owen and Maunders 1987)[28].

Early accounting frameworks such as that of the AICPA (1974) did not accept a social dimension, or were not widely accepted by accountants (Mathews 1997). Mathews (1997) commented on the need for theoretical principles to CSR, which need became evident in the 1990s and he referred to Gray (1995) and Gray et al. (1995). This period was also characterised by the incorporation of the concept of sustainability (Gray 1992, Bately & Tozer 1993, Geno 1995). Modelling remerged again in the 1990s (Gray et al. 1996, Schaltegger et al. 1996, Schaltegger and Burritt 1999, Mathews 1997, 2002), during which period Bebbington and Tan (1996, 1997) developed an experimental accounting system to account for the notional cost of sustainability. Cost and Management Accounting has also in recent times been brought into the CSR field (Milne 1996, Bailey and Soyka 1996, Ramanathan and Ditz 1996, Larsen and Brown 1997, Roth and Keller 1997, Parker 1997, Freedman 1998, Carrera and Iannuzzi 1998, Coorigan 1998, Schaltegger and Burritt 2000).

The trend of the late 1990s (Elkington 1997), which has dominated CSR in the current millennium, is that of triple bottom line reporting, as endorsed by the GRI, including in South Africa (O'Riordan, Preston-Whyte, Hamann & Manqele 2000, Oelofse & Scott 2002).

[27] Refer to arguments under Section 3.4.1.
[28] Refer to Section 3.5.3 for further developments of the social audit.

4.5.2. Key CSR Models

4.5.2.1. CSR Modelling in South Africa

Although there has been significant work undertaken in South Africa on CSR (Savage 1994, Dewar 1994, De Villiers 1996, Vorster & Lubbe 1994), there have been no new modelling attempts (Holcroft 1999).

4.5.2.2. Dilly and Weygandt (1973)

Dilly and Weygandt agued that the cost (outlay) presentation would be the best method of presenting data on social performance, where companies show how much they have spent on each activity, but this information should be supplemented by qualitative non-financial data. They suggested that such a report should also include:

- Details of an independent social audit,
- An overview of the company,
- Details of the community it serves and how it does so,
- Key data on emissions, water usage, with comparison against standards,
- A statement on occupational health and safety,
- Detail of employment, including minorities, and
- Statements of funds flow for socially relevant activities, whereby activities are allocated some form of cost.

4.5.2.3. Ramanathan (1976)

Ramanathan's article on corporate social accounting was the first and only such CSR article ever accepted by the Accounting Review (arguably the most prestigious journal in accounting) on CSR, which in itself makes it significant. He notes that accounting normally involves four components, namely: a framework of objectives, valuation concepts, measurement Methodology, and reporting standards. Ramanathan's concern was with the development of the framework. He made two overriding assumptions: solutions to current social problems require active involvement of business; and measurement of current financial performance is inadequate and a broader measure of corporate performance is needed. He considered that the problem would need to be looked at from two levels: a macro-level looking at what social performance is and how is should be measured and evaluated; and a micro-level, developing criteria for specific firms as well as information systems. He

identified that companies have two roles, namely that of the delivery of some socially useful goods or services, and that of the distribution of economic, social and or political rewards to social groups from which it derives its power.

From this he developed three overriding objectives for social accounting, that is to: identify and measure the periodic net social contribution of an individual firm; determine whether a firm's strategies and practices, which affect the resources and power of individuals and communities, social segments and generations are consistent with the accepted social norms, as well as individuals' aspirations; and make available reports (on costs versus benefits), with respect to the firm's goals, policies, programmes, performance and contributions. Such information must provide accountability and facilitate public decisions and resource allocation.

Ramanathan (1976), concluded that the limitation of present AFS was that they do not account for non-market transactions and externalities, which he classified as social transactions. This form of accounting then led to the following components which he defined as:

- Social transaction: the delivery or utilisation of a socio-environmental resource,
- Social overhead (returns): the sacrifice or benefit from those resources consumed or added.
- Social income: the net periodic contribution,
- Social constituents: the distinct social groups with whom the firm is assumed to have a social contract e.g. clients, employees, communities etc.
- Social equity: the aggregate claims each constituent is presumed to have with the firm,
- Social asset: is the aggregate non-market contribution the firm has made to the communities well-being.

It is useful to note that Seidler (1973) proposed a similar system for companies with a social income statement with benefits being defined as socially desirable outputs not sold, and costs being defined as socially undesirable effects not paid for such impacts as pollution and health problems created by the companies activities. However

Ramanathan's (1976) work was unique in that it proposed the development of a framework of socially acceptable goals and indicators as a major requisite to future progress in CSR. The author suggests that this normative aspect of CSR has still to be adequately resolved.

4.5.2.4. Estes (1976 & 1977)

Estes (1976) developed a social 'income' statement, which required summation of positive social benefits created and subtracting summated social costs. These benefits and costs are discounted over the time period for which they will be experienced or used or enjoyed. The overall costs and benefits are not netted, and he proposed an extensive 'income' statement detailing major categories.

His model did account for the impact of actions of directors, shareholders and employees, but did not account for the effects of the users (pollution), nor the suppliers since that was argued to be double counting. It did however account for substitutes.

In a follow-up paper, Estes (1977) suggested separate columns for different activities, which lends itself to matrix accounting. Although there have been several theoretical papers on matrix accounting, these are mathematically based without consideration of measurement or disclosure of social factors and hence are not discussed further in this thesis, which is focussed on improvements to existing reporting.

4.5.2.5. Wartick and Cochran (1985)

Wartick and Cochran (1985: 758) cite Bowen (1953: 6) who states "that business have an obligation to pursue those policies, to make decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society", and suggest that he started the modern debate regarding corporate social responsibility. They identify three challenges to social responsibility:

- Economic responsibility, which seeks to maximise corporate profits at the expense of all else,
- Public responsibility, whereby the state is seen to be protecting the interests of the public, but also serving the interest of business,

- Social responsiveness, which shifts attention away form the social contract i.e. what they should or should not be doing, to what they are doing.

Wartick and Cochran (1985), argue how each of the above challenges can be integrated with the objectives of corporate social responsibility.

4.5.2.6. Gray (1992)

Gray defends systems thinking by saying that it provides powerful insights into the social sciences (Lowe & McInnes 1971, Lowe 1972) despite major criticism (Hooper & Powel 1985), and particularly 'soft systems' theory, which lends itself particularly well to both ecological and social systems on which CSR is based. Gray (1992) reviews several possible principle-based approaches, but ultimately, suggests that despite its shortcomings a 'deep green' approach would provide the most comprehensive challenge. He refers to his previous work of 1990 with some specific suggestions, that there should be:

- Compliance and ethical audits,
- Waste and energy audits,
- Environmental budgets,
- Use of EIAs, environmental hurdle rates, and best practical options,
- Environmental and social reporting, and
- Environmental asset accounting and maintenance.

He suggests a simple system (Gray 1992) with input data, processing data and output data. He also stresses that accountability (and hence the data) need not be in current financial units, and that appropriate valuation approaches would be needed. However, such a system in itself would not discharge a company's responsibility to be accountable, but rather the data would need to be placed in the public domain, i.e. reported externally. He also suggested that such a system would need to account separately for critical natural capital, sustainable natural capital and man-made capital, as well as distinguishing between primary resource inputs, input of waste sink capacity, and stewardship assets. This would probably need a parallel accounting information system to calculate the full cost of transactions. Finally, he notes that the

result would most likely indicate that: "no Western company has made a sustainable profit for a very long time, if at all" (Gray 1992: 419)

4.5.2.7. Christophe and Bebbington, the French Bilal (1992)

Christophe and Bebbington (1992) conclude that through using the principles of the French Bilal it is possible to develop a standardised (but general) environmental statement, which provides for financial and non-financial data (which the French Bilal provides). Such reports would have defined reporting categories, for example water pollution would provide details of organic nitrogen, organic phosphorus, oxides, heavy metals etc. For each category they suggest reporting the following aspects:

- Actual pollution levels of the previous reporting year,
- Expected levels of current year based on previous years technology but current year's production,
- Expected levels for current year on current years technology,
- Actual pollution level current year,
- Gross change in pollution, and
- Spilt between change in production, and change in technology.

This approach provides useful data that facilitates an effective assessment of the company's performance with comparison to prior years (relevance, and comparability). The prescription of key reporting criteria for each source of output and waste also ensures potentially dangerous pollution (per defined categories) is reported. However the author argues that such a 'laundry list' approach does not ensure completeness nor reliability, and a more principle-based approach would.

4.5.2.8. Schaltegger, Meuller and Hindrichsen (1996)

Schaltegger, Meuller and Hindrichsen (1996) published one of the first and most comprehensive books on environmental accounting in which they differentiated between environmental accounting, which essentially represents traditional accounting in monetary units, specifically differentiated to account for environmental costs, and ecological accounting which deals with physical units. The aim of ecological accounting is "to promote sustainability" (Schaltegger et al. 1996:122), and should "measure environmental impact added and eco-efficiency". Eco-efficiency (Schaltegger & Sturm 1990) measures the desired output as a ratio to the

environmental impact which they then go on to differentiate from ecological product efficiency, ecological function efficiency and economic-ecological efficiency. They also use the distinction drawn by Grey and Owen (1993) between critical and other natural capital and artificial capital. This distinction is applied in this thesis (refer to Chapter 7). They suggest an eco-asset sheet, and an environmental impact added statement, listing all inputs and outputs. The input-output account or Okibalance (mass balance) is critical in ensuring all outputs are accounted for. Schaltegger et al. (1996) consider the principles for an ecological conceptual accounting framework (as discussed in Chapter 7), and the principles of their work have had a major impact on environmental accounting and reporting, and on this thesis.

4.6. Conclusions

In this chapter literature relating to prior research on CSR has been reviewed. The historical development of CSR was reviewed, from its emergence in the 1970s to its re-emergence into prominence in the 1990s. It was noted that significant research has been dedicated to reviewing the nature, amounts and trends in CSR disclosure. Extensive research has also been conducted into determining the effectiveness of CSR and has examined the market effectiveness and external assessments of its effectiveness.

Research relating to the perceptions of stakeholders was also reviewed, and looked at limitations of both traditional accounting and CSR. Specific limitations of existing CSR and CSR systems were noted. It was recorded that limitations are perceived to exist with respect to stakeholders' expectations of present CSR disclosure, including that in South Africa. It was noted that stakeholder surveys of environmental, employee and general CSR in South Africa have been limited to select stakeholder groups.

CSR modelling was also reviewed, including more of the most cited modelling attempts. Such modelling did not always include an attempt to test the practical application of such models, nor the relevance of the proposed outputs to stakeholders. No significant South African models were noted.

Thus the author proposes that the following gaps exist in current CSR research in South Africa:

i) No comprehensive survey has been undertaken of all major stakeholder groups. Clearly difficulties related to surveying many such groups would have limited previous work. Such limitations will affect this study.[29]

ii) There is no evidence of significant work on CSR modelling in South Africa, although conceptual work has been done (Vorster & Lubbe 1994). The author suggests this could be partially explained, as there would be little reason to motivate such work as international models would be applicable in South Africa.

iii) There is no evidence of research in South Africa, to assess what practical challenges, would inhibit the application of CSR by businesses.

The author postulates that, arising out of limitations of previous research in South Africa, the following would need to be done to improve CSR:

- Identify and address (where possible and reasonable) all key stakeholders' needs,
- Identify areas of CSR with which stakeholders are dissatisfied, as being priority areas,
- Develop a conceptual framework, with principles as the basis for CSR models and disclosure,
- Develop a comprehensive CSR model, from an underlying framework, and
- Identify which areas (per the above model) can and which cannot be measured and reported.
- Identify areas, which companies currently do, and do not measure, and why not i.e. challenges to the implementation of a CSR model.

As noted in the above gap and limitations analysis, there exists the need to conduct a comprehensive survey of all significant stakeholder groups in South Africa, regarding all aspects of CSR, which is what will be undertaken in Chapter 6. In Chapter 5 the methodology developed for this component of this study is set out. Also set out is the

[29] Refer to Chapter 5 with respect to limitations in methodology for stakeholder survey.

research approach, developed to address the other limitations of prior research as noted in the above listing.

CHAPTER FIVE
METHODOLOGY

5.1. Context to the study and the selected methodology

5.1.1. Summary of the problem statement

It is submitted that the annual reports presented by companies on their various business activities are inadequate in that they present in sufficient information on the impact of such activities on affected stakeholders and the environment, to enable such stakeholders to make effective decisions and take appropriate action thereon. Thus, the corporate reports do not adequately account (to stakeholders) for corporate activities. The present format of the annual report provides only select information to users, specifically designed to engender confidence in management, and to promote investment in such a company (Gray et al. 1996). As noted in Chapter 4, many social and environmental reports, which are included in such annual reports, are presented to improve the corporate image of their company (Rubenstein 1989), and do not necessarily provide full and meaningful disclosure. Thus, the overall aim of this thesis is to determine what measures are needed to improve present CSR in South Africa. This aim (and resultant objectives) will be considered not only theoretically, which will require the development of a conceptual reporting framework (similar in principle to the accounting framework), but also applied from the perspective of the users of such reports, namely the stakeholders. Thus, this thesis will draw conclusions regarding a specific property (namely orientation i.e. perceptions and attitudes), of one of the objects of the study, namely the stakeholders of corporate reporting.

Comprehensive CSR guidelines already exist (GRI 2000), however limited numbers of companies in South Africa actually report on these (KPMG 2004), and where such reporting exists, significant limitations of such reporting have been noted (Chapter 4). For CSR to improve (in terms of stakeholder perceptions) areas considered important to key stakeholder groups would need to be reported upon, and for such reporting to be possible, such areas must be reasonably measurable. In order for CSR to improve, improvements may be required to measurement, recording and reporting systems. This thesis identifies where such possible improvements are needed, and what challenges (perceived and actual) exist to achieving such improvements. The thesis also determined, with respect to all significant areas of CSR disclosure, which are

measured in practice, and where such areas are not measured, (or only partially measured), and the apparent reasons for this lack of measurement.

5.2. Plan for the research

5.2.1. Aims

The overall aim, research questions and objectives for the study, were established in Chapter One. To achieve the specified objectives, the study was grouped into three integrated phases as also noted in Chapter One. The overall aim and objectives of the study are grouped in the appropriate phases. The aims are specified in this section, and the objectives in Section 5.2.2.

Part 1:

To determine the perceived limitations of existing CSR in South Africa and specifically what would need to be addressed to develop an improved system.

Part 2:

To develop a conceptual framework of interactions and impacts that result from business activities and model a CSR system thereon. To consider the theoretical validity and completeness of the model developed in this thesis.

Part 3:

To determine which aspects of the proposed CSR system could be implemented by industry, by assessing the readiness of companies to report on key areas, and if not why they cannot report. If it can be established why they are not in a position to report, then it can be determined what measures could be adopted to change this.

5.2.2. Objectives

The objectives of the study are thus grouped according to above parts.

Part 1:

i) To identify and group, all possible material (that is significant) effects of core corporate activities,

ii) To develop a conceptual model[30] relating to these impacts and activities,

iii) To determine stakeholders' (users and preparers) views on the possible relevance of such information,

iv) To determine whether each of these aspects (of corporate activity) are adequately described in the corporate reports (and any specific component of the annual report including the AFS and CSR), in the view of the stakeholders,

v) Thus, to determine what areas of corporate activity are not being adequately reported, in terms of the model developed in (ii) above, and to determine the perceived importance of these areas,

vi) To determine the perceived limitations and inadequacies of existing CSR in its current formats.

Part 2:

i) To develop a conceptual framework of the principles for a CSR model,

ii) To review the conceptual model of interactions (as developed in Part 1) relating to the impacts and activities, and identify possible key reporting issues,

iii) To determine, for all key reporting issues, if and how these could be measured, recorded and reported,

iv) To synthesise the above into a reporting model,

v) To assess the reporting model for validity,

vi) To assess the reporting model for completeness.

Part 3:

Note: it is assumed in this part that if all companies reported on all areas in the above model, this would result in (theoretically) improved (ideal) CSR.

i) To assess whether all key areas can be or are:

- Measured,
- Recorded, and
- Reported,

[30] This model will need to be generic enough, so that any specific report on corporate activities can be based thereon. It will also need to be the basis for any conclusions and suggestions arising from the study.

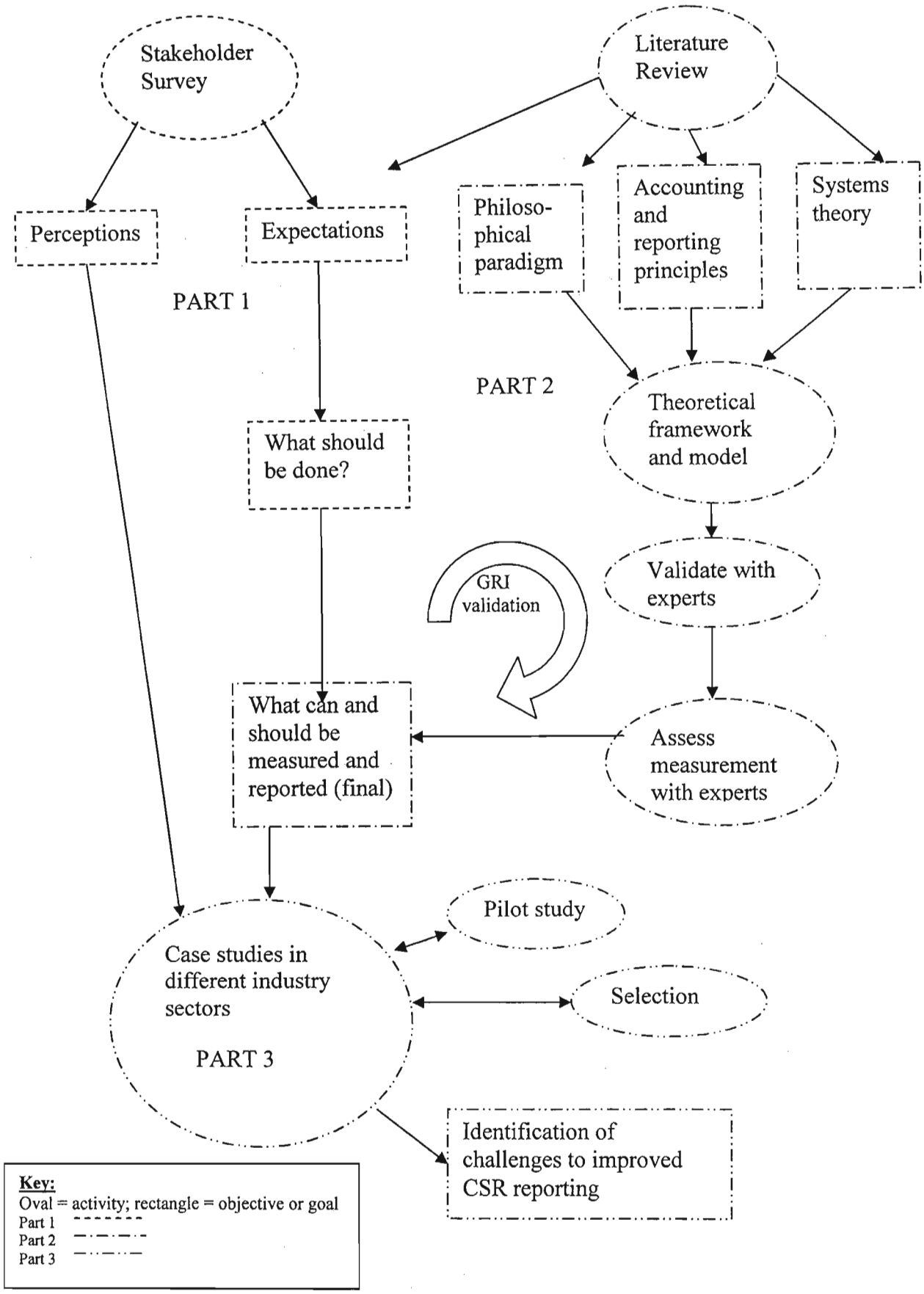
by South African companies in all major sectors,

ii) To determine where key areas are not presently and comprehensively measured, recorded and reported (MRR), and why this is not so,

iii) To suggest potential generic (not detailed) solutions to overcome the reasons for the limitations identified in (ii) above.

These three parts to the study have been represented diagrammatically in the Figure 5.1. This flow chart illustrates the steps within the thesis starting with a literature review, part of which determined the background to possible stakeholder expectations. These stakeholder expectations and perceptions were measured in a comprehensive survey, which forms the first part of the thesis. The literature review informed an appropriate philosophical paradigm. A review of accounting and reporting principles, in the context of systems theory, was the basis for the development of a theoretical framework and reporting model, which formed the second part of the thesis. The findings of the stakeholder surveys were considered in the development of such a model. This model was validated by using a process of peer and expert review with comparison against the international best practice model, namely the GRI. Experts were also used to provide feedback on potential measurement challenges of the model. The third part of the thesis comprised a multiple case study, to assess the challenges to potentially implementing a comprehensive CSR model in industry. This case study was conducted in a selected large metropolitan area, with a diversified industry base.

Figure 5.1: The relationship between the major components of the thesis



5.3. Part 1: Detailed methodology

5.3.1. Aim

To determine the perceived limitations of existing CSR in South Africa, and thus specifically what areas need to be addressed to develop an improved system.

5.3.2. Objectives

These objectives were detailed for Part 1 in Section 5.2.2.

5.3.3. Hypothesis

Hypothesis:

The annual reports of companies, including the AFS and any CSR, (using existing principles and monetary values, in their existing format and components), do not adequately account for the full impact of all material corporate activities to relevant stakeholder groups.

Null Hypothesis:

The annual reports of companies, including the AFS and CSR, (using existing principles and monetary values, in their existing format), do adequately account for the full impact of all material corporate activities to relevant stakeholder groups.

Note: Hypothesis 1

1) To disprove the null hypothesis it should be necessary only to prove that any aspect (of importance to a relevant stakeholder group) is not perceived to be adequately reported by annual corporate reports i.e. is negative. This can be done with formal statistics, or informally by deduction (refer to Table 6.2).
2) The basis of this test is public perceptions namely opinion, and cannot be proved objectively i.e. on facts alone. However, this is not necessary since relevance and accountability (both subjective concepts) are being tested.

5.3.4. Detailed methodology

5.3.4.1. Development of a conceptual framework for comprehensive corporate reporting

A review was conducted of national and international literature on the following fields

- Corporate social reporting,

- Environmental reporting,
- Alternative forms of corporate reporting, and
- Value added statements and employee reporting,

Any and all concepts that could be relevant to an integrated comprehensive reporting model were considered.

5.3.4.2. Determining the materiality and perceived effectiveness of current corporate reporting to key stakeholder groups

The most effective technique for obtaining a representative and widely dispersed sample of stakeholders is the use of self-administered questionnaires. Other techniques such as interviews require extra time, the presence of the researcher, and unless advanced psychological tests are used, do not necessarily determine actual, as opposed to perceived beliefs. Thus, in the interest of obtaining larger and more diverse (and hence representative) sample, the questionnaire was selected as the appropriate technique for this study. However, it must be noted that certain stakeholder groups were unlikely to respond to self-administered questionnaires, and thus for these an alternative approach was used. Such groups are noted in the following section.

5.3.4.3. Sampling

The entire population of stakeholders of corporate reporting in South Africa is potentially the entire population of 46 million. This would be practically impossible to sample. Thus, this study focused on key groups representing the population with respect to their respective vested interest in corporate reporting.

The stakeholder population could be broken down into several groups and subgroups, however the exact sample size required for statistical significant testing within each of these groups and subgroups, was dependent upon the questionnaire itself. The number of variables needed to be known, which (for the required power level of 0.90), would determine the sample size for each group. For each of the groups and sub-groups, three questions pertaining to sampling are addressed, namely:

- What group would be sampled? (It is assumed for the larger groups that random samplings were to be used e.g. CAs, whereas for the smaller groups the entire population were to be selected e.g. environmental pressure groups)
- What does that group represent?
- How will it be accessed?

In addition, the exact size of the sample (where the entire groups' population is not being used), was to be determined using statistical power analysis (Kramer & Thieman 1987).

The stakeholder groups as identified by Gray et al. (1992) are:

i) Employees, employment and job creation groups and trade unions,
ii) Communities, society, pressure and advocacy groups,
iii) Customers,
iv) Suppliers,
v) The state, local and provincial government, and foreign governments,
vi) Competitors,
vii) The stock markets, financial markets and their intermediaries,
viii) Creditors and banks,
ix) The media,
x) Industrial bodies, peers, and
xi) Interested persons concerned with the impacts on non-human life, and future generations of human life.

Table 5.1 below details how each of the above stakeholder groups are represented in South Africa, and provides an assessment of whether such groups can be accessed with the intended primary survey instrument, namely a self completing questionnaire.

Table 5.1: Stakeholder groups selected for survey and details of access

No	Group	What group will be sampled?	What does that group represent?	How will it be accessed?
i	Employees	Employee Groups and Trade Unions	All change effected by companies happens through people, the employees. These groups are also significantly affected by companies since their entire livelihoods depend on their employers (said companies).	The entire population of registered trade unions in South Africa: the Department of Labour's database was used.
ii	Community, Society, Pressure and Advocacy Groups, Others	Community forums, health and safety, anti-globalisation, social aid groups and NGOs	These groups represent collective interest of the public in other aspects of corporate behaviour.	Purposeful or convenience sampling. Limited numbers of these groups have websites, however a comprehensive database of all NGOs registered with the Department of Social Services exists (per province), so this was used as the population from which a sample of 50 was selected, as a test sample. However, a low (unusable) response was received so a selected leader of a representative organisation was selected for the alternative interview technique.
iii	Customers and Consumers	Customers and representative groups	These persons are in the best position to judge whether services and goods supplied are socially acceptable. In the case of corporate customers, these persons need to assess whether they are prepared to trade (buy) from companies, in terms of the upstream impacts of the supplier, which then become part of their product.	There were only three consumer organisations identified from the advocacy groups, which would be inadequate for a survey. It would be impossible to survey all consumers in the country (46 million); hence the alternative technique of a personal interview with the CEO of the leading consumer organisation was arranged. In the case of corporate consumers, these would also be represented by the person selected in the following category (iv).

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iv	Suppliers	Suppliers and their representatives	These persons need to assess the downstream impacts of their products. In terms of the principle of from the 'cradle to the grave', these parties could potentially be held accountable for pollution caused by their products.	The population of this group is every formal and informal business in South Africa, which would be impossible to identify, and impractical to survey. Thus the CEO of a major purchasing (supply chain) institute was identified, and interviewed.
v	Government	The departments of Agriculture and Environmental Affairs, Environment and Tourism, and Social Welfare	These groups represent the interests of the general public as embodied in policy and legislation.	Government employees in South Africa are considered to be overworked, and lack the capacity to attend to tasks over and above their allocation, hence they would be unlikely to respond to any questionnaire Thus the alternative technique of interviewing senior representatives from the above government departments was selected. (Note: government representatives, will be excluded from the environmental stakeholder group, and will be included in the above subgroup).
vi	Competitors	Competitors of reporting companies	These companies may benchmark themselves against the reporting entity, or strive to obtain a competitive advantage over such companies with respect to social and environmental deliverables and impacts.	This population groups also potentially represents every business in South Africa, which is impossible to identify, and would be impractical to survey. Hence no survey will be conducted. No representative body as such exists, however responses from groups (iv) and (x) would also be applicable, as these persons would be also be very much aware of their needs with respect to their competition. (Note Mitchell and Quinn 2005, surveyed the top 300 listed South African companies to determine their attitude towards CSR, and levels of reporting, refer to Chapter 4 for details).

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vii	Stock Markets, Financial Markets and their intermediaries	Two specific subgroups will be selected to represent these sectors, namely CAs (Chartered Accountants) and CFA's (Certifid Financial Analysts). These two professional groups are considered to represent the leading professionals working in this field, representing the various institutions, as well as the investors in these markets		
vii(a)	Chartered Accountants	These are the companies and their employees, who prepare the corporate reports. The actual individuals who prepare the annual reports are almost exclusively Chartered Accountants (CA/SA designation) by profession.	These are the people that most understand the current preparation and presentation of annual reports. Within legislation they also influence what is included and excluded.	The membership database of the South African Institute of Chartered Accountants (SAICA) of 16000 members was accessed from which a sample of 300[31] members was randomly selected (Sample was provided by the institute, for privacy purposes).
vii(b)	Investment Brokers and Fund Managers (representing CFA's)	All public / institutional, private and professional investor groups	Investors represent the net interest in organisations (they stand to loose the most). They also provide the most significant finance, and directly or indirectly have control over corporate activity. They are responsible but not accountable.	Purposeful and convenience sampling Public / institutional: Purposeful selection of unit trust managers, asset management unit managers, (as determined, by the listing in the Financial Mail 2003), and all Brokers as listed in the JSE Handbook. Note the original method was to be a random selection of 300 members from the database of SA CFAs. However, the SA institute turned down an application twice to allow the author permission to access this database. The alternative approach above represents a limited listing of these professionals.

Continued below…

[31] Refer to section 5.3.4.6 for commentary on the sample size

Continued…

viii	Banks and Creditors, Providers of Debt Finance / Capital	All commercial and Merchant banks. However, credit bureaus and micro-lenders will be excluded since these deal primarily with individuals	These groups represent the interest of the debt capital and are concerned with going concern or solvency, liquidity and cash flows. Note, in the USA banks who lend money to corporations to acquire property or plant; can be held financially liable for any clean-up costs associated with the activities of these companies.	Purposeful sampling of the entire group as defined above, as registered with the FSB (Financial Services Board).
ix	Media	Public press, radio, and journalists	In a democratic society, the right of access to information is considered a given, and the media access such information that is of interest to various stakeholders.	Only select journalists, would be interested in environmental and social issues resulting from corporate activities. There are no ready means to determine this whole population group. and a survey of all the members of the SA Journalist Union, would be inappropriate. Thus, an interview was arranged with a leading regional environmental journalist selected by identifying the most number of environmental related articles over a period of three years, from online public newspapers in KwaZulu-Natal.
x	Industrial bodies and professional peers	Industrial and business professional associations	Such collective bodies may wish to influence members and set guidelines to regulate their industry.	This is a broad category, and includes many industry types and professionals. Many such institutes and bodies would have very little formal interest in CSR, and very few responses would be expected. Thus an interview will be arranged with a senior executive of the Chamber of Business to gauge its views on this matter.

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xi	Non Human life, and future generations of humans	Formal Environmental Pressure and Concern Groups, and activists, Conservationists, (Note Mitchell and Quinn 2005 surveyed environmental consultants and professionals)	These groups represent the formal collective interests of all stakeholders in the protection of the environment.	The entire population as reflected in the latest Enviropedia (Hoogervorst & Hoogervorst 2001), together with all environmental and animal welfare related organisations register with the Department of Social Welfare, which comprised a group of just less than 300.

5.3.4.4. Data collection

For the Surveys

A self-administered questionnaire was used as the instrument for the data collection. The questionnaire incorporated features of those used in previous studies that focused on the usefulness of annual reports (Flynn 1987, Peebles & Stainbank 2003). However, it was significantly different in that it was looking at the broader picture of the full range of impacts of corporate activity, as perceived by all key stakeholders. The questionnaire was based on a matrix format, covering all major corporate activities and potentially affected, or interested, stakeholders. The questionnaire is included as Annexure 1.

The questions were primarily closed ended, with yes /no type questions and Likert scaled opinions. The questionnaire was pre-tested for reliability and validity, using a staff sample in the School of Business at the University of KwaZulu-Natal.

The questionnaire was posted with accompanying letters (on university academic discipline letterheads), and with addressed postage paid return envelopes. Repeat letters were sent out as a follow-up.

Where e-mail addresses were available, electronic copies rather than hard copies, were sent out. Returned questionnaires were filed, then captured on a SPSS version 11.5 spreadsheet.

For the interviews

For the personal interviews a semi-structured interview was conducted, with a questionnaire (see Annexure 2) used as a guideline. Results were summarised and tabulated.

5.3.4.5. Data analysis

For the interviews

The results of the interviews were compared for the structured questions, and the discussions were reviewed for common themes.

For the survey

The data from the returned questionnaires were captured on a SPSS spreadsheet, with each group (user or preparer) and subgroup in the case of users, denoted.

The following analyses (but not limited to this alone), were run on the data:

- Median and frequency distributions, possibly with inter-quartile ranges. Note: due to the non-parametric nature of the data, means and standard deviations were not appropriate.
- Kruskal-Wallis two tailed tests to determine if there are any significant differences between the various groups.
- Correlations tests to determine if any of the demographic data, such as the respondents' level of education explained their answers.
- Detailed frequency analysis of perceived, materiality and adequacy of areas covered by existing reports, and where in such reports i.e. which components.
- Analysis and interpretation of perceived responsibility and accountability.

Five specific tests were conducted as detailed in Table 5.2 below.

Table 5.2: Details of statistical tests run on data from stakeholder survey

No	Purpose	Questionnaire section	U=	Possible conclusion
i	To determine whether specific areas of corporate activity are considered to be material	Answers to part A of the questionnaire would need to indicate these to be important i.e. a score of at least 3	So u = 3	Then if the median (mean) =/> 3, for any group this is satisfied
ii	To determine if any group is unsatisfied (with current reporting)	Answers to part B would need to be at least 2 i.e. consider corporate reporting to cover these specific areas fairly well	So u = 2	Then if the median (mean) < 2, for any group, this would indicate a potential failure of corporate reporting
iii	To determine whether there are significant differences between the groups. Here it will be necessary to prove that the responses are statistically different (not that the means/medians differ)			
iv	To determine if there is any significant correlation between the demographic details and the answers of the respondents. It would be ideal to have control groups for each of the five factors identified that could significantly affect responses, however identifying such groups would be impossible. Thus this objective is just to determine the degree of correlation if any, and hence to then consider its impact on the results as a confounding variable. Note: the only assumed variable is the respondent's membership of their particular group.			
v	Degree of variance between groups. This will be determined as a measure of consistency within and between groups			

5.3.4.6. Determining sample sizes

In order to ensure the validity (and strength) of the results of the above analysis, consideration was given to the sample size required to ensure satisfactory power. This is shown below in Table 5.3.

Table 5.3. Sample sizes for statistically significant results

Sample size for the following tests	Details for significant differences	Implications for z-score
i & ii	For both of these tests the implications are similar. Example for test 2, The u_0 = specified value = 2 (adequately represented) What difference would be significant i.e. 1(inadequate) – 2(adequate) = 1 difference? Would also assume narrow distribution, so the standard deviation = 1	Hence the z-score = $(u-u_0)$/standard deviation = 1/1 = 1 So for a 90% power, and significance of 5 %, for a one tail test, this would give a required sample below 10 i.e. 9 (Kramer & Thieman 1987)
iii	This test is a balanced ANOVA to determine significant differences	Assuming a difference of 0,5 between groups to be significant, this would give a z-score of 0,5/1 = 0.5. This would require a sample of 73 at a 90% power and 5% significance. (Kramer and Thieman 1987)

With a sample of 300, and assuming a response of 20%, this would calculate to a sample of 60. Hence, it would result in less than 90% power (per table 5.3 above) but greater than 80%. However, a more realistic response of 10% (Mitchell & Quinn 2005) to such a technical questionnaire would give a power of only 80%. This would need to be accepted as a limitation of this study. Actual return rates for the various groups varied from as low as 8% to as high as 23%, with a median of 11%.

Since test iii to v are not requisites for disproving the hypothesis, the power of these results need not be high. The sample sizes for correlation analysis would be prohibitive for this study (and are not presented here).

5.3.5. General assumptions and anticipated problems

i) Questionnaire design:

The principal questionnaire has been tested for internal validity. (Refer to Section 7.10 for findings)

ii) Sampling

The following problems were anticipated when surveying the respective stakeholder groups:

- Preparers, (for example CAs), are very busy professional people and hence were unlikely to respond well to a complex questionnaire. (The actual return rate was 9%).
- Investors, (for example CFAs and brokers), cannot be easily accessed, and those that can, would likely be public practicioners and fund managers, who are also extremely busy professionals, and thus a low response rate was expected, with and actual return rate of 8%.
- Environmental groups and their representatives, would be expected to encounter difficulty interpreting and responding to some technical aspects of the questionnaire, which could contribute to fewer being completed and returned.
- Employee groups, may not all have adequate education or English language skills to interpret and respond to some aspects of the questionnaire.
- Bank employees, since these are very busy professional people, were expected to give a low response rate. (A return rate of 23% was achieved, however this was very low as banks, and not bankers were surveyed).
- The author would have difficulty finding representative groups in SA to represent others, and expected that possible respondents to encounter difficulty interpreting and responding to some aspects of the questionnaire.

Overall, due to the technical nature of the questionnaire, a very low response rate was expected, which would impact on the validity, although it was noted earlier that the results would have a power of 80%. Further, since no control group was possible, this could possibly raise questions regarding the validity of the results. No control group is possible because all South Africans are stakeholders in respect of at least one or more groupings, e.g. employees or consumers. Previous stakeholder surveys as part of PhD studies on CSR, have accepted this limitation (De Villiers 1996, Stainbank 2000).

iii) Model Design

The following problems were anticipated with respect to the model design:

- Difficulty integrating and simplifying model.
- Extreme difficulty trying to express and quantify the relationships.

The model was prepared on a conceptual basis, expressing the nature of the relationships and the variables concerned, but would not be able to quantify these. The purpose of the model is to represent social and physical reality, with respect to an organisation, it's employees and the environment. From this simple model, different levels and aspects of reporting were possible. Current corporate reporting would be compared to the model.

iv) Linking the empirical study and model

It will not be possible to completely link the responses of the preparers and users, with all levels and aspects of reporting identified with the conceptual model, but only with the core corporate activities.

5.3.6. Theoretical problems

The following theoretical problems (Durrheim & Terreblanch 2000) have been considered and approaches to address these are listed:

- Construct: The author will accept psychological construct of perception (of belief of importance), and accept that responses do not represent inherent beliefs, just perceptions thereof.
- Representation: Numbers allocated by respondents will be assumed to adequately represent their perceptions.
- Objectivity and operationalisation: Perceptions will be measured on Likert scales, which have been extensively used and validated. However, compensations for positive bias, such as using the 'no mark' for no relevance, could introduce negative bias to this study.
- Correspondence: Differences in numerical responses will be assumed to represent proportionate differences in perceptions of importance etc.

5.3.7. Validity

The following issues (Durrheim & Terreblanch 2000) have been considered regarding the validity of the study and proposed methodology:

i) Measurement validity

This indicates the extent to which the instrument measures what it intends to measure i.e. the fit between the construct and the instrument (Durrheim & Terreblanch 2000):

- Criterion-related validity: The use of the Likert scale has concurrent validity, in that it has been validated by extensive studies.
- Content validity: The questionnaire has been reviewed to ensure that it incorporates all major corporate activities and all key groupings of the stakeholders. It does not, however, include all possible impacts and areas of impact, as these are not the objects of the study (refer to Section 7.2.).
- Construct validity: The construct of the 'perceived importance of corporate reporting' is not a complex construct. It is likely to correspond closely to a respondent's socio-economic viewpoint e.g. from Marxist to orthodox capitalist. It can be reviewed after the results have been compiled to test for expected divergence between say trade unions and CAs.
- Instrument reactivity (the 'Hawthorne Effect'): The possibility that those persons being studied will react differently from how they would have normally (Hoggart, Lee & Davies 2002). The self-completing nature of the questionnaire, together with the likelihood that many of the participants receive many such questionnaires, makes it unlikely that they would react differently to how they normally would.

ii) *Internal and external validity*

Internal validity cannot easily be tested since it is not possible to have a control group, since the entire population of South Africa are stakeholders in corporate reporting. It is anticipated that the results of the study will be generalisable to the rest of the population (not tested).

Since the study does not directly attempt to establish causal relationships and does not depend on unique conditions, there are unlikely to be confounding, moderating or mediating variables that question its validity and generalisable nature.

iii) Other threats to validity

- Any converging event: Sufficient time has passed since the World Summit on Sustainable Development (2002) to have eliminated bias from this event.

However, the recent prominence of the GRI (2000) and the King Report on Corporate Governance (2002) and related general media coverage, could influence some participants.

- Natural change and maturation: Increasing world liberalisation will have an impact over time on perceptions of corporate responsibility and accountability.
- Test effect: The effect of being selected to participate in the study could induce a more positive response, than the possibly usual views of respondents.
- Effect of outliers, on medians etc: This will be overcome by large sample sizes.
- Measurement: As noted previously, the use of a Likert scale and self-administered questionnaires have been used as standard instruments in equivalent PhD studies in South Africa (Stainbank 2000, De Villiers 1996) and numerous studies internationally (Gray & Bebbington 2001, Deegan & Rankin 1999).
- Response bias: This can be introduced when a questionnaire is difficult and technical, as in this case. Respondents can misunderstand or misinterpret questions. This threat to validity was reduced by the researcher providing personal telephonic and e-mail contact details as suggested by Kohne (2002), to answer any questions[32], and a two page annexure to the questionnaire provided detailed explanations of terminology, and context of questions (refer to the end of Annexure 1 for a copy).

iii) Validation techniques

The use of multiple data collection techniques, which is known as triangulation, has been proposed as a mechanism for increasing validity and reliability (Durrheim & Terreblanch 2000). However, Sarantakos (1993) suggests that this does not necessarily guarantee better results and that each method needs to be separately tested for validity and reliability. Further problems arise when the results differ in determining which is the more accurate technique.

Lamenk (1988 cited in Sarantakos 1993) states that:

[32] Several respondents did contact the researcher to ask for clarity on various aspects of the questionnaire.

- Different single techniques and procedures can be equally invalid if they are based on the same wrong conditions and research foundations.
- Triangulation is often used as a way of legitimising personal views and interests.
- As a technique, triangulation is difficult to replicate (i.e. reliability issues).
- Triangulation is not more valuable or appropriate than any single valid method or technique.
- Hence, triangulation is not always suitable.

It is proposed by the author that the only other technique which might be suitable for use in combination with the self-administered questionnaire would be interviews (either telephonic or personal). However, sample sizes would need to be at least as large as in other techniques to ensure statistical power. Further, it is apparent that at least two databases might only be accessible under limited conditions e.g. through the secretariat of the respective institutions, and hence the study could not be conducted in these instances. Thus, it is proposed that no additional techniques be performed.

5.3.8. Reliability

Reliability is the accuracy of the results, that is, whether they are free of errors. Results are considered to be reliable, if they would be the same if the tests were to be repeated. However, it is considered to be inappropriate for questionnaires to be re-administered to human subjects due to the test 'learning' effect. With respect to errors, there are considered to be two major categories, namely random and systematic. Random error is not considered to be significant (Durrheim & Terreblanch 2000), and is accounted for in statistical analysis. Conducting a test run or pilot study, with feedback from participants can reduce systematic error, for example misinterpretation of a question. Techniques considered to be impractical in this study are: test-retest because respondents are busy professionals and would not appreciate completing the questionnaire again; parallel forms because testing entire populations of some groups is needed; and split halves because testing entire populations of some groups is needed. However, internal consistency will be tested for on SPSS, determining Cronbach's alpha coefficient, which should be greater than 0.75.

5.4. Part 2: Detailed medtodology

5.4.1. Aim

To develop a conceptual framework of interactions and impacts resulting from business activities, and model a CSR system thereon, then to consider the theoretical validity and applicability of the proposed model.

5.4.2. Objectives

The objectives of part 2 were detailed in Section 5.2.2.

5.4.3. Hypothesis

Research Question 2: No hypothesis (no statistical work, arguments only)

5.4.4. Detailed methodology

5.4.4.1. Developing a conceptual framework and model

The literature review of Part 1 was extended to include all key modelling work and normative studies in CSR (refer to Chapter 4).

5.4.4.2. Determining key impacts and effects

The conceptual model was reviewed and all key (refer to Chapter 7) interactions were listed. The importance and perceived effectiveness of these will be surveyed in Part 1, and these will be incorporated in principle into the reporting model developed in this section.

5.4.4.3. Evaluating key measurement issues

The conceptual model of interactions and impacts of corporate activity, as developed in Part 1, was reviewed by local experts, who are nationally or internationally recognised in their fields. Interviews were arranged with such persons to discuss: recognition, measurement, recording, and reporting issues.

The areas and experts identified and consulted are listed in table 5.4 below.

Table 5.4 Experts consulted on measurement of elements of CSR model

Field	Expert
Physical systems (chemistry)	Dr S Spankie Dr C Southway
Biotic systems /(ecology)	Dr M Hammer
Human interactions, well-being, lifestyles (Psychology)	Dr G Lindegger
Employees motivations, remuneration (Human Resources)	Dr C Hunter
Consumer behaviour / customer welfare (Marketing)	Prof. D Vigar
Social systems (Sociology)	Dr S Burton
Overall systems (Systems theory)	S. Luckert
Financial and economic systems (Economics)	Prof. T Nicola

Such experts were shown the conceptual model and asked to comment on measurement issues, relating to their field of expertise, providing further references where relevant.

5.4.4.4. Synthesis of reporting model

This was achieved by:

- Using the principles of the conceptual framework, as a basis for recognition, measurement, recording and reporting, and then to build all key areas of possible business impact into the model.
- Reviewing stakeholder requirements (Part 1), to ensure these have been built into the key reporting areas.

5.4.4.5. Validity of the reporting model

In order to validate the reporting framework and model developed, use was made of the process of external peer and expert review. The method chosen was to send the framework and model by e-mail to selected experts, asking them for comments and criticisms. These experts were chosen on the basis of all the first authors of references (in the PhD proposal) for which e-mail addresses could be determined by an Internet search.

Any references, criticisms and suggestions provided by such experts, were reviewed and where appropriate the model was adjusted accordingly.

In cases of criticism, the following was done:

- The model was amended (if criticism valid and appropriate).
- A defence against the criticism was provided, and
- The criticisms were accepted as a limitation of the model, if it was not feasible to do either of the above.

5.4.4.6. Completeness of the reporting model

In order to assess the completeness of the model, it was to be compared against the accepted best practice, which is currently the GRI prescribed by the JSE listing requirements, as part of compliance with the King II Report (Institute of Directors 2002). In this comparison, based on its theoretical derivation it was expected that the model would have elements not included in the GRI. Where items that are principle-based were included in the GRI (but not this model), and were therefore missing from the model, this model was updated for these. Where items that are not principle-based or conceptually derived were included in the GRI (but not this model), it is suggested that these items have probably been negotiated into the GRI by stakeholder groups. Although these items were excluded from the model, they are included in the review conducted in Part 3.

5.5. Part 3: Detailed methodology

5.5.1. Aim

To determine which aspects of the proposed CSR system could be implemented by industry, by assessing the readiness of companies to report, and by identifying which key areas, and why, they cannot report. If it can be established why they are not in a position to report, then it could be determined what measures could be adopted to alter this.

5.5.2. Objectives

The objectives of Part 3 were detailed in Section 5.2.2.

5.5.3. Hypothesis

Research question 3: No hypothesis (limited statistical work, exploratory research)

Note: Research question 3 does, however, have an informal hypothesis. It is suggested that many companies do not measure and record (or report) in non-traditional financial reporting areas, as this process is time-consuming, (with obvious resource implications), and is not required, not because they believe it cannot be done. Thus, unless reporting becomes mandatory or has significant benefits versus costs, companies will not allocate resources to this. Measuring and reporting in traditional areas will not occur as there is no pressure (legal or otherwise) on companies to record or report on these impacts.

5.5.4. Detailed methodology

5.5.4.1. Approach

In order to collect the required data, consideration was given to the opinions in companies of those persons who were responsible for CSR systems and the preparation of such data. Such data could have been collected by means of self-completed questionnaires. However, besides the obvious difficulties of low returns associated with such techniques, the format of such a technique would not lend itself well to obtaining answers to questions that cannot be precisely or perhaps widely enough framed. An interview approach would be more appropriate, where a chain of questions following upon each other could be used to identify the true problem or challenges (from the preparers perspective). Thus, semi-structured interviews were used with a structured questionnaire.

The approach or overall methodology selected would be that of multiple case studies, in that it is argued that extra units are only useful to the extent that they provide additional information (Turner 2004), and it has already been argued above that self-completed questionnaires, the instrument of a traditional survey, would not necessarily provide the required data. Multiple case studies are considered more robust, and the evidence therefrom is considered more compelling (Herriott & Firestone 1983). Replication (Yin 1994) is essential in multiple case studies, testing cases to provide the same results e.g. within the same industry sector, or to compare results in different sectors. Yin (1994) notes that the case study approach is most suitable for asking the questions 'how' and 'why'. In this case study it is concerned with how different impacts are measured (and which), but more specifically with why they are not, where such an impact or interaction is not measured. The case study

approach has been criticised as not being suitable for generalisability, however, this can be overcome by using the multiple case study approach as has been done in this study. Note, no formal protocol was established as there was a single researcher and a consistent approach was used for each set of interviews.

Yin (1994) notes that for a case study approach five components have to be considered in the research design, namely:

- The study's questions,
- Its proposition, if any,
- Its units of analysis,
- The logic linking the data to the proposition, and
- The criteria for interpreting the findings.

Relating to the above requirements:

- The study's questions are detailed in the section below.
- The proposition is discussed under the heading of the hypothesis above.
- The units are the selected businesses / companies.
- The data were analysed by establishing modes for each sector and comparing these.
- These modes were interpreted in light of the nature of that business sector, and the influences therein. Modes between sectors were compared to confirm these findings (comparing sectors that have the same or similar factor applying, and comparing sectors without similar factor influencing their operations). Findings were then compared to propositions noted above. The researcher sought to identify any patterns, in the data between the different cases. Note, generalisation is different in case studies compared to surveys, since the findings of each case study are compared to theory, or propositions, and if two or more cases support the same theory this represents evidence to support that theory, this is known as 'analytic generalisation'.

5.5.4.2. Structured questionnaire

The structured questionnaire was designed to assess all areas of reporting of both the proposed CSR system and the GRI. Additional items not included in the proposed

model, but requirements of the GRI were identified in Section 6.3.3.2. For each disclosable item of the two systems, the appropriate company representative was asked whether this is measured (and how for validity purposes only), and whether this aspect is fully or partially measured if at all. A pilot study, using a company chosen as being a progressive company in an environmentally sensitive sector, was conducted to pre-test the questionnaire. For each question in the pilot study the questionnaire initially asked why each possible disclosable item was not being measured (if not), offering a range of possible likely factors. However, it was found in this pilot study that the answers for each question in each section (explained below), were identical, i.e. there was a common restricting factor (in the opinion of the respondents), hence the questionnaire was modified, so that this question was asked only once at the end of each section, for any and all questions to which the respondent had indicated that a particular aspect had only been partially measured.

In order to facilitate efficient interviews, the questions were grouped into management areas or disciplines, namely questions relating to the functions of the following core management areas:

- Managerial,
- Marketing,
- Human Resources,
- Financial,
- Industrial Chemistry,
- Engineering and Production Management, and
- Other, for specialist companies e.g. agricultural, energy, mining.

A full copy of this questionnaire is included in Annexure 3.

5.5.4.3. Sample

The potential population for this study would be all companies registered with the registrar of companies in South Africa, as well as Close Corporations. All medium and large companies could be selected from this database (if access was granted). Alternatively all large companies listed on the JSE could be selected as the representative population from which a random sample could be selected. However,

as noted earlier very large companies will probably present CSR because most are listed on the JSE and hence will comply with the listing requirements, which includes complying with the King Code on Corporate Governance, and hence will report on their triple bottom line. It can be argued that small and medium sized companies do not have sufficient resources (Deegan & Rankin 1999) or differentiated management structures (with specific managers in charge of this activity), to undertake CSR. In the case of small companies, even their financial reporting is traditionally outsourced, as they do not have internal expertise to produce such reports. If CSR was made mandatory by legislation it is likely that such small companies would still outsource this activity. It is thus suggested that studying such small companies, would not provide any useful information for this thesis. Thus, only medium to large companies were selected for this study.

The sampling technique used in this study, was to select a medium to large sized metropolitan area, from which companies could then be selected. Choosing one metropolitan area could result in regional differences not being identified (however legislation is uniform throughout South Africa, since it is the result of national acts). However, the advantage of this approach is that several confounding variables created by regional influences and differences in economics, regional and local government support and infrastructure would be held constant.

The metropolitan area selected was the Msunduzi (Pietermaritzburg) Metropolitan area. This selection was based on the size of the economy, diversity of industry and relevance of environmental and social issues (Coetzee 2006). The Mzunduzi Metropolitan area has significant environmental problems: which include poisoning and pollution of the local Msunduzi river, and an air quality worse than most industrialised areas of South Africa (Witness 2005). It is also situated in the province with the highest HIV/AIDS infection rates in the country (UN World Aids Report 2005). As with most regions in South Africa, the residents face other social problems including poverty, unemployment, and inadequate social and health services. Businesses were identified from the Chamber of Industry's database, which includes 792 businesses. Most medium and large companies in the metropolitan area belong to the chamber. (Where significant large companies that were not members of the chamber were identified, these could be substituted).

5.5.4.4. Sampling techniques

Multiple stratification

The JSE listing classification, was consolidated to provide 17 business segments into which the above sample population was divided. (The 42 segments for the JSE, would have resulted in the major companies being spread too thinly with only perhaps one or two per segment, from which to select the sample). This consolidation, attempted to group the JSE segments in terms of the similarity of their risks with respect to social and environmental impacts. This initial consolidation resulted in the following groupings as listed below:

- Automotive and components,
- Beverages, food and farming,
- Chemicals,
- Construction, building materials and real estate,
- Education,
- Electronics and telecommunication,
- Engineering,
- Financial services, insurance and assurance,
- Forestry, plantations, paper and printing,
- Health and pharmaceuticals,
- Households products, textiles, clothing and footwear,
- Media and entertainment,
- Metals, minerals and mining,
- Oils, gas and energy,
- General retail,
- Services (non financial), and
- Transport.

The purpose of using such strata was that companies could be specifically selected from each grouping, so that risks and factors peculiar to that sector could be identified. A random sampling from the entire population would not ensure significant representation from each sector.

The companies and businesses were also ranked as small, medium or large based on the estimated number of employees (such information should as from 2005 be publicly available in terms of the Access to Information Act, however many companies have not yet complied with this). Thus, estimation of number of employees was made in consultation with senior members of the Chamber and other Msunduzi business leaders. The basis for this classification was:

- Small, less than 20 employees,
- Medium, 20 to 80 employees, and
- Large, over 80 employees.

As noted above, employees were selected as this data was available or could be reasonably estimated, whereas net assets or turnover would be sensitive data, which could not be accessed. The above classification would not hold true for multinationals, where 80 employees would represent a small to very small company. However, it has to be noted that many of the companies identified above as being large, do trade internationally and are part of large listed national companies, and at least one company is a large national listed company.

Selection Technique

Purposeful selection was undertaken from the population, selecting the three largest companies from each of the business sectors. It is argued that three companies should provide enough understanding about each sector and the forces that operate within, while still being able to isolate factors unique to each specific company[33]. The largest companies were selected as Hunter (2004) notes that at least two layers of management are required in order to have sufficient management differentiation, which in turn would require formalised policies and procedures. Such formalised policies and procedures are what this part of the study aimed to examine (to determine what measuring and reporting systems are in place), hence small and medium sized businesses were ignored.

Where less that two large companies were available on the membership database, a company, where possible, was substituted from those that were not members of the chamber (and not part of the sample population), but that still operated in the

[33] It was noted previously that if the findings of two case studies correspond and support the stated theory, this is sufficient grounds for generalisation in the case study methodology (Yin 1994).

Msunduzi metropolitan area. Where no such substitute could be found, the next largest company from the medium sized companies was selected. Where a large company refused to be part of the study, the next largest company was substituted.

Annexure 4 lists companies selected, and those actually surveyed, as well as reasons why several were not surveyed by the cut-off date of 31 January 2006. Confidentiality agreements preclude the disclosure of any data relating to any one specific company.

It must be noted (Yin 1994) that cases are not sampling units, and are specifically selected, thus justification is required for the approach to selecting such companies, but cannot be used to invalidate any particular selection.

This research is descriptive research, in that it is a form of conclusive research intended to generate data describing the composition and characteristics of relevant groups of data (Parasuraman 1991), in this case, collecting data by means of survey, which can collect facts, opinions and data on behaviour (Dane 1990). The advantage of the interview technique is that it not only allows the researcher to explain complex questions, but it also allows the researcher to ask follow-up questions and collect additional data not represented on the questionnaire. As noted earlier a pilot study was conducted on a selected company, to pre-test the questionnaire. This highlighted difficulties regarding asking opinions as to why specific data were not collected for each aspect (as the answers did not appear to differ), and thus these questions were then limited to one per manager or one per core management field.

Alternative Technique

In determining the initial research technique, it was assumed that companies that have addressed corporate social and environmental issues are likely to have positive images and are likely to be leaders in CSR. Companies that have not managed the social and environmental impacts are likely to be less involved in CSR, that is, since they would have little positive information to report upon, they are unlikely to produce such CSR. Thus, it was suggested that by reviewing the best and worst of each sector, the full scale of challenges to improving CSR would be revealed. However, it must be noted that in terms of legitimacy theory, companies with poor social and environmental performance may use CSR extensively to try to improve their image. Companies with

poor images may have strong CSR systems in place. In order to identify the best and worst of each sector a mini-Delphi technique was used (Gupta and Clarke 1996). Members selected for such a group were recognised leaders from: NGO's and environmental groups, and industry and academic experts.

This did not need to be a full Delphi exercise, but merely asked for suggestions for 'best' and 'worst' from each sector, and compiled a list using frequency of suggestions as the selection criteria. The final list was not going to be re-circulated for several rounds, but was to be discussed with contributors. It was anticipated that several selected companies would refuse to participate for the following reasons:

- Concerns over confidentiality, trade secrets,
- Concern over poor environmental or social or employment practices, and
- Time constraints of top executives.

In these cases substitute companies were to be selected.

The above technique was unsuccessful. Many experts approached were unwilling to be associated with naming companies as 'good' or 'bad'. Experts who did participate had knowledge of specific high-risk industries, but not of others. Different experts named the same company as 'good' and 'bad'. This problem could not be resolved, and the technique was abandoned.

5.5.4.5. Interviews

A generic questionnaire was developed with specific questions for relevant managers to be used in the (semi-structured) interviews. These questionnaires included all key activities as identified in the reporting model, as well as others specific to the GRI (refer to Chapter 3 Section 3.5.5.). The latter would be useful in reporting to such companies on how easily they could report according to the GRI (the SA standard). A copy of the full questionnaire is included in Annexure 3.

For all conceptual reporting areas, the interview established to what extent these areas were measured, recorded or monitored, (reporting would be looked at on an overall basis). Where such areas were not completely or comprehensively measured and recorded, the interview tried to obtain the perceived reason e.g.

- No technology or method available,

- Not legally required,
- No interest (no value),
- Little significance (little benefits),
- Significant, but difficult (limited time),
- Significant, but difficult, costly (Cost > benefits),
- Difficult & costly,
- Not enough pressure,
- Other reasons, and
- No idea.

Questions collected nominal data, 'yes or no', or specific facts or opinions. Interviewees were not expected to rank data on any scale. Nominal measurements require characteristics to be broken down into mutually exclusive categories (Cooper & Schindler 2001), which is what this study did. However, with respect to the opinions as to why variables were not measured, as noted above, there could be several factors operating simultaneously to influence such an outcome.

5.5.5. Synthesis and analysis

The results for the different sectors were then compared with each other, overall medians were evaluated and the implications discussed. Modes were used, as there were at most three companies (and hence three responses) per sector, and when one company failed to answer a specific question, a median was not determinable. The primary form of analysis undertaken was comparative analysis, where the mode of the responses for each sector was compared, and these findings discussed. (In most cases discrete answers e.g. 'Yes or No' preclude the use of a median or mean). The objective of the case study approach, with semi-structured interviews of various staff within the selected companies, is to interpret the findings, not to analyse the data statistically.

As noted previously, for each sector, the three largest companies were chosen. However, the Kruskal-Wallis test to determine if differences can be distinguished between such groups, is possible on groups larger than five (www.itl.nist.gov/div898/software/dataplot/refman1/auxillar/kruskwal.htm), thus

these groups were again consolidated, to obtain a potential minimum of six per group, on the basis of environmental and social risks. The low number of responses per sector (limited to a maximum of six), together with the potential problem of tied results, may have reduced the statistical power (significance) of the test. However since statistical significance is not the primary concern of this exercise, this is not a limitation of the study, as the data were not being used for inferential analysis, but merely for descriptive purposes to determine if differences between responses exist. It must be noted that although the selection of the sample was not random, it was independent. Cooper and Schindler (2001: 495) define an independent observation as "one where the selection of any one case does not affect the chances for any other case to be included in the sample".

From the findings of these case studies, reasons were summarised as to why measurement and recording is inadequate (cannot be statistically 'proven' or generalised), as well as issues peculiar to industries, or 'better' / 'worse' companies noted. Conclusions were drawn, and general suggestions (with supporting arguments) were made with regard to what measures are necessary to improve CSR in South Africa.

Statistical analysis of small samples with five or more samples per cell is possible (Turner 2004), thus the groupings identified in Chapter 7 Section 7.2.3.3, were further compressed into a smaller number of groups, upon which the Kruskal-Wallis Chi Square test was applied to identify if significant differences existed between their responses. These collapsed groupings with 5 to 6 cases per combined segment are:

- Mining, metals, minerals, construction and building materials,
- Chemicals, pharmaceuticals and health,
- Oils, gases and energy, transport,
- Automobiles and components, and engineering,
- Electronics and telecommunications, media and entertainment,
- Financial services, insurance, assurance, education, and other services,
- Beverages, food, farming, forestry, pulp, paper and printing, and
- Retail, household goods, textiles and footwear.

The above mix (combination) is perhaps not ideal in that the risk profile of each of the above collapsed sectors is unlikely to be homogeneous. However this exercise is conducted to establish whether significant differences exist. If the statistics demonstrate this, then it can be reasonably assumed that such differences do exist. If however, the statistics do not show such differences, this could mean that either:

- Such differences do not exist, or
- The above grouping is not homogenous enough to allow meaningful comparisons between the groups.

In analysing the above data it must be remembered that it is the specific responses to the questions and patterns that the author observed (in the individual cases studied) that are of particular importance, and the collected data is there to support the theory, or contradict it if that be the case.

5.5.6. Validity and reliability

These are issues that must be considered when using case studies. For this study, they are presented in the table below:

Table 5.5: Reliability and Validity of Case Study Approach (adapted from Yin 1994: 33)

Test	**Case study tactic**
Construct validity	Used multiple sources of information, not just data supplied by interviewee e.g. internet on website
Internal validity	Did 'pattern' matching, established modes for each sector
External validity	Used replication and multiple cases
Reliable	Used a database for responses for each question for each case. Developed a consistent (informal) protocol used for every case.

5.6. Summary and conclusions

In order to contribute towards improved CSR in South Africa, three primary research questions were asked:

i) What are the inadequacies and limitations of current CSR?

ii) What should be disclosed and reported upon in CSR?

iii) Can these limitations be overcome and specified impacts reported upon?

In order to answer these questions specific objectives were set with appropriate methodologies to achieve each of these objectives.

The various methodologies were collated into three interrelated phases. The first phase was a comprehensive stakeholder survey to determine in what areas stakeholders expect CSR disclosure, and to what extent present reporting achieves those expectations. This highlighted a weakness that needed to be addressed. The second phase was a conceptual phase, which started with a conceptual framework, as the basis for CSR, which was incorporated into a proposed CSR model. Such a model was validated, and compared against the international best practice standard, the GRI, to test for completeness. The third and final phase was to take the proposed model (and the GRI) and test how readily they could be applied by business, using a case study approach.

It is suggested that the proposed methodology, incorporated into the three phases, would identify areas that need to be addressed in order to improve CSR in South Africa, conceptually, practically and from a stakeholder perspective.

CHAPTER SIX

SURVEY OF STAKEHOLDER EXPECTATIONS AND PERCEPTIONS

6.1. Introduction

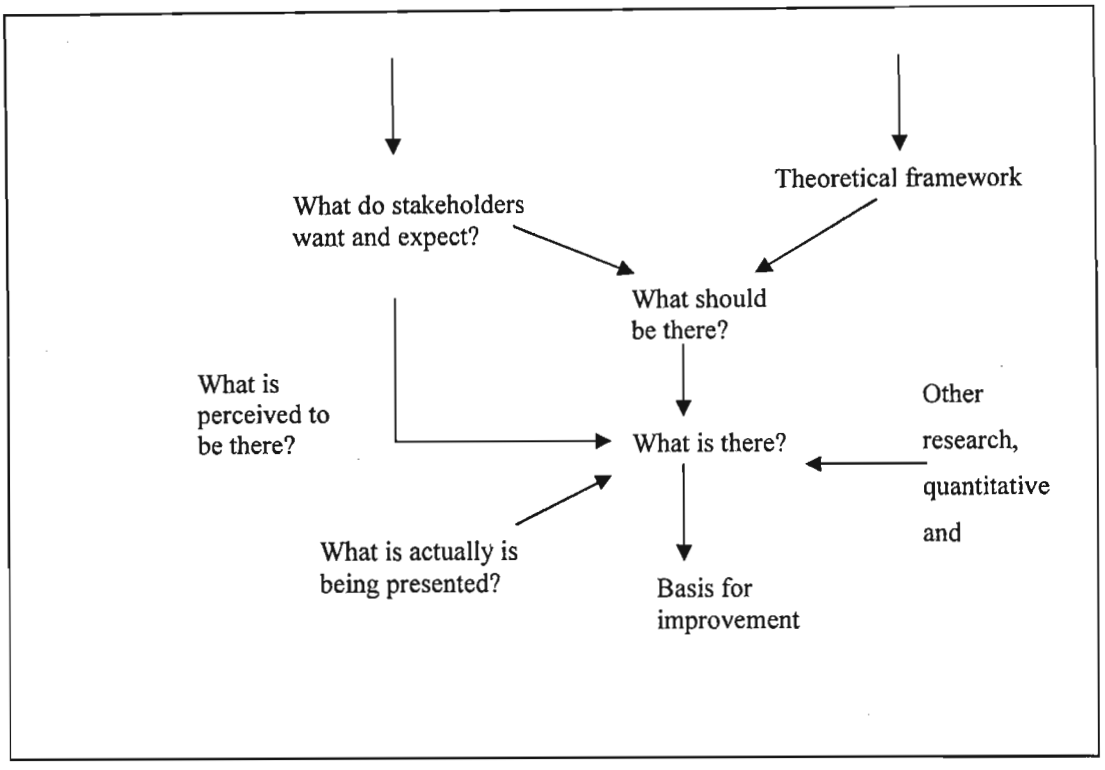
Corporate Social and Environmental Reporting (CSR) is "the process of providing information designed to discharge social accountability" (Gray et al. 1987: 4), whilst social accountability is the responsibility to account for actions that do not have purely financial implications, and which are demanded of an organisation under some implicit or explicit contract. Of the two predominant theories, Legitimacy and Stakeholder theory (as discussed in detail in Chapter 2), the former theory explains CSR as a mechanism used by businesses to legitimise their activities to society, hence CSR is largely a publicity exercise. The Stakeholder theory, however, specifically in the case of the branch known as Ethical Stakeholder theory, makes a normative assumption that businesses have a duty of accountability to society, in a principal agent relationship, where the agent has to account for its use of the principal's (society's) resources, and where society consists of non-homeogeneous groups of affected parties, the stakeholders. If CSR is considered from the perspective of Ethical Stakeholder theory, then the actual needs and expectations of stakeholders (the principals) should be considered in determining the direction of further development of CSR.

This chapter represents a comprehensive survey of South African stakeholder groups, as the basis for determining required improvements to CSR in South Africa. For such improvements in CSR to be relevant to stakeholders, this study would need to identify areas of reporting significant to such stakeholders, and identify where such areas are currently inadequately reported (or perceived to be). This is the purpose of this chapter, to identify areas where deficiencies and expectation gaps exist.

This chapter identifies such deficiencies in CSR, as well as areas of disclosure that are considered important from a stakeholder perspective, as the basis of areas to research in the rest of the study, and as the basis of determining what needs to be done to improve CSR from a stakeholder perspective. From a stakeholder perspective, surveys would reveal relevant areas, although survey responses will be affected by stakeholder

bias (Chapter 8 Section 8.4). However, applying a decision-making perspective to CSR to determine which areas could be relevant to stakeholders, requires a conceptual approach (Chapter 7) as illustrated by Figure 6.1 below. Stakeholder perception of existing CSR disclosure should also be compared to quantitative analysis of actual CSR disclosure, however this is beyond the scope of this thesis.

Figure 6.1: Determinants of key deficiencies of current CSR disclosure



The comparison of what should be reported with what is being reported, could identify areas in which improvements are needed, which is relevant to:

- Those persons involved in CSR research, indicating the direction of, and which specific areas need improvements. Stakeholder needs and perceptions in South Africa (SA) as determined in this study could be compared with that of stakeholders throughout the world as determined by other studies.
- Standard setting organisations, as the basis for setting CSR standards and guidelines, taking stakeholder expectations into consideration.
- All stakeholders, if the findings of this study were used to increase and improve CSR, and hence accountability to them.

As was noted in Chapter 4, significant research has been conducted internationally and in South Africa dealing with two core areas of CSR separately namely: environmental reporting, and employee reporting. The South African studies (Stainbank 2000, De Villiers 1996, Savage 1994) have tended to concentrate on the perceptions of specific stakeholder groups. The author argues that there is a need to survey the needs of all significant[34] stakeholder groups, in all areas of CSR, including the two mentioned above. Although the same methodology might not be applicable to all stakeholder groups, the results of such a comprehensive study would, within the limits of the validity of the techniques selected, represent compelling evidence for the need for changes to improve accountability to such stakeholders.

6.2. Approach

6.2.1. Suggested position and hypothesis

Prior studies (De Villiers 1996, De Villiers 1998; De Vries & De Villiers 1997, Stainbank 2003) have indicated support for increased levels of CSR in South Africa, as well as comprehensive levels of disclosure (Mitchell & Quinn 2005). The hypothesis of this chapter is that current levels of CSR in key areas that are considered important to stakeholders, are perceived to be inadequately reported, and do not meet stakeholders' expectations[35].

It should be noted that without the existence of significant expectation gaps with respect to CSR disclosure, there would be little justification for concerted efforts to improve CSR.

6.2.2. Research aims and objectives

In this chapter the aim is to determine whether current CSR meets the expectations of key stakeholders, and what areas stakeholders believe should be reported on. To achieve this aim, overall research objectives were devised in Chapter 1.

Concerning these objectives, in Chapter 7 a conceptual framework will be deloped from which the key stakeholders, and key interactions and impacts can be identified.

[34] As defined and justified in Chapter 3.
[35] This hypothesis will be inferred, not proven statistically.

The conceptual framework of the interactions with these stakeholders had to be completed prior to this stakeholder survey (Chapter 6). However, the stakeholder survey had to be completed prior to the framework for the reporting model could be developed, as this needed to take into consideration the stakeholders' expectations. Thus, it made sense to present this conceptual work, both the framework of interactions and the reporting model, together. Thus, this is presented in Chapter 7, even though some of it was completed prior to the work of this chapter.

6.3. Methodology: stakeholder survey

The detailed methodology for this section has been outlined in Chapter 5. As noted in Chapter 5, not all stakeholder groups could be surveyed by means of a self-completing questionnaire (Annexure 1), where for example, the stakeholder group was not represented by a defined group, or was too widely spread e.g. consumers. In the case of the latter groups, acknowledged representatives were surveyed. However, it is argued in Chapter 5, that a self-completed and detailed questionnaire would be inappropriate, and that a semi-structured interview was required. An abbreviated questionnaire (Annexure 2) was used as the basis of such interviews.

Certain modifications and adaptations to the techniques proposed in Chapter 5, are noted below:

- It was argued that both Portfolio Managers and Brokers, where not Chartered Accountants by profession, would most likely be qualified CFAs who in SA are represented by the national institution, the International Analysts Society of South Africa (IASSA). Despite two formal requests (December 2003, January 2005) the IASSA denied permission to sample their membership. The researcher, as an alternative, then identified a sample of brokers through the JSE Handbook (2003), and fund managers through a combination of an internet search and reviewing 2003 editions of the Financial Mail. Despite two mailings, a very low response was obtained, with an 8% return on 169. This same difficulty had been encountered by De Villiers (1996) in his PhD study while surveying South African portfolio managers.
- The South African Institute of Bankers did not respond to a request made in 2004, to survey their membership, and thus a listing was obtained

(http:www2.resbank.co.za/Banksup/Banksup.nsf) of all registered South African banks and foreign banks operating in South Africa (not just representative offices). It was expected that because of the small sample (35), including mostly foreign banks, a low response would be obtained, which would be useful only for descriptive statistics. This is what occurred, with only a 23% return being achieved.

6.4. Results and discussion

6.4.1. Survey

6.4.1.1. Importance and perceived effectiveness of reporting on specific CSR areas

The following table details responses to the first component of the questionnaire, which addresses the areas of importance to stakeholders and the perceived effectiveness of current reporting.

Table 6.1: Medians of ratings of importance, and perceived effectiveness of coverage by key stakeholder groups

	Importance of area & impact							Effectiveness of current reporting						
Area of impact	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**
Economic & Financial **Current Performance**	4	4	4	4	4	11.023	.026 *	3	2	3	3	3	8.185	.085
Past Performance	3	3	3	3	4	6.471	.166	2	2	3	2	3	20.110	.000
Present Financial Position	4	4	4	4	4	8.308	.081	3	2	3	3	3	5.907	.206
Potential or Likely Future Performance	3	4	4	4	3	2.779	.595	2	2	2	2	2	1.917	.751
Governance and Control	4	4	4	3	4	2.596	.627	2	2	2	2	2	2.587	.629
Legal **Compliance with Company Law**	4	4	3	4	3	2.740	.602	2	2	2	2	2	3.363	.501
Compliance with Labour, Financial and Environmental Law	4	4	3	3	3	9.697	.045 *	2	2	1	2	2	0.647	.958
Socio-Political **Effect of Marketing & Advertising on trends, fashions & expectations**	3	3	2	2	2	7.726	.102	1	2	1	1	1	8.144	.086
Effects of corporate lobbying on political decisions	3	3	2	2	1	13.287	.010 **	1	1	1	1	1	6.475	.166
Shareholders & Funders **Benefits received as interest or dividends**	3	4	3	4	4	6.639	.156	2	2	3	3	3	5.587	.232
Benefits accrued & share value	3	3	3	4	3	4.117	.390	2	2	2	3	2	4.569	.334

Note N (the actual valid returns) for sample is:
E = 36
T = 27
CA = 36
FA = 14
B = 8

	Importance of area & impact							Effectiveness of current reporting						
Area of impact	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**
Employees **Benefits received & earnings**	3	4	3	3	3	6.708	.152	1	2	2	2	2	6.226	.183
Effects on social status (from promotions etc), and value of increased skills base	3	3	3	3	3	6.776	.148	1	1	1	1	1	1.728	.785
Effect on mental health (stress & self esteem)	3	4	2	2	2	14.920	.005 *	1	1	1	0	0	9.270	.055
Effect on physical health from work conditions and stress	3	4	2	2	2	22.895	.000 **	1	1	1	0	0	7.615	.107
Assistance and support provided to disabled employees and members of disadvantaged groups	3	3	2	2	2	9.759	.045 *	1	1	1	1	1	6.247	.181
Public **Effect on consumer mental well-being from marketing activities i.e. tension created by new needs and expectations for products & services**	3	3	2	2	2	10.216	.037 *	1	1	1	1	1	2.318	.677
Effect on physical health of consumers from using products	3	3	2	2	3	9.518	.049 *	1	1	0	1	1	4.790	.309
Indirect effect of pollution through impaired functioning of environment, loss of aesthetics	3	3	3	3	3	10.571	.032 *	1	1	1	1	1	0.393	.983

	Importance of area & impact							Effectiveness of current reporting						
Area of impact	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**
Direct effect of pollution	4	3	3	3	3	12.188	.016 *	1	1	1	1	1	0.587	.964
Direct contributions to society	3	3	3	3	3	10.338	.035 *	2	1	1	1	2	10.277	.036 *
Physical Environment **Conversion of natural assets (raw materials) to artificial assets**	3	3	3	3	3	6.615	.157	1	1	1	1	1	1.562	.815
Other conversions of materials and chemicals	3	3	3	3	2	5.911	.206	1	1	1	1	1	3.199	.525
Effect on owned natural assets e.g. land, such as pollution	4	3	3	3	3	18.408	.001 **	1	1	1	1	1	2.551	.636
Effect on shared natural resources e.g. air, water quality, hazardous waste	4	3	3	3	3	14.145	.007 **	1	1	1	1	1	4.526	.339
Use and sources of energy	3	3	3	3	3	7.592	.108	2	1	1	1	1	25.653	.000 **
Biotic Environment **Effect on Bio-diversity (species richness)**	4	3	3	2	3	22.505	.000 **	1	1	0	0	0	8.496	.075
Effect on eco-systems health & functioning	4	3	3	2	3	25.275	.000 **	1	1	0	0	0	8.563	.073
Effect on Biomass (live plant and animal quantities)	4	3	3	2	3	18.682	.001 **	1	1	0	0	0	10.283	.036 *

Key:
E ≈ Environmental groups, T ≈ Trade Unions, CA ≈ SA Chartered Accountants, FA ≈ Financial Analysts working as Brokers or Fund Managers, B ≈ Bank representatives
KW ≈ Kruskal-Wallis Chi Square
Sig. ≈, Significance i.e. of differences between key stakeholder groups
0 ≈ Not at all / important, not reported at all
1 ≈ A little / important, Reported a little
2 ≈ Some (agree), important, partially reported
3 ≈ Mostly (agree), very important, well reported
4 ≈ Completely (agree), extremely important, comprehensively reported
** ≈ Significant to 0.05*
*** ≈ Significant to 0.01*

In table 6.1 the data collected from the first section of the questionnaire are presented. The questionnaire collected data on respondents' opinions regarding the importance of disclosure about specific areas of the potential impact and influence of business

activities. For each area the questionnaire then asked for the respondents' impressions on how well they believe a particular impact is currently disclosed by businesses. The results are presented separately for each of the five groups surveyed, showing the medians. The Kruskal-Wallis chi square test is run internally to test differences between responses of each the groups tested, for importance and then for perceived effectiveness of current reporting.

With respect to several of the (potential) areas of disclosure listed in the table above and discussed in the following pages, trade unions and environmental groups considered these to be more important than did bankers, accountants and financial analysts (who represent investors). This could be attributed partially to trade unions and environmental groups having direct interest in these areas, whereas for example, accountants who may have experience in such reporting may be adverse to extra disclosure, due to the increased time and cost of preparing such disclosure.

All stakeholders considered disclosure of 'financial information', as well as 'benefits to shareholders and funders as very important (3) to extremely important (4), whereas they felt actual disclosure, was only partially (2) to well reported (3). All stakeholders felt that 'potential future performance' as well as 'governance and control' were only partially disclosed (2).

'Legal compliance' was considered very important (3) to extremely important (4), whereas stakeholders felt that actual disclosure of such information was partially (2) to poorly (1) reported. The Kruskal-Wallis test demonstrated with regard to stakeholder expectations of 'compliance with labour and environmental law' that a significant difference at 95.50% confidence level, existed between responses, with both the environmental and trade union groups having higher expectations than other groups.

'Socio-political impacts' were considered important (2) to very important (3), whereas stakeholders felt actual disclosure of such information was primarily poorly (1) reported. The Kruskal-Wallis test showed a significant difference at 99.90% confidence level existed between responses, with regard to expectations with both the

environmental and trade union groups having higher expectations of reporting the impacts of 'corporate lobbying' than other groups.

Reporting 'impacts on employees' was considered important (2) to very important (3), except in the opinion of trade unions who (expectedly) considered such matters to be generally extremely important, whereas all stakeholders felt actual disclosure, was primarily poorly (1) reported except 'employee earnings' which was general considered partially reported. The Kruskal-Wallis test showed a significant difference at 99.95%, 99.99% and 95.50% confidence level between responses, with regard to expectations, with both the environmental and trade union groups having higher expectations of reporting 'impacts on employee mental' and 'physical health', as well as 'assistance to disabled and disadvantaged employees'.

Stakeholders considered that reporting the 'impacts upon the public' to be important (2) to very important (3), except for the environmental groups who specifically considered the reporting of the direct impacts of pollution to be extremely important. Actual reporting of 'impacts upon the public' was considered to be poor (1) by all stakeholder groups. The Kruskal-Wallis test showed significant differences, with confidence levels ranging from 95.10% to 98.40% for these questions regarding stakeholder expectation. Both the environmental and trade union groups had higher expectations of reporting with regard to all 'impacts on the public'.

All stakeholder groups considered that reporting on the impacts on both 'physical and biotic environment' to be important (2) to very important (3), except for environmental groups who (as expected) considered most of these impacts to be extremely important (4), with the Kruskal-Wallis test showing significant differences from 99.30% and 99.99% confidence. All stakeholders considered these impacts to be either poorly reported (1), or possibly not reported at all (0).

The following table summarises the results according to major category of activity or area of reporting.

Table 6.2: Modes of responses to core areas of impacts and activities

Overall area of reporting	Importance (mode) of responses by all stakeholder groups	Effectiveness of Current presentation (mode)	Extent of expectation gap
Financial	Extremely (4)	Partial (2)	Significant
Legal	Very (3)	Partial (2)	Small
Socio-political	Fairly (2)	Poor (1)	Small
Shareholders & funders	Very (3)	Partial (2)	Small
Employees	Very (3)	Poor (1)	Significant
Public & consumers	Very (3)	Poor (1)	Significant
Physical environment	Very (3)	Poor (1)	Significant
Biotic environment	Very (3)	Non-existent (0)	Extreme

Table 6.2 displays a significant expectation gap with respect to 'financial reporting', specifically with respect to areas of 'corporate governance', and 'indicators of potential future performance'. Clearly this would be a concern to investors. Significant expectation gaps were also evident for areas affecting 'employees', the 'public' and 'physical environment', and an extreme expectation gap was present with respect to reporting on the impacts on the 'biotic environment'. These collectively represent the traditional areas of CSR, clearly indicating the inadequacy of current reporting in the view of the targeted stakeholder groups.

6.4.1.2. Importance of reporting separately on core business activities

Table 6.3: Medians of relevance, and overall perceived importance of core business activities to specific stakeholder groups

	Relevance rated by key stakeholders							Importance to specific groups							
Activity	**E**	**T**	**CA**	**FA**	**B**	**KW**	**Sig.**	**Inv**	**B**	**C**	**S**	**Pub-lic**	**Env.**	**Empl.**	**Gov.**
Research & Development	2	2	2	2	2	4.117	.390	4	3	2	2	1	2	3	2
Production & Conversion	2	1	2	2	2	5.955	.203	3	3	2	2	1	2	2	2
Selling, Marketing, Advertising	2	2	2	2	2	2.669	.609	3	3	3	2	2	2	3	1
Administration	2	2	2	2	2	1.934	.748	3	3	2	1	1	1	2	2
Packaging & Delivery	2	2	1	2	1	6.652	.155	2	1	2	2	1	1	2	1
Consumption of company's products & Waste	1	1	1	1	2	3.323	.505	3	2	2	2	2	3	3	2
Taxes Paid	2	2	3	3	3	24.575	.000 **	4	3	1	1	1	1	2	4
Dividends & Interest	3	2	3	4	3	30.219	.000 **	4	4	1	1	1	0	2	2
Overall Profitability & Performance	3	2	3	4	3	34.489	.000 **	4	4	2	2	1	1	3	2
Investment in Assets	3	2	3	3	3	14.845	.005 **	4	4	1	1	1	1	2	2
Financial Investment	3	2	3	3	4	26.845	.000 **	4	4	1	1	1	1	2	2
Potential future events and company performance	2	2	2	2	2	3.392	.494	4	3	2	2	2	1	3	2

Key:
E ≈ Environmental groups, T ≈ Trade Unions, CA ≈ SA Chartered Accountants, FA ≈ Financial Analysts working as Brokers or Fund Managers, B ≈ Bank representatives
KW ≈ Kruskal-Wallis Chi Square
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3 ≈ Mostly (agree), very important, well reported
4 ≈ Completely (agree), extremely important, comprehensively reported
** ≈ Significant to 0.05*
*** ≈ Significant to 0.01*

The conceptual work of Chapter 7 (which as noted earlier was partially completed prior to this survey), suggests that disclosure of socio-economic as well as environmental impacts of core business activities, could facilitate comparisons between businesses as well as comparison against best practice and would allow stakeholders to assess the efficiency and effectiveness of individual businesses. The author suggests that such information would be useful to stakeholders. In light of this, the results of Table 6.3 are somewhat surprising. Stakeholders considered many areas

as only of little (1) to some importance (2). Traditional reporting areas such as 'taxes', 'dividends and interest', 'profitability and investments' were considered important (2) and only in a few cases as extremely important (4). The Kruskal-Wallis test revealed significant differences in confidence levels ranging from 99.50% to 99.99% for all the latter categories, with financial analysts and banks having the highest expectations in several of these traditional reporting categories, and trade unions having the lowest.

Those respondents who did complete the section on relevance of core business activities to specific stakeholder groups, rated many areas as more important to investors, banks and employees. The results of this part of the questionnaire do not provide evidence to support an activity based reporting format for CSR. This does not mean that such an approach has no merit, but that stakeholders surveyed perceive little value in such a reporting approach.

6.4.1.3. Format and verification of CSR

Table 6.4:Medians of stakeholder opinion on format and verification of CSR

Opinions of areas	E	T	CA	FA	B	KW	Sig.
CSR should be in separate report	3	3	3	3	3	2.575	.631
CSR should be tailored to specific stakeholder needs	2	3	2	2	2	5.134	.274
CSR should be to same standards as AFS	3	4	3	3	4	0.793	.939
CSR should be externally verified or audited	3	4	3	2	3	11.701	.019*

Key:
E ≈ Environmental groups, T ≈ Trade Unions, CA ≈ SA Chartered Accountants, FA ≈ Financial Analysts working as Brokers or Fund Managers, B ≈ Bank representatives
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4 ≈ Completely (agree), extremely important, comprehensively reported
** ≈ Significant to 0.05*
*** ≈ Significant to 0.01*

In Table 6.4 stakeholders' opinions regarding the format and verification of CSR are listed. All stakeholders strongly (3) supported the concept that CSR should be provided in a separate report, and all stakeholders felt strongly (3) that it should be to at least the same standard as AFS, while trade unions and bankers felt more strongly (4) about this. All stakeholders agreed (2) that CSR should be tailored to stakeholder needs, however only trade unions felt strongly (3) about this. Regarding external verification or audit of CSR, the Kruskal-Wallis test revealed significant differences at 98.10% confidence, with trade unions feeling the strongest (4) about such verification and financial analysts supporting this the least (2). However, CAs, environmental groups and bankers strongly supported (3) the idea that CSR disclosure should be externally verified or audited, thus providing evidence of an overall strong support.

6.4.1.4. Principles behind CSR

Table 6.5: Degree of support by stakeholders for principles and concepts behind CSR

Opinions of areas	E	T	CA	FA	B	KW	Sig.
Direct investors' right to CSR information	4	4	3	4	4	9.781	.044*
Indirect investors' right to CSR information	4	4	3	4	4	7.321	.120
Consumers' right to CSR information	4	4	3	3	3	6.621	.157
General stakeholders' right to CSR information	4	4	3	3	3	12.316	.015*

Key:
E ≈ Environmental groups, T ≈ Trade Unions, CA ≈ SA Chartered Accountants, FA ≈ Financial Analysts working as Brokers or Fund Managers, B ≈ Bank representatives
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4 ≈ Completely (agree), extremely important, comprehensively reported
* ≈ *Significant to 0.05*
** ≈ *Significant to 0.01*

In Table 6.5 the support for accountability to various stakeholder groups is listed. All stakeholders felt extremely strongly about direct and indirect investors' right to CSR, except CAs who supported the idea, but not as strongly. It is argued that perhaps this reluctance, comes from an appreciation of the difficulties and costs involved in such reporting. With regard to consumers' and general stakeholders' right to information,

environmental groups and trade unions strongly supported this concept, while the financial intermediaries (CAs, CFAs and bankers) also supported it, but less strongly.

Table 6.6: Format and perceived obstacles to improved CSR

Opinions of areas	E	T	CA	FA	B	KW	Sig.
Where would CSR best be presented e.g. AFS, stand alone, Internet? #	2	2	2	2	2	N/A	N/A
Why do you think companies do not present more CSR? ##	5	6	4	4	1	N/A	N/A

Key:
E ≈ Environmental groups, T ≈ Trade Unions, CA ≈ SA Chartered Accountants, FA ≈ Financial Analysts working as Brokers or Fund Managers, B ≈ Bank representatives
KW ≈ Kruskal-Wallis Chi Square
Sig. ≈ Significance i.e. of differences between key stakeholder groups
Modes, not median reported for last two questions since data not ordinal in nature, and
The following numbers represent (# for first question, ## for second question)
 # 2: In annual report with AFS
1: Data not available
4: Costs exceed benefits
5: Data too sensitive
6: Not legally required

Almost all respondents of all stakeholder groups felt that the AFS, were the most suitable place for CSR. With regard to perceptions of why companies did not present more CSR, very interesting results were attained. Almost all respondents from environmental groups thought the reason was that they believed that companies considered the data as too sensitive to release, showing genuine concern about perceived corporate impacts. Trade unions thought the reason was that the law did not force companies to do so, suggesting that employees look to government to protect them and their rights, or perhaps that if specific activities are not required by them then 'why do it?' Chartered Accountants and financial analysts thought the costs would exceed the benefits, which might be from experience of such reporting or from cost sensitive professional training. Most bankers, on the other hand, thought the data was just not available, perhaps indicating a more conservative view or perhaps limited experience in such reporting processes.

6.4.1.5. Demographic data

Table 6.7: Significant correlations between demographics and key responses

Question / Demographics	Group	Level of management	Field of work	Age	Gender	Education	Experience with CSR	Political view
Importance of areas of impacts & activities	25	6	5	2	8	8	1	17
How well impacts are reported	9	0	4	10	0	14	14	4
Subtotal	34	6	9	12	8	22	15	21
Financial impacts	5	0	5	0	0	7	0	2
Legal impacts	1	0	0	2	1	0	0	2
Social impacts	2	0	0	2	-	3	1	0
Impacts for shareholders	2	0	2	0	0	3	1	0
Impacts for employees	6	3	0	3	4	4	4	5
Impacts on public & consumers	5	2	0	2	3	1	2	4
Impacts on physical environment	7	0	2	3	0	1	4	4
Impacts on biotic environment	6	1	0	0	0	3	3	4
Subtotal	34	6	9	12	8	22	15	21
Current reporting adequate to show impacts of core activities	4	1	2	0	2	5	5	3
Were full details shown for above i.e. for each component of the annual report?	1	0	1	1	0	1	0	0
Opinions on format of CSR	1	0	2	0	1	2	0	2
Rights of stakeholders to CSR	4	3	0	1	1	2	0	3

When demographic data were tested for correlations with responses, numerous correlations were found (Spearman's two tailed test), too numerous to list in the body of this thesis (refer to Annexure 6). Table 6.7 summarises some of the categories in which these occurred. Clearly, there were extensive correlations between responses and the different stakeholder groups and this supports the validity of the groups, that is it shows that responses differ per group. As expected, there was a positive correlation between many categories and experience of respondents with CSR and the

age of the respondents. There were also many positive correlations between political viewpoint and responses, and as would be expected, more liberal respondents would likely support CSR to a greater extent than more conservative respondents. There were also numerous negative correlations between education and responses, perhaps suggesting concern for inherent difficulties and costs, or in the case of financial intermediaries, evidence of the extent of their education and conditioning to minimise costs, that is more extensive reporting will cost more.

6.4.2. Interviews

Table 6.8: Results of interviews with representatives of key stakeholder groups

Q	Details	Suppliers	Consu-mers	Industry	Media	Comm-unity	Gov. local	Gov. Env.	Gov. Social
1	Is CSR adequate to meet needs of: • Environment • Community • Employees • Economy • Future?	 Yes No Yes No Yes	 No No No No No	 No Yes Yes Yes No	 No Yes No Yes No	 No No No No No	 No No No No No	 Yes No Yes No Yes	 No Yes No Yes No
	How important is CSR • Environment. • Community • Employees • Economy • Future?	 Mod Mod Little Very Mod	 Very Very Very Very Very	 Very Very Very Very Mod.	 Very Mod Mod Very Mod	 Very Very Very Little Very	 Very Very Very Very Very	 Very Little Mod. Mod. Mod.	 Very Very Very Very Very
	Do general stakeholders have right to CSR information?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do investors have right to CSR information?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Should CSR present separate data for all major stakeholders?	Yes	-	Some	Yes	No	Yes	Yes	No
2	What are key areas that should be reported on?	Com-munity involve-ment in environ-ment. projects.	Society, consu-mers, and com-munity.	Educ-ation, com-munity	Social / green investment Environ-ment & safety of assets.	Impact on environ-ment.	Social, environ-mental. impacts, & goals. Progress in poorly perform-ing areas.	Occupat-ional health, pollution, effect on human health.	Environ-mental impacts, com-munity, impacts, & assur-ance.
3	Why do you think companies don't give better CSR?	No legal require-ments, not enough pressure.	Not consid-ered import-ant, no interest.	Not enough pressure, other priorities.	To difficult, no pressure, no legal require-ments.	Diffic-ult and time consum-ing.	Not enough pressure, no legal require-ments.	Not enough pressure, not considered important.	No legal require-ments,, not import-ant, no pressure.

Information in Table 6.8 would suggest that (other) key stakeholder groups do support CSR and believe that general stakeholders and not just investors do have the right to CSR disclosure. Key stakeholders believe that not all areas of current CSR disclosure are adequate, with different groups believing different areas to be important. However, all stakeholders felt there was not enough pressure on companies to present CSR disclosure.

6.5. Conclusions

In this chapter the author sought to determine the views of all significant stakeholder groups, regarding the perceived importance and their expectations of CSR, and the

extent to which current reporting was perceived to meet these needs. Primary evidence was gathered from a survey of key stakeholder groups, with supporting evidence from interviews of representatives of other significant stakeholder groups that could not reasonably be surveyed. This study assumes that these stakeholders had been exposed to CSR in their personal capacities, and knew what its objectives were[36].

Areas traditionally associated with CSR, such as 'impacts on society', 'employees', 'the public', 'consumers', the 'biotic' and 'physical environment', were considered to be important, but not adequately reported. This supports the notion that there are inadequacies with respect to current levels of CSR from stakeholders' perspectives, and hence an expectation gap exists. Traditional financial reporting areas, which were considered to be very important, which should be well disclosed (as required by the Companies Act of 1973, amended), were considered by all stakeholders to be inadequately reported, particularly in the case of corporate governance and data that would indicate potential future performance. This expectation gap provides evidence to support the call for increased pressure on business for improvements in reporting and disclosure, and the need for research into CSR disclosure, reporting systems and model building, as undertaken in this thesis.

The stakeholder surveys conducted in this chapter are built upon the framework of interactions between businesses and the physical and social environment. The findings of this chapter are considered as evidence (from an accountability theory) to support the principles used in the second part of Chapter 7, which proposes a framework for a CSR model. The support found in this chapter by key stakeholder groups for disclosure of specific impacts, justifies their inclusion in the proposed model.

Stakeholders do believe that general stakeholders, and not just investors, have the right to CSR disclosure, that CSR should be included in the annual report, be prepared to the same standard as the AFS, and should be externally verified or audited. The

[36] Non-returned questionnaires could in certain instances represents those sent to stakeholders that did not have experience with CSR, and hence were not in a position to respond. It must be noted that annexure was included with the questionnaires, which provided explanations of all concepts and terminology.

latter raises questions of whether adequate systems exist for auditing, which question is not addressed by this study, but requires further research.

Perceptions as to why present CSR is not more comprehensive, differs between stakeholder groups, indicating a lack of transparency in CSR presentation. Concern by financial intermediaries regarding difficulties and costs, and negative correlations of responses with respondees with higher levels of education, suggest that improvements are needed in current CSR systems, supporting the need for further research in these fields. However, interviews with various stakeholder representatives indicate a concern that there is not enough pressure on companies to present CSR disclosure. This raises policy issues, and perhaps the need for compulsory CSR standards and legislation. In this chapter, evidence is provided that there is an expectation gap, and that there is a need to improve CSR, which is the premise of this thesis.

CHAPTER SEVEN

PROPOSED CONCEPTUAL FRAMEWORK AND PRINCIPLE-BASED CSR MODEL

7.1. Introduction

The principles of CSR disclosure and practice, from a South African perspective, are critically reviewed in this chapter. Major criticisms are noted, and suggestions are offered (the author's viewpoint) regarding possible ways forward. Although the review is undertaken in a South African context, it is relevant to all those involved in CSR research and practice, particularly those in model building and setting standards and guidelines. In this chapter, the findings of Chapter 6 are taken into consideration: that is the perceived expectations of the stakeholders in the CSR process. The findings of prior research and model building as detailed in Chapter 4 are also considered.

It is suggested that many CSR systems lack rigour and have been developed from various collaborations, and hence lack a sound conceptual foundation (principle-based) that is needed for standards that achieve specific objectives, and facilitate comparability. Potential problems with such an approach are critically reviewed, and processes and further research that is required for significant progress is highlighted, as well as a framework of principles not unlike that used for financial reporting is suggested. These principles are then applied to the formulation of a CSR model.

The significance of the first part of this chapter is that in it the author systematically addresses CSR and its research in SA, presenting observations and suggestions with respect to:

- What is 'actually' being done,
- What should be done,
- What other people (stakeholders) and researchers think about this,
- Why this should be done (theoretically and from stakeholders' perspective), and
- How this should be done (including reporting formats).

In Chapter 4 relevant prior research was discussed in detail. However this is briefly revisited in the context of this chapter.

CSR emerged in the 1970s in response to growing environmental pressures and concern over the social impacts of corporate activities (Gray et al. 1996). Business, predominately in developed but also in developing countries such as South Africa, not only responded with increased disclosure, but also with participation in and subscribing to a number of protocols and charters. Arising from these documents, drafted by NGOs, the UN and business collaborations, various environmental and social reporting guidelines emerged (GEMI 1992, Hillary 1993, CERES 1995, GRI 2000). With the exception of the Oboblianz or the input-output-flow system adopted by several countries in Northern Europe and Scandinavia (Schaltegger et al.1996), most of the voluntary guidelines consist of recommended lists of key indicators and other criteria that reporting companies are encouraged to disclose.

A limitation of these voluntary and non-prescriptive reporting frameworks is that they are subject to reporting at the lowest denominator (Krut & Gleckman 1998) that is, companies report the absolute minimum required by such guidelines. Since many of these guidelines consist of lists of suggested disclosure, there are few items that have to be disclosed. Thus, guidelines do not require specific compliance or external verification. Other problems with such systems include:

- Intentional omission of data that could be perceived negatively by the public and shareholders (Gray & Bebbington 2001),
- Excessive focus on minor issues or irrelevant data to enhance the corporation's public image, known as 'green washing' (Welford 1997),
- No mechanism for users to identify omitted data i.e. completeness,
- No way for the users to determine relevance of data without specific industry knowledge i.e. comparability, and
- No way for users to verify accuracy or reliability of data presented.

Deegan (2002) notes that research papers in CSR have focused on areas such as:

- What companies are reporting (Adams, Hill & Roberts 1995, Deegan & Gordon 1996, Gamble et al. 1996, Newson & Deegan 2002),
- Links to industry and size (Ullman 1985, Newson & Deegan 2002),

- Investor reactions (Feedman & Jaggi 1988, Epstein & Freedman 1994), and market reactions (Wiseman 1982),
- Stakeholder perceptions (Bebbington et al. 1994, Deegan et al. 1996),
- Role of education (Gordon 1998, Gray & Collison 2001),
- Management roles (Deegan & Gordon 1996, Deegan & Rankin 1997), and
- Role of audits (Gallhofer & Haslam 1996, Power 1997, Owen & Swift 1999, Ball, Owen & Gray 2000, Owen, Swift, Humphreys & Bowerman 2000, Gray 2002).

However, conspicuous by their absence from the above listing are theoretical propositions on how to improve and change CSR, which have been less readily forthcoming. Gray (2002: 698) notes that "less than positive responses from editors and referees" clearly have been a deterrent as have, until recently, critique from alternative and critical theorists, although he suggests this is changing. The early theorists did however provide creative and imaginative propositions (Linowes 1972, 1973, Abt & Associates 1972, Ramanathan 1976, Ullman 1976), and these early works had a managerialist perspective (Gray 2002), as did the pioneering work of Preston (1981), which discussed how social accounting could be considered within the parameters of GAAP, which Gray notes (2002: 698) is "not entirely without merit" and is re-examined within this chapter. That social accounting is "still under theorised is not in dispute" according to Gray (2002: 699). Social and environmental accounting and reporting could be perceived as being a threat to capital, and Gray (2002) notes that capital has a powerful control over the media, teaching and research agendas as well as practice. However, this is what CSR should be challenging (Bronner 1994, Power 1997, Lehman 1999): it should be challenging those in power who exceed their responsibility (Medawar 1976).

Thus, although important and ground-breaking work has been undertaken on CSR (Linowes 1973, Estes 1976, Medawar 1976, Ramanathan 1976, Preston 1981, Ullman 1985, Schaltegger et al. 1996) there still remains significant scope for work on developing the theoretical basis for and links within CSR, which will however, as noted above, be subject to significant critique.

Some of the difficulties associated with contemporary CSR approaches will be explored in this chapter, particularly with respect to meeting the growing expectations of stakeholders: a conceptual / theoretical approach, that would address many of these challenges will be provided. Although such an attempt to provide a framework is not unique (Hibbert 1999), the follow-though of these principles to report modelling will be.

The author argues that CSR frameworks, although largely voluntary, are still rule based as opposed to principle-based. The GRI, Forestry standard and Responsible Care Initiative, which are the only officially endorsed models (by the JSE, Forestry and Chemical Industries respectively) used in South Africa, are examples of such rule-based models. This rule-based approach is as a result of the process through which these guidelines and standards have been developed, which has been largely achieved largely through negotiation between stakeholders and interested parties, which Hibbert (1997, 1999) supports as the true application of the 'Accountability' model. However, the 'User Needs' model, or 'Decision-usefulness' model, which is favoured by the Federation of European Accountants (FEE) (Hibbert 1999), lends itself well to a conceptual model and subsequent principle-based reporting, which is the approach taken in this thesis.

7.2. Approach to this chapter

In this chapter how to (conceptually) contribute to improving CSR in South Africa is dealt with, and determining the basis of CSR from an academically rigorous point of view is the aim.

The objectives developed to meet the above aim were:

- To select an appropriate paradigm and theoretical perspective,
- To develop a framework of principles,
- To determine what should be reported (model of impacts),
- To determine how this should be reported (format or basis), and
- To apply this as the basis of a reporting model, system or framework.

The methodology used in this chapter was detailed in Chapter 5. However, to set the context of the work in the present chapter, a brief review is undertaken here.

The technique applied in this study was discursive analysis. This technique represents a subjective interpretation and viewpoint and is not tested for support in this study. However, in the overall study, several of these constructs were tested. The work described in this chapter is set in the context of a South African study, but this should not detract from the generalisability of the principles proposed.

A limitation of this study is that it specifically focuses on companies. CSR covers all aspects of a (business) entity's relationship with, and impact on, society and the environment, with research traditionally focusing on corporations as the primary vehicle for business activity. The present research focuses on corporations, which does not exclude other business or organisation forms, although these are not specifically considered, nor does it differentiate between the legal forms of corporations. However, it should be noted that in South Africa accountability does differ between these forms, with broader accountability required of listed and public companies, compared with negligible accountability to stakeholders other than shareholders, in the case of private companies, whose annual reports are not on public record.

7.3. Analysis and discussion

7.3.1. Stakeholder theory

The underlying assumption of this part of the thesis is that the various activities of companies have numerous integrated effects and impacts, many of which are not reflected in traditional annual corporate reports (including the annual financial statements). These impacts include, but are not limited to effects on:

- The environment,
- The economy (the broader impacts on communities and other specific stakeholders),
- Social systems (society),
- Consumers' health and well-being (mental and physical),
- Workers' health and well-being, and

- Political decisions / systems.

Corporations operate within a framework of social systems, with legal authority (Gray et al. 1996). This is the "social, political and economic framework, within which human life occurs" (Gray et al. 1996: 47), and this concept is the basis of Political Economy theory. Stakeholder theory (which is covered in detail in Chapter 2) has two main branches, the first of which is a managerial (positive) branch and the second is an ethical or normative branch (Gray 2002). Under the former, organisations strive to manage stakeholders that are considered to be powerful in that they control resources needed by the organisation, for example shareholders versus environmental groups (Roberts 1992). The latter approach makes the normative assumption that corporations are accountable to all affected parties, (stakeholders) with respect to the impacts (on these parties) from their activities. Stakeholder theory generally assumes that corporations would not be allowed to continue to exist by society, without overwhelming approval of the interested and affected parties. This thesis is written in the context of this approach and hence is concerned with the interests of all key stakeholders and accountability to them in order to receive their continued support.

Alternative theories such as the legitimacy theory (Gray et al. 1996) suggest that corporations exist by virtue of their power base and influence, which they constantly strive to maintain, by legitimising (justifying) what they are doing in terms of current socio-political expectations and norms. Such a theory can explain current CSR (Griffith 2002), which is largely based on voluntary guidelines and which provides only select indicators and information. These guidelines and protocols have been criticised as being applied at the lowest denominator (Krut & Gleckman 1998) and when applied are noted to carry extensive inappropriate and possibly misleading material that can be classified as 'green washing'. Legitimacy theory is useful in explaining current trends in CSR, but does not provide solutions to current deficiencies in reporting, nor does it play any potential role in promoting what corporate reporting could do to assist in reducing the current global environmental destruction. Thus, for the purpose of this thesis legitimacy theory is rejected as not providing a useful framework for improving existing CSR disclosure.

7.3.2. CSR framework and principles

Debates and disputes in financial accounting, particularly in the current era of international harmonisation are referred back to the accounting conceptual framework, which specifies accepted norms, including the principles and qualitative requirements for information to be presented in annual financial statements in order to be useful to the users and stakeholders of such reports (IASCF 2004). These qualitative characteristics and the constraints on reporting are highlighted in Table 7.1.

Authoritative guidance on CSR worldwide is not under the control of any single organisation, but rather emanates from a variety of NGOs, organisations, charters and, in a few countries, even governments, which set standards and guidelines on such reporting. Missing from such guidelines and standards is the articulation of any fundamental principles upon which such standards have been prepared, except in the case of the FEE, which prepared a discussion document on a framework for CSR, similar to the accounting framework of the IASCF (2004). This framework was criticised by Hibbert (1999) as inappropriately transposing accounting principles across to CSR. However, the author argues that CSR, as a sub-discipline of accounting, lends itself well to many of these principles, as is reflected in Table 7.1 below.

Table 7.1. Qualitative characteristics and constraints thereon, of disclosure in corporate social reports (Adapted from IASCF 2004: 28)

Characteristic / Constraint	Application to CSR
Relevance / usefulness	Information provided must enable users to be able to evaluate the impact on the environment, the effect on the health and well-being of workers, as well as the overall impacts on surrounding communities, society and the economy.
Reliability / accuracy	Information must be correct and neither misstated nor fictitious.
Completeness	Key information must not be missing, nor understated.
Objectivity (faithful presentation) and neutrality	Information must be presented on a factual basis, with explanations not trying to present a positive picture of the company as a marketing exercise i.e. must be free of green washing.
Understandability	Quantitative amounts must be labelled and explained in notes e.g. not just chemical formulae shown. It should be in an accessible language style, objective and rhetoric free.
Comparability	Format of presentation should be consistent between companies, to facilitate comparison of different companies' performance. (The implications of this is that there should be a single standard regulating CSR).
Timeliness	Information should be reported soon after the end of the reporting period, so that users may take appropriate and timely action; and interim or provisional reports should be provided where appropriate.
Cost / Benefit	The benefits of extra accuracy / disclosure should not outweigh the costs of this preparation. However, in the case of CSR this must be considered against the full social and environmental cost.
Balance between qualitative characteristics	No single qualitative characteristic should be favoured above the others.
'True and fair'	The information must be a reasonable presentation of what the actual activities and impacts were, including all material items. It should not be an idealistic portrayal of policies, monies spent and commitment to environmental and social goals.

Many of the above principles, which have been included in the FEE framework, have been criticised by Hibbert (1999). These criticisms, together with responses in relation to this study are listed below:

- Relevance: it was suggested that this could be determined by a survey of stakeholders' needs. In this study this was undertaken and reported on in Chapter 6.
- Timeliness: Hibbert (1999) argues that environmental reporting should not be linked to a financial reporting period, and that this may suit only select stakeholder groups. However, overwhelming support for inclusion of the CSR with the annual report was found by the present author (and reported in Chapter 6), this would support the notion of having co-terminus reporting periods.
- Prudence: the list in Table 7.1 does not include the FEE principle of Prudence. Hibbert (1999) suggests this should be excluded, but should be considered to

have been incorporated into the principle of neutrality, and the assumptions of the precautionary principle.

The FEE framework covers similar areas to the accounting Framework and includes five key underlying assumptions of environmental reporting which are listed below:

- 'The Entity assumption', whereby the boundaries of the entity are defined. This does not, however, exclude the possibility of reporting on upstream and downstream impacts, as suggested as the 2nd and 3rd order reporting discussed under the proposed model in Section 7.6.

- 'The Accrual basis'. Hibbert (1999) cautions attempts to apply the principle strictly to CSR, as many impacts are only determined many years later, and even current impacts are often hard to measure and record in the current period.

- 'The Going Concern assumption' notes that the entity can only bear the costs of environmental and social impacts, as long as it remains financially sound.

- 'The Precautionary Principle': where doubt exists about possible impacts, organisations should err on the side of caution. This is a very powerful principle, and if applied consistently would address many environmental problems. However, management would become accountable for decisions they made that had significant consequences and would need to show due diligence in the investigation of possible impacts, and that there was no cause for reasonable doubt, else they would clearly be responsible for such decisions.

- 'Materiality'. Hibbert (1999) suggests that materiality cannot be determined objectively and could only be determined using a stakeholder approach (as opposed to a decision-usefulness approach), through consultation, which is consistent with the view of Chambers (1966: 415) that materiality is "nothing more than an informed sense of proportion" which would clearly differ from person to person, and as Faux (2005) notes, is peculiar to the stakeholder using the information. The Environmental Accounting Task Force (International Chartered Accountants Association (ICAA) 1998) suggest the use of

'significant' event as opposed to the use of materiality when considering environmental impacts. Faux (2005) determined a materiality level of 6% would effect users' judgement of environmental impacts, however this assumes such impacts can be reliably measured.

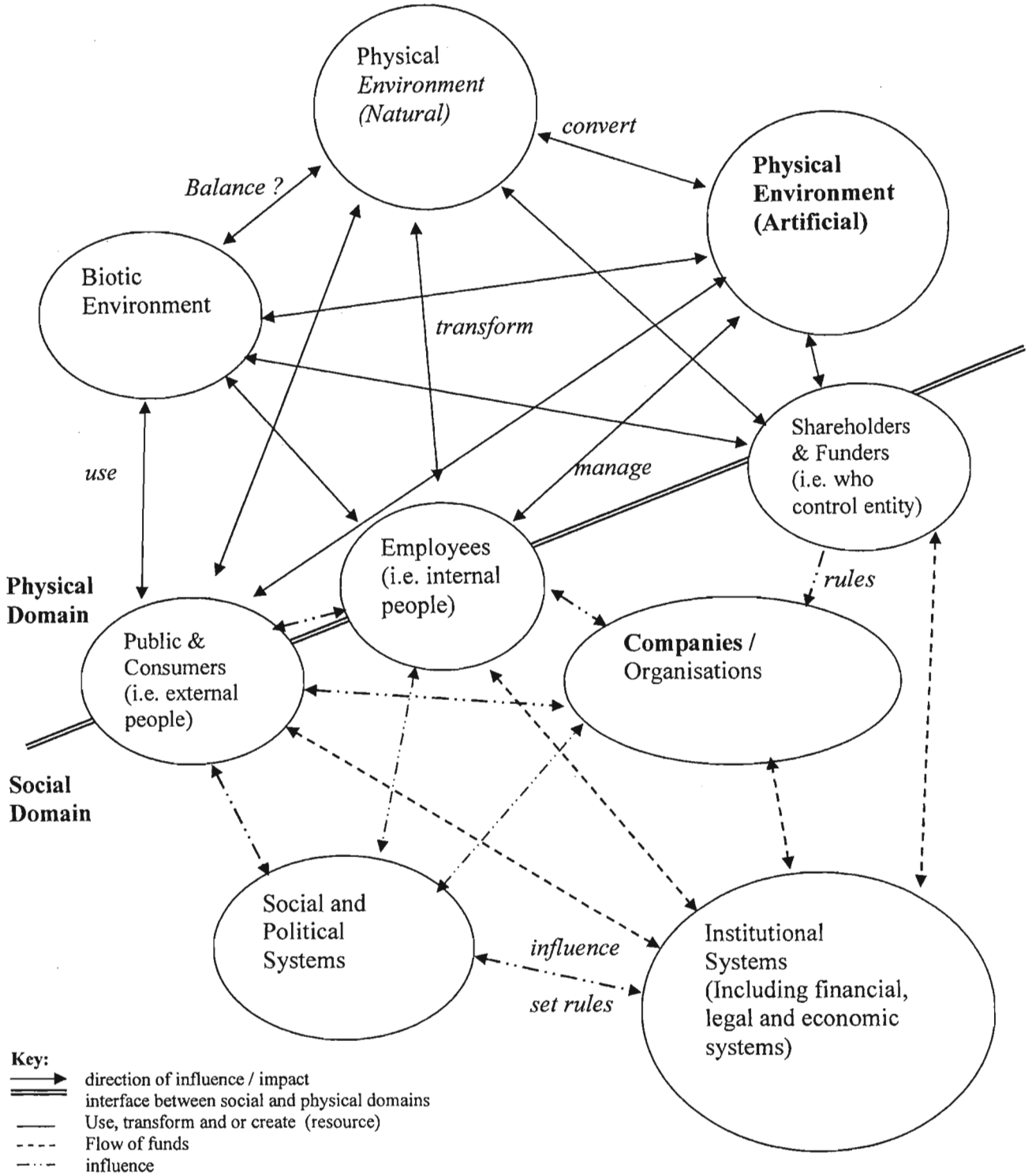
7.3.3. Framework of impacts and interactions between businesses and elements of social and physical realities

Criticism levelled against traditional financial accounting often ignore the social construct of the financial reporting system, namely that it seeks to report only in the financial-legal social system, intentionally ignoring other realities (Gray et al. 1996, Mattessich 1995). Some of these other realities (or constructs) that are well described by other academic disciplines include:

- Economic,
- Physical,
- Biotic (living systems),
- Socio-political, and
- Psychological.

The interaction between these systems, can be broadly divided into physical and social systems as reflected in Figure 7.1, which was developed by the author. This framework was developed by considering what represents key elements of social and physical realities and their potential interactions caused by or linked to the activities of any hypothetical business producing products and or providing services. These interactions are discussed in more detail on the page following Figure 7.1.

Figure 7.1. Conceptual framework showing social and physical systems, subsystems and their interaction



Key:

direction of influence / impact

interface between social and physical domains

Use, transform and or create (resource)

Flow of funds

influence

Use ≈ impacts; Funds ≈ invest or withdraw; Influence ≈ both directions

Note: due the complexities of social and physical realities only limited detail is shown on the above diagram. A more detailed explanation is included in annexure 1.

The basis of this framework is that people are at that interface between social and physical realities. Funders, specifically shareholders, give the employees and managers of the companies instructions to act upon the physical environment to transform raw materials into artificial products, the production of which has an impact upon the natural and biotic environment. The employees also influence the consumers, through marketing programmes to encourage the purchase and consumption of products, which also has an impact on the natural physical and biotic environments. All people impact on the environment as a result of activities from everyday living, as all people are regulated by social norms, as well as influence such norms. A key sub-system of social reality is the financial-legal system in which accounting operates (Mattessich 1995), which interacts with all persons and is crucial to all these interactions since the goal of companies is to maximise the financial wealth of their shareholders.

Applying the principle of materiality (as discussed earlier) and considering what impacts of corporate activities are likely to affect specific stakeholders, the author grouped these impacts per subsystems of the physical and social realities, (as separately indicated in Figure 7.1 above). This listing, which is clearly not exhaustive, is shown in Table 7.2:

Table 7.2. Lists of possible significant impacts and interactions resulting from corporate and industrial activity

Economic and Financial Current performance
Past performance
Present financial position
Potential and likely future performance
Governance and internal control
Continued existence
Legal Compliance with company law
Compliance with labour, financial and environmental law; and the constitution
Establishment of additional legislation
Socio-Political Effect of marketing and advertising on trends, fashions, and expectations
Effects of corporate lobbying on political decisions
Shareholders & Funders Benefits received as interest or dividends
Benefits accrued and share value
Source of funds
Employees Benefits received and earnings
Effects on social status (from promotions etc), and value of increased skills base
Effect on mental health (stress and or self esteem)
Effect on physical health from work conditions and stress
Assistance and support provided to disabled employees and members of disadvantaged groups
Public Effect on consumer mental well-being from marketing activities i.e. tension created by new needs and expectations for products or services
Effect on physical health on consumers from using products
Indirect effect of pollution through impaired functioning of environment, loss of aesthetics
Direct effect of pollution
Direct contributions to society
Physical Environment Conversion of natural assets (raw materials) to processed assets
Other conversions of materials and chemicals
Effect on owned natural assets e.g. land, such as pollution
Effect on shared natural resources e.g. air, water quality, hazardous waste
Use and sources of energy
Biotic Environment Effect on bio-diversity (species richness)
Effect on eco-systems health and functioning
Effect on biomass (live plant and animal quantities)

Potential materiality of these impacts was determined in Chapter 6, in which most categories were found to be important to very important. Traditional financial reporting items were considered to be very important to extremely important.

7.3.4. Format and basis of reporting

Various CSR formats have been suggested (GRI 2000, GEMI 1992), however it is acknowledged that significant research still needs to be conducted to determine the

elements (Hibbert 1999) of corporate social and environmental reports. This section of the chapter considers the transferability of many of the principles of financial reporting to CSR, while acknowledging that additional complexities need to be accommodated.

Using the example of a sales executive initiating an advertising campaign, it can be said that financial accounting systems would respond not just to the initial event or transaction i.e. advertising, but also to the direct consequence which is the resulting sales, and also the significant impacts thereof, such as profits, cash flows and taxation. Any comprehensive social and environmental accounting system would need to record all (material) activities and the impacts thereof. The measurement, valuations and reporting (disclosure) would differ depending upon the reporting objectives. However, in the case of external reporting to stakeholders, these should be determined according to a defined set of rules to reflect identical or at least comparable results.

Within a financial accounting system, the three elements of a transaction (event or impact) that need to be considered are (IASCF 2004):

- recognition i.e. of the asset, liability, equity component, income or expense,
- measurement i.e. of the amounts, and
- recording (and classification) of the amounts of the elements recognised.

In the case of social and environmental accounting systems, the question needs to be asked: Can all material[37] activities be recognised, measured and recorded? This is considered in Table 7.3 below, for each of the major subsystems of physical and social reality[38].

[37] As determined with reference to all major stakeholder groups, not just shareholders.
[38] As discussed earlier in this chapter in Section 7.3.3.

Table 7.3: The feasibility of the recognition, measurement and recording of major realities and elements thereof

Criteria		Physical artificial[39]	Physical (including chemical)	Biotic	Financial-legal	Economic	Socio-political & psycho-logical
Recognition		√	√	√	√	√	√
Measurement	**Performance activities**	√	√	√	√	√	*1
Measurement	**Position and cumulative effect**	√	√	*2	√	*3	*1
Recording		*√*	*√*	**2*	*√*	**3*	**1*

Note: Traditionally the above realities are combined into economic, social and environmental
Measurement: assumes that this can be done, without addressing cost versus benefit or accuracy versus timeliness issues

√: Can be recognised, measured and recorded

**1: Social and psychological impacts of most corporate activities can be measured on employees, the public & consumers. However, the accumulated effect on individual subjects and aggregation for whole populations is difficult to determine*

**2: Impacts on ecosystems and individual organisms can be determined, however, it is difficult to isolate single influences. It is also difficult to determine cumulative or aggregate effects*

**3: It is difficult to isolate individual impacts of corporate activities on a macro-economic scale (as there are too many variables influencing change)*

As noted in Table 7.3, although the sciences are able to determine and measure impacts, difficulties can be encountered isolating impacts and determining cumulative or aggregate effects, particularly where there are numerous variables operating simultaneously. The existence of such difficulties does not, however, preclude actual recognition, measurement[40] and presentation[41], but does raise questions regarding qualitative criteria (Vorster & Lubbe 1994).

Arguments against existing CSR systems are based largely on issues of incompleteness (Welford 1997), and relevance or usefulness of information actually disclosed (Laughlin 1999). It is suggested that any comprehensive corporate reporting system, in order to facilitate comparability, would need to be based on sound and consistently applied principles incorporated in a conceptual reporting framework as covered in Table 7.1. Reporting format would also be important and thus it would be

[39] Artificial e.g. plant and equipment, has relevance in the financial-legal and economic subsystem of social reality.

[40] It does however raise cost benefit issues.

[41] It is suggested that simple social scales such as Maslow's Hierarchy (Maslow 1970) could be used, for groups indicating numbers of people and levels on the Hierarchy, before and after. With regard to eco-systems, a biomass multiplied by a coefficient for ecological significance, (or grouped into categories) could be used. When determining how best to present these data, cost versus benefit as well as limited precision may support arguments for simple, but effective systems.

useful to consider the basic format of current traditional financial reporting systems, which include (IASCF 2004):

- Position, (status, or cumulative effects to date), at the beginning of the reporting period (opening balance sheet amounts),
- Changes, (impacts) and performance for the period (income statement for current period),
- Position, (status, or cumulative effects to date) at the at the end of the period (closing balance sheet amounts), and
- The notes to the AFS present additional information on the above items that are useful in further explaining amounts, and particularly in providing information material to specific stakeholders' (in this case the shareholders' and potential investors') decisions[42].

This same approach could be used with CSR. However, since not all amounts can be objectively or reliably costed and hence cannot be included in a single financial-economic report, the merits of reporting per separate subsystems of physical or social reality can be justified[43]. The following two examples illustrate how this could be applied. The first example focuses on the impact of the activities of a business and the use of carbon, and specifically the release of CO_2, a significant greenhouse gas. The example illustrates how the aforementioned approach, identifies the impact of the company's activities, in this case the CO_2 released into the atmosphere. The second example illustrates the impact that an advertising campaign can have on potential consumers.

1. Example from Environmental Report
    - Beginning: carbon in solid state (wood, coal etc) acquired, controlled or held by corporation,
    - Conversion through production or chemical processes, heating or power generation,
    - Natural attrition and environmental denudation or regeneration of sustainable resources,

[42] The statement of changes in equity (SOCIE) merely reflects movements and balances in funds, whereas the cash flow statement incorporates all of the above, but from a selected element of financial subsystem of social reality, that is cash amounts and movements only.
[43] See Table 7.3.

- End: total CO_2 released[44] and amount still in solid state.

2. Example from Social Report
    - Beginning: (awareness levels in consumers predisposition to purchase) x (number of consumers aware of product),
    - Advertising, add: (average duration) x (average number of consumers exposed to) x (number of times) = (Average change in awareness) x (average number of consumers),
    - Purchases, less: (number of consumers purchasing) x (average number of products purchased),
    - End: (awareness levels in consumers predisposition to purchase) x (number of consumers aware of product).

A further consideration in the design of such a reporting system is the usefulness of the presentation format. The opening-change-closing position system is consistent with the Oboblianz or input-output-flow system, which has strong support from some CSR academics (Schaltegger et al. 1996), and eliminates the obvious deficiency of incompleteness, which is commonly manifested by companies not providing a full product and waste reconciliation. Completeness, also needs to address location of output, for example carbon removed from emissions by scrubbers versus mirco-biological filters, which have very different impacts.

Arguments in favour of non-compulsory reporting systems suggest that the 'carrot' instead of the 'stick' approach is more effective in motivating corporations to modify their behaviour. Such motivating factors can include an improved corporate image and adopting new technologies that lead to greater operating efficiencies. Other benefits of the voluntary approach suggested by Jorgenson (2002) include:

- It encourages insight and understanding, in identifying significant impacts.
- It allows for stakeholder involvement.
- It does not face the logistic difficulties of legislative enforcement.
- It encourages innovation.

[44] The notes would need to disclose the significance and / or cost of such releases / emissions.

- It can ensure compliance (if only in applying an environmental management system), in such cases where industrialists opt for some form of certification.

This author suggests that if data in the environmental and social report (and other sub-reports) were to be grouped on an activity basis (e.g. manufacturing, packaging, distribution, marketing, administration), this could lead to direct comparisons with industry norms and could provide useful information for various stakeholders. Such a format could motivate an entity to strive for greater efficiency, which would reduce costs, improve competitiveness as well as satisfy shareholders, government regulators and environmental concern groups. Comparisons could be made between sub-reports for each activity, comparing the environmental impact to: (a) value created[45], (b) the impact on society and (c) the impact and benefits for workers. It must be noted however, that in Chapter 4, strong stakeholder support for such activity based reporting was not found.

Reporting is linked closely with recording, and CSR systems could include variations, such as the two considered below:

1. Management Information Systems and Information mining

   Many large organisations already have such systems, which include all information on corporate activities[46], which could then be used to selectively extract data for relevant reports (CIMA 1999). This data is inherently quantitative although qualitative data is provided as an integrated link and as attribute value laden data. For example, production figures could be interrogated to derive yield prediction and extrapolation.

2. Variable Coefficients

   All transactions, reactions and transformations can be recorded in one system with dummy coefficients (Seddon 1992), which can be set to zero where not relevant for a particular report, or can be loaded with a factor. For example, CO_2 output, although not included in normal production reports, could be loaded with a zero cost, for normal management

[45] 'Value created', from the Value Added Statement, is the excess of revenue generated over associated costs, which in the case of this thesis includes externalised environmental and social costs.
[46] Which may be flagged for relevance per reporting type.

reporting, but for environmental reporting could be costed at international trading rates, translated into South African Rands.

A very important aspect of reporting is the reporting boundary of an entity with respect to its activities and impacts (Mattessich 1995). The critical issue here is to be able to separate which impacts are caused directly by the entity, as opposed to those caused by the entity's suppliers and customers. Although reporting on an entity level basis, that is excluding indirect impacts, accurately reflects the impacts of that specific entity's activities, without such activities (such as decision to produce and sell) the activities of the suppliers and customers may not have occurred. Thus, it is proposed that a consolidated 'supply chain', including the impacts of suppliers and customers which are treated like subsidiaries (over which the corporation has influence or control)[47] and are thus as an extension of the primary company's activities, would be useful. Several international corporations are in essence already doing this on a product basis, using life cycle analysis to minimise the impacts of their products, packaging, waste and raw material sourcing (Anderson 1989, Proctor & Gamble 2002). Adoption of a consistent reporting system for economic, social and environmental impacts would in itself not ensure greater accuracy, relevance or reliability or any of the fundamental principles upon which such a system might be based. Independent (external) verification would, however, be able to provide some level of assurance that all material items had been fairly presented. The author contends that it is unreasonable that AFS are audited and CSRs are often not, which is commonly the case when drafted on the basis of non-compulsory guidelines. This is especially concerning, when it is known that some environmental impacts of corporate industrial activity may last for thousands of years. A further concern is the impact of legally approved (certified) products on the health and well-being of humans, including products such as cigarettes, alcohol, many carcinogenic additives, as well as certain medicines, which are not accounted for.

[47] Arguments could be made for the consolidation of the impacts of funders, shareholders and particularly employees, over which the corporation has limited control or influence, or those activities controlled by shareholders and funders (the equivalent of the ultimate holding company).

If social and environmental reports were to be audited, then audit assertions should be applied. Financial audit assertions (SAAS 500 2003: paragraph 17 page 354) that could be applied in this context are:

- Accuracy, including
  - valuation (estimation of social and environmental impacts),
  - measurement (of current impacts),
  - presentation and disclosure of material environmental and social data,
- Completeness,
- Validity, including
  - existence / occurrence,
  - rights and obligations (based on a social moral code, *not* legal).

However, it must be noted that such assertions relate to the principles and qualitative criteria of reporting which would, in the case of CSR, need to be defined in a conceptual framework. Other assertions specific to CSR, such as sustainability (which includes elements of going concern not listed above), would also need to be tested.

Cost versus benefit arguments might suggest that significant levels of reliability and accuracy are not justified in the case of CSR (Vorster & Lubbe 1994). However such arguments ignore the significant social and environmental costs that are not internalised under present financial-legal systems (Rubenstien 1989). Complexity and difficulty associated with measurement of social and environmental factors does not preclude measurement itself, but merely indicates that improvements to management information systems will be required. In South Africa, some of the larger accounting firms have established specialised environmental audit divisions (Holcroft 1999). It would be expected that if social and environmental audits became mandatory, this would result merely in changes in the accounting and environmental professions, with existing social and environmental consultants aligning themselves more closely with financial auditors, even though they would be governed by different legislation.

The social audit is largely accredited to the Social Audit Limited (Medawar 1976), an independent body that emerged in the UK in the 1970s, and provided critical 'audits' of major commercial organisations. The social audit has developed since then with,

for example, global standards by the Council of Economic Priorities (CEP) such as the SA8000 standard (Swift & Pritchard 1999). However, such audits have been extensively criticised as having succumbed to managerial and professional capture (Power 1997). The stakeholder engagement component of the social audit, may merely be according to Owen et al. (2000: 87) "a guise for controlling and capitalising on stakeholder sentiment for commercial gain", which opinion is also voiced by Swift and Prichard (1999). Disclosure in itself can have only a limited effect, as it is necessary for those who use the information to have some forum in which to use it (Williamson 1997). Owen et al. (2000) suggest that attempts to standardise CSR do little to empower non-financial stakeholders and they observed the lack of professional standards of verification and accreditation of Social Auditors, as well as the lack of assurance of independence and professional competencies. They also note confusion between roles of the audit and review and propose formal legislation to address such issues. In South Africa, preliminary legislation has been drafted for registration of impact assessors, which could ultimately be used for social and environmental auditors (Muir 2005). Despite the problems associated with the social audit, it currently remains the only process designed to provide assurance to stakeholders that has potential to ensure meaningful accountability and ensure the qualitative characteristics of CSR as proposed in this chapter are achieved.

Finally, it is useful to consider the proposals of this chapter in terms of CSR formats, in light of Antal and Dierkes' (2002) framework of CSR models, which has four levels namely:

1. Early models, for example Linowes (1972, 1973), which include elements of cost accounting and using socio-economic variables. This includes value added statements
2. Extension of level (1) models to include outputs (Dierkes 1979)
3. Integrated multifaceted models such as those developed by the Social Accounting Practice (AKSP 1977) which include: social reporting, value added accounts, and societal impact accounts
4. A final level, which includes 'goal accounting and reporting' (Antal & Dierkes 2002). Such reporting identifies social and environmental goals then provides quantitative and qualitative data to demonstrate how these have been achieved by the business, as well as shows impacts of activities.

Levels 1 to 3 include accounting for inputs and outputs with quantitative and qualitative disclosure. Advanced models at level 3 include accounting for all measurable variables, and can provide comprehensive data on overall outputs and impacts of businesses. However, the author argues that without a suitable framework or interpretation, these models would not address the key principle of Ethical Stakeholder theory, that is, to present meaningful accounts to stakeholders so that they can assess whether business activities are acceptable in terms of their relationship / social contract with these businesses.

What has been proposed in this chapter correlates to a level 3 report of Antal and Dierkes' (2002) framework. However, the key difference is that the present author stresses that such a report should be developed against proposed CSR accounting principles embodied in a conceptual framework as suggested previously in this chapter. A level 4 report would achieve greater accountability, (provided completeness and neutrality could be assured). However, it would be easy to use goal accounting to detract from actual impacts and to focus users' attention on goals successfully achieved only.

7.3.5. Limitations of this component of the thesis

In earlier sections of this chapter the principles were discussed for CSR based on a sound conceptual framework and on identifying reporting formats that would achieve these principles. However, for comparability and consistency, uniform standards or guidelines need to be developed to facilitate the standardisation of CSR. The writer is not arguing for a format that would disallow reporting entities the flexibility to best portray the impacts of their unique activities to meet the specific needs of their stakeholders, but is arguing for consistency in the elements in CSR, which has been acknowledged to need further work (Hibbert 1999). Numerous guidelines already exist (CERES, GRI, ISO14001), as do examples of excellent application by companies (Norsk Hydro, Body Shop).

The framework of corporate impacts identifies significant areas of impact that the author argues should be reported on. Several of these impacts, for example the impact of marketing on public and consumer mental and physical well-being, would be potentially difficult to measure and report. Although none of these areas would be

impossible to assess, inherent difficulty would explain poor or perceived non-existent current reporting, despite importance to specific stakeholder groups (Chapter 4). In Chapter 6 it is noted that further research would be needed to develop many of these areas, before they can be readily reported upon.

Areas of impacts identified as being potentially significant, even if measurable, would not result in measurement, unless systems exist in, or could be put into place by, companies. An assessment would need to be made of monitoring, measuring and reporting systems that exist in business organisations, to determine the ease with which such data could be compiled for reporting. A significant argument against CSR is the additional burden it would place on entities. Any comprehensive reporting system would need to assess the potential extent of this additional burden.

7.4. The basis for the formulation of a principle-based reporting model

As noted earlier in this chapter, the present work is based on the principles of systems theory, and is viewed from a social perspective using a structuralist approach, and thus any CSR model developed would be based on structuralist theory. In order to determine if CSR can be improved in South Africa (the overall aim of the thesis), the following would need to be considered:

- What is meant by 'improved', both theoretically and from a stakeholder perspective.
- What can be measured, recorded and reported theoretically.
- How could such data be presented, conceptually and practically.
- Do measurement and recording systems exist in companies to report such data.

The objective of this part of this study is to develop the framework of such a reporting system to see theoretically how such data could be presented[48].

It has been argued in this study that many current CSR systems and guidelines have been developed through stakeholder negotiation and not from a conceptually sound

[48] Practical application will be considered in Chapter 9.

basis. These principles have been established in Section 7.3, while this part of the chapter attempts to build the framework of a CSR system upon these principles.

In Section 7.3 the world was classified into physical and social realities, which classification is widely accepted. The impacts of corporate activities were then portrayed within each of these realities as were the interactions between the major subsystems of such realities. The author constructed this classification of physical and social realities into subsystems, to identify major interactions and impacts, which could be used as the basis of a stakeholder survey to determine the importance of such factors to these stakeholders. However, such a system is no better than any other 'shopping list' type CSR system, in that it is subjectively devised, with systems and interactions, highlighted for disclosure where they were (subjectively) considered to be significant by the author. A principle-based CSR system, would need to be based on a pre-established and widely accepted model of social reality and significant interaction therein.

Since this thesis is based on systems theory, the most widely accepted systems-based model of social reality, namely structuralism, would provide an appropriate theoretical framework. Criticisms of structuralism argue that it does not concentrate on power, or the mechanisms of change (Burrell & Morgen 1979). Power, as noted in Chapter 4 cannot readily be measured (and hence reported), and hence in the context of CSR the element of power is almost never reported. CSR is considered important to facilitate change but does not focus on the mechanisms of such change, merely provides the information that can act as a catalyst of such change. Thus, this study accepts such a limitation, as it is argued that the reporting of change is not the primary purpose of CSR, which rather serves to report on the present (with the past in the form of the prior year results, often being reported to facilitate comparisons).

7.5. A structuralist approach to CSR

Talcott Parsons is widely acknowledged as the founder of the concept of structuralism. His work is particularly useful in the context of CSR, as he integrated sociological theory and the central concepts of economics (Parsons 1959b), the integration of which is valuable to CSR, and largely represents the impacts of business (the economy) on society (social systems). Note that stucturalism does not

specifically consider the impacts on the physical environment, which would thus need to be added to the model being developed in this thesis.

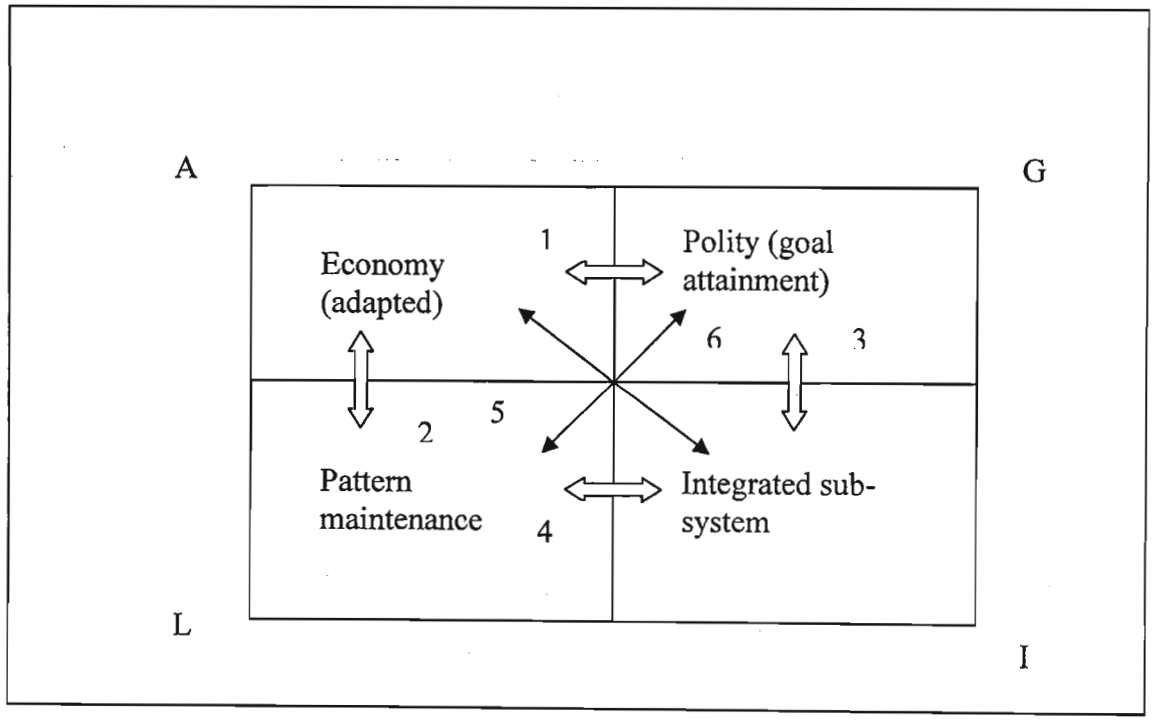
Parsons (1951) identified four functional prerequisites for social systems, namely:

- A; adaptation (differentiation, resource allocation, specialisation, economic function)
- G; goal attainment (political)
- I; integration (non-static culture)
- L; pattern maintenance (institutionalised culture, based on value orientation)

Social systems also have the following functions that can be linked to the above prerequisites: provision of capital, production and distribution, economic commitment and entrepreneurship.

These differentiated subsystems can be represented diagrammatically (Parsons 1959a) as reflected below.

Figure 7.2: Structuralist representation of social systems



⟺ : Direction of interactions,
Numbers 1 to 6 refer to levels of interactions discussed in Table 7.5 to 7.10 below.
A; adaptation, G; goal attainment, I; integration, L; pattern maintenance

The adaptation function is achieved by the economy, specifically by the activities of businesses. Goal attainment is achieved by the polity (that is governments and institutionalised systems), while pattern maintenance, is undertaken by members of the general population made up of multiple households. Finally, the integration function is achieved by entrepreneurs who (while making a profit at the same time), develop ways for people to satisfy their needs.

Any system would have variables in orientation namely: diffuseness-specificity and affectivity-neutrality. It would also have variables of have pattern maintenance namely: universalism-specifity and quality-performance. Key subsystems include: production, investment and capital, entrepreneurship, commitments to productivity. Key indicators include: motivation, capacity to work (trained), knowledge and technical know-how, labour power, purchasing power, capital funds (debt and equity), capital goods and assets.

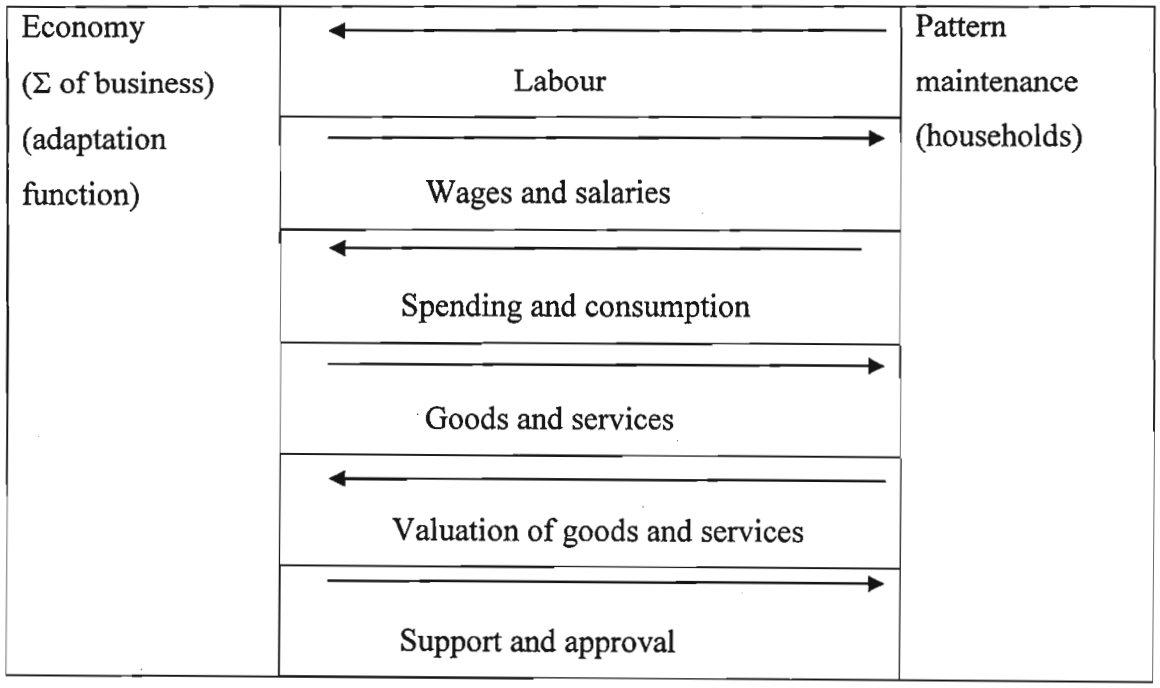
The diagrammatic representation in Figure 7.2 needs to be examined in more detail to consider interactions. Between the four elements (subsystems), there are six levels of interaction (marked on Figure 7.2), which are shown in Table 7.4 below.

Table 7.4: Interactions between components of structuralist system

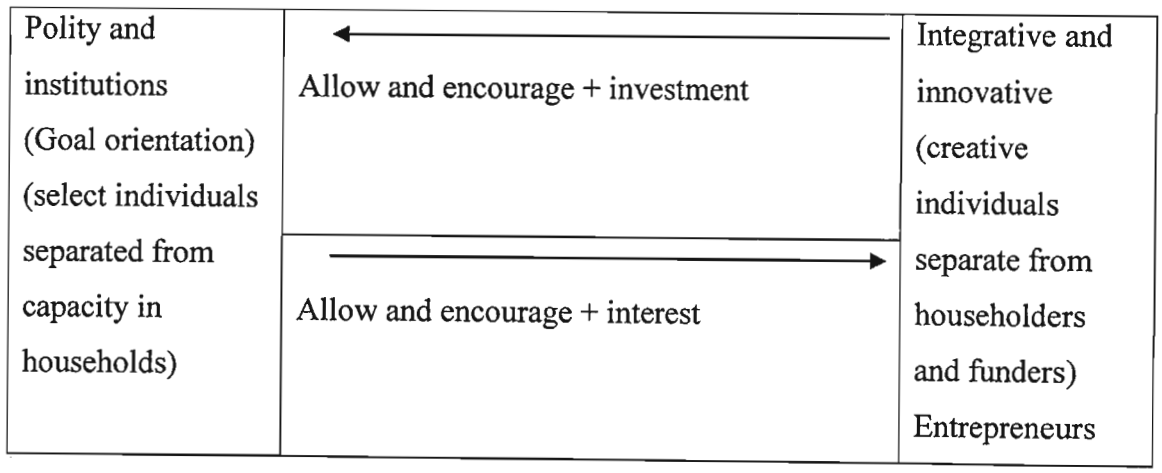
Interactions 1

Economy (Σ of business) (adpatation function)	← Credits and control of capital and investment	Polity and institutions (Goal orientation) (select individuals separated from capacity in households)
	→ Productivity + (interest on investments)	
	← Support activity +encouragement +incentives	
	→ Support structures and power	

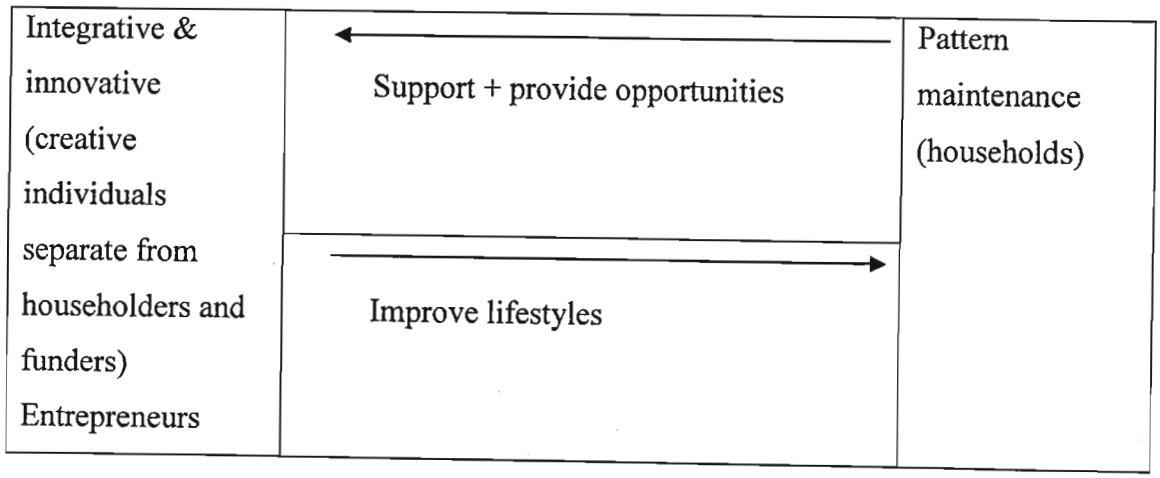
Interactions 2



Interactions 3



Interactions 4



Interactions 5

Economy (Σ of business) (adaptation function)	← New ideas and structures + investments + entrepreneurship	Integrative & innovative (creative individuals separate from householders and funders) Entrepreneurs
	→ Profit and gains	

Interactions 6

Polity and institutions (Goal orientation) (select individuals separated from capacity in households)	← Loyalty and support + taxes + investment	Pattern Maintenance (households)
	→ Protect and support + interest	

The above tables are adapted from the work of Parsons (1965) on systems theory and the economy. Each of the tables demonstrates the different interactions between the subsystems, and the direction of these interactions are shown by arrows in the tables. For a system to be in dynamic balance, the inputs and outputs for the interactions between each system should be equal. This is the principle accepted in classical economics.

The first level of interactions shown are those between the business(es) and the institutions and government. The government supports business activities by providing infrastructure and business support systems. It also facilitates the investment and funding of such business activities. In return, the business contributes towards the economy (for example job creation and taxes) as well as supports those structures (namely government) that in turn support it.

The second level of interactions shown are those between business and the households. The household provide the labour and are rewarded with salaries, wages and other benefits. The households also supply the market which purchases the products and services provided and hence keep the business running. Businesses provide products and services that support the quality of life of consumers, who in turn support these businesses.

The third, fourth and fifth levels of interactions shown are those between the entrepreneurs and households, governments and businesses. The households create needs, which the entrepreneurs develop innovative ways (in potential products and services) to satisfy, always striving to improve consumers' lifestyles. Governments allow structures and systems to support these entrepreneurs, which in the long run increases wealth, by creating new business opportunities and thus growing the economy. These entrepreneurs are rewarded with the profits of these new business ventures.

The sixth level of interactions shown are those between the governments and the households. The households support the governments and contribute taxes, by means of which the governments provide infrastructure, social services and protect the households.

Identifying these interactions is crucial to the theoretical formulation of CSR principles, as it allows all significant interaction to be identified and grouped. The author argues that all these interactions should be identified and reported upon in CSR, subject to measurement limitations of current systems. It must be noted that, the basis of CSR is that instead of looking at the whole economy, CSR looks at the interactions from the perspective of one business. That does, however, bring in a further level of interactions not shown in any of the tables above, namely that between specific business and all other businesses. All interactions above are portrayed from a social systems perspective only and ignore the impact on physical systems.

With respect to business and human interactions within the physical reality, this could be portrayed in numerous ways from a systems perspective. Of particular concern to CSR is business and human impacts on:

- Biotic systems (eco-systems),
- Biotic resources, including products e.g. fossil fuels,
- Individual key species,
- Natural systems (which may be interlinked with biotic systems),
- Naturally occurring substances, and
- All energy sources (biotic and natural).

The following diagram (Figure 7.3) was developed to show the interface between social systems, using a structuralist approach (as described earlier), and key physical systems (the author acknowledges significant limitations and simplifications used in physical systems). This diagram is the work of the author, and it attempts to link physical with social reality as the interfaces between the business and the households, both represented by people. Physical and biotic systems were portrayed simplistically. The diagram highlights only those interactions that are significant from a CSR perspective, that is, the interactions that are caused or influenced specifically by business activities. This includes the conversion of natural or biotic substances into artificial products, as well as the conversion of artificial products (by businesses). The impacts of such processes are significant, as is the use of energy, specifically since its release / conversion has significant impacts on natural and biotic systems. Biotic systems, which are diverse and complex are shown only simplistically as a cycle of the production of hydrocarbons by plant species, interacting with the physical (natural) environment, being used by herbivores and humans (represented by the households), who also feed upon the herbivores and higher life forms. The cycle also shows the waste cycle interacting with the natural environment.

The social systems as represented from a structuralist perspective, interact with the physical systems through both people in the households consuming biotic products, and transforming natural and artificial products, returning waste to the physical environment, and through people in businesses transforming natural and artificial materials, as using and creating biotic products. These interactions, particularly with

respect to waste generation and its treatment are of particular concern in CSR. The other interactions within the social systems were detailed previously in Table 7.4.

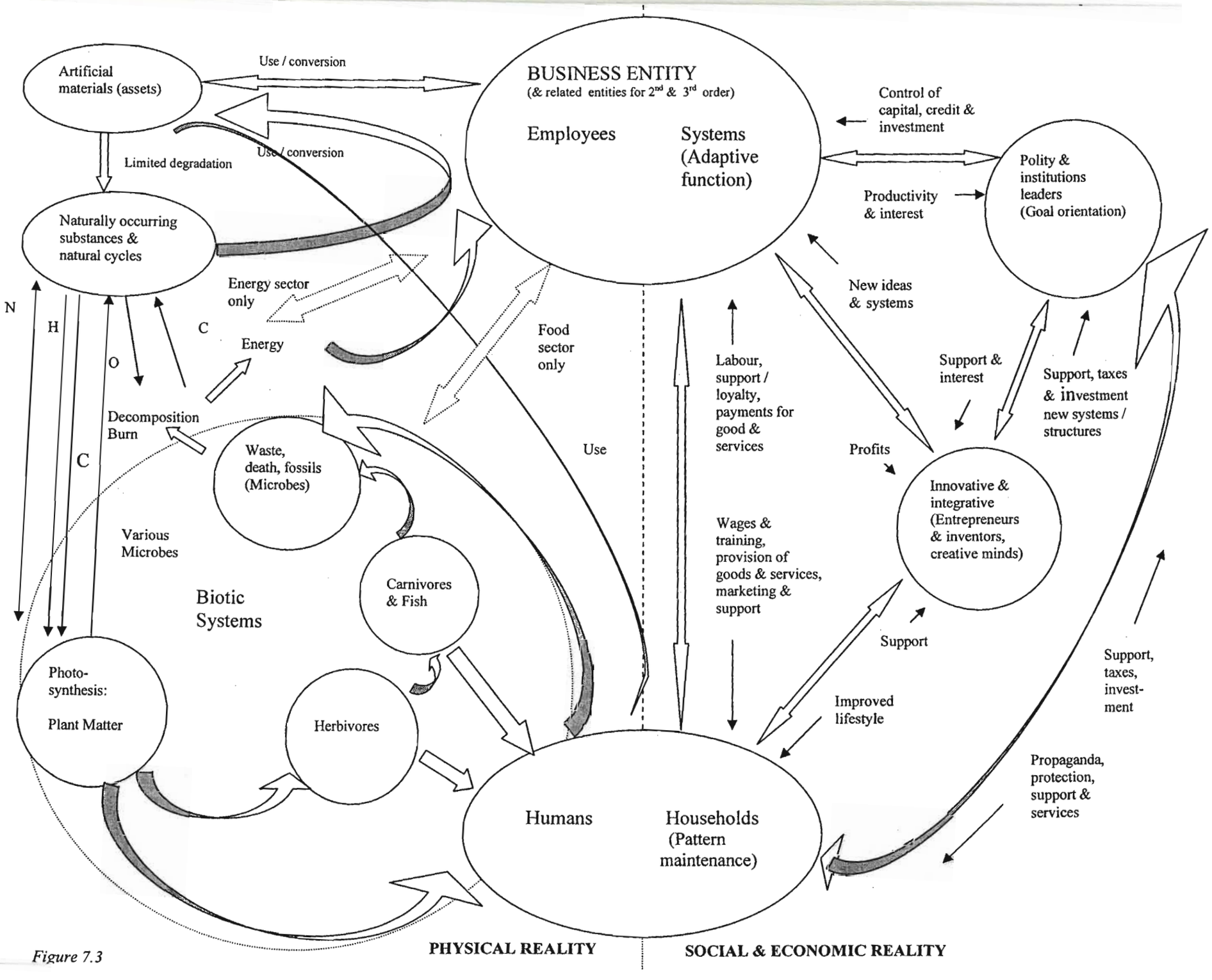

Artificial materials (assets)
Use / conversion
BUSINESS ENTITY
(& related entities for 2nd & 3rd order)
Employees
Systems (Adaptive function)
Control of capital, credit & investment
Polity & institutions leaders (Goal orientation)
Productivity & interest
Limited degradation
Use / conversion
Naturally occurring substances & natural cycles
Energy sector only
Food sector only
New ideas & systems
N
H
C
O
C
Energy
Labour, support / loyalty, payments for good & services
Support & interest
Support, taxes & investment new systems / structures
Decomposition Burn
Waste, death, fossils (Microbes)
Use
Profits
Innovative & integrative (Entrepreneurs & inventors, creative minds)
Various Microbes
Biotic Systems
Carnivores & Fish
Wages & training, provision of goods & services, marketing & support
Support
Support, taxes, invest-ment
Photo-synthesis:
Plant Matter
Herbivores
Improved lifestyle
Propaganda, protection, support & services
Humans
Households (Pattern maintenance)
PHYSICAL REALITY
SOCIAL & ECONOMIC REALITY

Figure 7.3

Notes (to Figure 7.3 on previous page)

- *Only material interactions as defined in this thesis, have been presented. Interactions not identified as significant have not been portrayed. This does not mean that these interactions might not be significant on a cumulative basis.*
- *Specific interactions with other businesses have not been presented, only the net impact with the end consumers, or the physical environment.*
- *The social systems as shown are based on the structuralist representation of Parsons (1959).*

7.6 Proposed CSR model

Based on Figure 7.3, the author suggests that the principles of what should be incorporated into a CSR model can be developed, if it is accepted that every key interaction identified in the diagram should (if possible) be reported upon. Thus, using this approach, the following direct (first order) interactions have been identified:

7.6.1. 1st Order (only direct interactions of primary business with social and physical environments)

Physical (direct effects in notes)

- use and/or conversion of artificial material (assets, both capital and operating),
- use and/or conversion of natural material (products),
- use of energy, and
- use of labour (physical only).

In case of specialised industries, should also detail

- conversion ('production') of energy, and
- agricultural (biotic) production.

Socio-economic (Note = assumed equivalent)

• input value of natural and artificial material	= payments made + unpaid costs
• input value of labour and experience	= wages paid + training and experience
• support and valuation of goods and services	= marketing and promotion costs
• output of goods and services	= payments received
• productivity +interest and profits for rent of capital and or credit	= credit + control of capital + investments
• true or super profits (not for rent of capital)	= entrepreneurship + new ideas

However, the interactions of a business with other businesses also create impacts. For example, the demand for a raw material will encourage another business to supply this material or product which creates second order (upstream) impacts. Further, the use of these products by the consumers will create downstream impacts. Accounting for the source and impacts of suppliers has become widespread (Turner 2004) as a result of the use of life cycle analysis in certain business sectors, particularly with the application of ISO 14001. It is suggested by the author that second order impacts (for all impacts noted in the case of first order), should be reported for the entities identified below:

7.6.2. 2nd Order (including share of upstream[49] and downstream business effects)

- Primary company impacts,
- Proportionate share of suppliers' impacts (as created by demand for products / services), and
- Proportionate share of distributors' impacts (as required to service output).

The activities of a business have impacts on numerous persons who use the product, draw a salary or wages (that is employees), or derive other benefits from the company such as do investors and funders. These impacts are not commonly reported upon. All impacts as noted in the first order of reporting should be considered for the following groups as listed below.

7.6.3. 3rd Order (including all effects as a result of companies activities)

- Effects on households as users,
- Effects on households as employees,
- Effects on individuals as investors, funders and entrepreneurs,
- Effects on polity and institutions, and
- Effects on bio-systems (eco-systems).

[49] Upstream impacts refer to the impacts caused by suppliers. Downstream impacts refer to the impacts of the distributors, and secondary businesses that use these products as inputs to their production processes.

7.6.4. Suggested notes

The author suggests that in terms of the qualitative characteristics desirable of a CSR system, such a system would need to provide sufficient detail to facilitate understanding and comparability of the data presented. For each interaction, key indicator/s, detailed schedules of data, or general indices may be required to provide for the users of the report an understanding of the significance of a particular impact. Explanations and comparisons with industry and best practice norms could be encouraged. Table 7.5 below highlights such suggested notes.

Table 7.5: Suggested disclosable notes for the proposed comprehensive CSR system

Required Notes: Activity & Impact	**1st and 2nd Order Reporting Input-Output (Physical reality)**	**1st and 2nd Order Reporting Output & Impacts**	**Additional notes for 3rd Order Reporting Input-Output**
Physical Use (conversion) of artificial and natural resources	Complete input-output reconciliation i.e. mass balance, noting: Distribution before and after • land (controlled or not) • water • air Per appropriate category e.g. • gases & liquids • metals • ceramics • compounds neutral or reactive Special notes on hazardous and radioactive chemicals produced	Special notes: Impacts on biotic natural systems (local and other) Indicators for the following systems: • land • water • air Impacts on biodiversity e.g. biomass x rarity index	Additional notes on transformations through use and waste. Notes on final distribution Additional notes of further impact on natural and biotic systems.
Use of energy	Total input, giving sources of: • fossil fuel • hydroelectric • nuclear • other A note should explain the impact of these sources of derivation	Output (transformed, stored, and wasted)	Input of energy to use (consume) products
Use of labour	A brief note on efficiency	Estimated effects of training i.e. value added	
Specialised e.g. energy production or agriculture	As above	More detailed notes on impacts on natural and biotic systems	
Socio-Economic Conversion of natural resources	**Input** Value of resources used + purchase costs + cost of conversion	**Output & Impacts** Value (economic) of product	***Other Socio-economic indicators*** (Only as result of business activities & impacts) Δ in power of governments & decisions Δ in power of industry Δ in culture & values including objects (wealth) and lifestyles Δ in motivation Δ in capacity to work, including training Δ in technical knowledge Δ in labour power Δ in purchasing power
Wages & salaries for labour	Input of labour hours	Payment for wages +Δ training & experience +Δ household esteem & well-being	
Provision of value of goods & services	Payment received	Benefits provides (goods &services) (needs & tension reduction)	
Marketing, promotion & support services	Cost of Providing	Loyalty, product need (measured on an index)	
Profits for new ideas & innovations (R&D)	New ideas & cost of developing	Financial benefits (valuation) paid out	
Productivity + interest (as rent for capital) + profits	Provision of credit, facilitation of capital investment, structure, support & stability + actual capital (invest) & credit made available	Productivity (i.e. GDP)& taxes + financial support Interest + 'profits' paid / accrued on investments	

Δ = Change or change in value of

The list of suggested additional disclosures detailed in Table 7.5 reads as many current CSR models might, proposing detailed disclosures under many categories. These notes are suggested by the author as being necessary to supplement and explain the disclosure items required as suggested in Sections 7.6.1 to 7.6.3. above, which were developed from the theoretical principles and a framework of interactions.

The author suggests that the physical impacts should be disclosed by providing a fully reconciled mass balance with supplementary disclosure noting the location and distribution of the output. Also notes should be provided detailing any hazardous substances produced and the impacts on natural and biotic systems, possibly by using indices. It is suggested that reconciliation should be provided of energy used, including the amount transformed and wasted, and all input sources. Further notes would be required for businesses in specialised industries such as agriculture and energy production.

Regarding additional disclosure for impacts on social systems, this is largely driven by the structuralist interactions as identified in Table 7.6. Most of these interactions can be measured in financial terms and the principle of economics assumes equivalence where such interactions occur, for example that the amount paid for labour is the value of the labour given. However, the author suggests that there are many impacts, not easily determined from this structuralist model, such as changes in power, influence, motivation, culture, technology and health that are of significant interest to stakeholders, and hence they should be disclosed.

7.7. Conclusions

To achieve improved CSR, a shift would be required from short-term to long-term priorities, by shareholders, employees and consumers. Improved corporate reporting would come at increased (short-term) financial costs, resulting in possible reduced profits for shareholders, smaller wage increases, higher prices to customers and reduced taxation collected. However, by accounting for previously externalised impacts and costs, it is suggested that both internal and external pressures will lead to greater income generation, increase in operating efficiencies and overall reductions in environmental impacts, and hence more sustainable[50] business practice.

In this chapter it is argued that corporations are responsible for the impacts of their activities on the environment and other stakeholders such as employees, consumers and surrounding communities (Anderson 1989, Gray et al. 1996). Present financial-

[50] The concept of 'sustainability', is derived from the concept of 'sustainable development' which is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs"(World Commission on Environment and Development (WCED) 1987)

legal systems do not hold corporations accountable for all such impacts[51], nor are these required to be disclosed in the AFS and thus corporate reporting represents accountability only to a single stakeholder group, namely equity stakeholders (shareholders and potential investors) (Gray & Bebbington 2001).

Morally, the continued abuse of common resources by business, benefiting only a few select wealthy individuals (shareholders), at the expense of the rest of society, as well as all other living plants and creatures with which humankind shares this planet, cannot be justified and sustained (Ellwood 2001). It is suggested that increasing social awareness, facilitated by increased CSR, would strengthen accountability. This together with the decreasing quality of living conditions for the bulk of humanity would act as a catalyst for change.

In this chapter it is suggested that all aspects of corporate activities should be accounted for using a conceptual framework of reporting principles, many of which are included in traditional financial reporting. Corporate activities should also be subject to an assurance or audit process. Many aspects of financial reporting are easily transferable into CSR. However caution must be exercised as social and environmental impacts are far more complex and less easily measured and recorded than would initially be assumed. Although further research is still needed into the elements of CSR (Hibbert 1999), at a minimum the application of reporting principles and formats of financial reporting to CSR could ensure key qualitative criteria of such reporting to be achieved. Further separation into sub-reports and separate presentation of key activities, (such as currently occurs in financial reporting in the income statement) could be extended across all CSR as an activity based reporting format, which would provide meaningful information to stakeholders. Further, consolidating the impacts of entire supply-chains could provide valuable insight into overall (upstream and downstream) impacts of specific business activities. Comprehensive accounting for all corporate activities will be the key to greater accountability by industry, and could ultimately contribute towards greater sustainability[52]. However,

[51] Emissions, waste, spills and effluent will be subject to taxes, fines and penalties, if successfully detected and prosecuted by the relevant authorities, within the scope of the environmental regulations that will differ per country and district.
[52] Refer to Chapter 3 Section 3.4.3 for explanation of sustainability.

further research into measuring systems, standards, and the elements and possible formats of CSR is required.

It is suggested in this chapter that many of the criticisms levelled against present CSR and CSR systems and guidelines can be attributed to their rule-based approach, which has been developed in many cases by negotiation between stakeholders, businesses and NGOs. Arguments are presented for a principle-based approach, and the principles upon which such reporting could be based are suggested. It is argued that although CSR is more complex and measurement less precise than in financial reporting, in many cases, many of the principles of financial reporting could still be applied to CSR.

Using a systems approach and structuralist theory for describing social reality, a model to portray key (material) interactions between components of physical and social realities is developed in this chapter. This model is then used as the basis of identifying what interactions should be reported on in a principle-based CSR system. These interactions are extended to second and third order interactions, and additional notes are identified.

The suggested system cannot be argued to be complete or without fault or omission unless tested in practice, over an extended period of time with numerous and different case studies. This was beyond the scope of this thesis, which aimed to determine conceptually what was needed to improve present CSR in South Africa, not to test the application of a new CSR model. However, a conceptual review and a review of the practical applicability was possible. In Chapter 8 a conceptual and theoretical review followed by a defence of this model is undertaken, while in Chapter 9, through the use of multiple case studies, the feasibility of applying this model, and or the GRI model is determined. It must be noted that limitations determined in Chapter 9 would not necessarily equate to deficiencies in the model, but would rather highlight areas in which companies are not yet adequately monitoring, recording and reporting.

CHAPTER EIGHT

REVIEW OF THE VALIDITY AND COMPLETENESS OF THE PROPOSED CSR MODEL AND SUBSEQUENT REFINEMENT

8.1. Findings and proposals of prior model building research

8.1.1. Introduction

In Chapter Seven a framework of interactions between businesses and physical and social systems was developed, identifying key impacts and relationships. Chapter Seven investigated the principles behind reporting as applied to CSR and, using the aforementioned framework, developed the framework for a CSR model. In this chapter, the proposed model will be assessed for validity and completeness using multiple techniques. The objective of this process is not only to provide a justification for the proposed model, but also through the selected processes to identify any limitations of the initial proposed model that can be refined or altered, to produce a more conceptually sound, or more comprehensive reporting model.

8.1.2. Process

This study is different from prior work in its approach to building a CSR model. The basis of this difference has been the theoretical approach to developing this specific CSR model. This process included the following steps:

- Consideration was given to the philosophical paradigm for the work, which needed to be congruent with the objectives of the thesis, requiring both a positivist and normative approach, hence the conditional normative approach. The study also was based on systems theory and took a structuralist view of social systems, which was consistent with the approach necessary for the inclusion of biotic systems.
- Consideration was given to the principles for the (reporting) system. These were aligned with the principles of the accounting framework (FASB 1976). The reasons for this were discussed in Chapter Seven. It was noted that several other generally accepted accounting principles ('gaap') would be relevant to CSR.
- A conceptual model was developed of the interactions between companies and their physical, biotic and socio-economic environments. This model identified

all significant categories of interactions between the business and its physical and social environments.

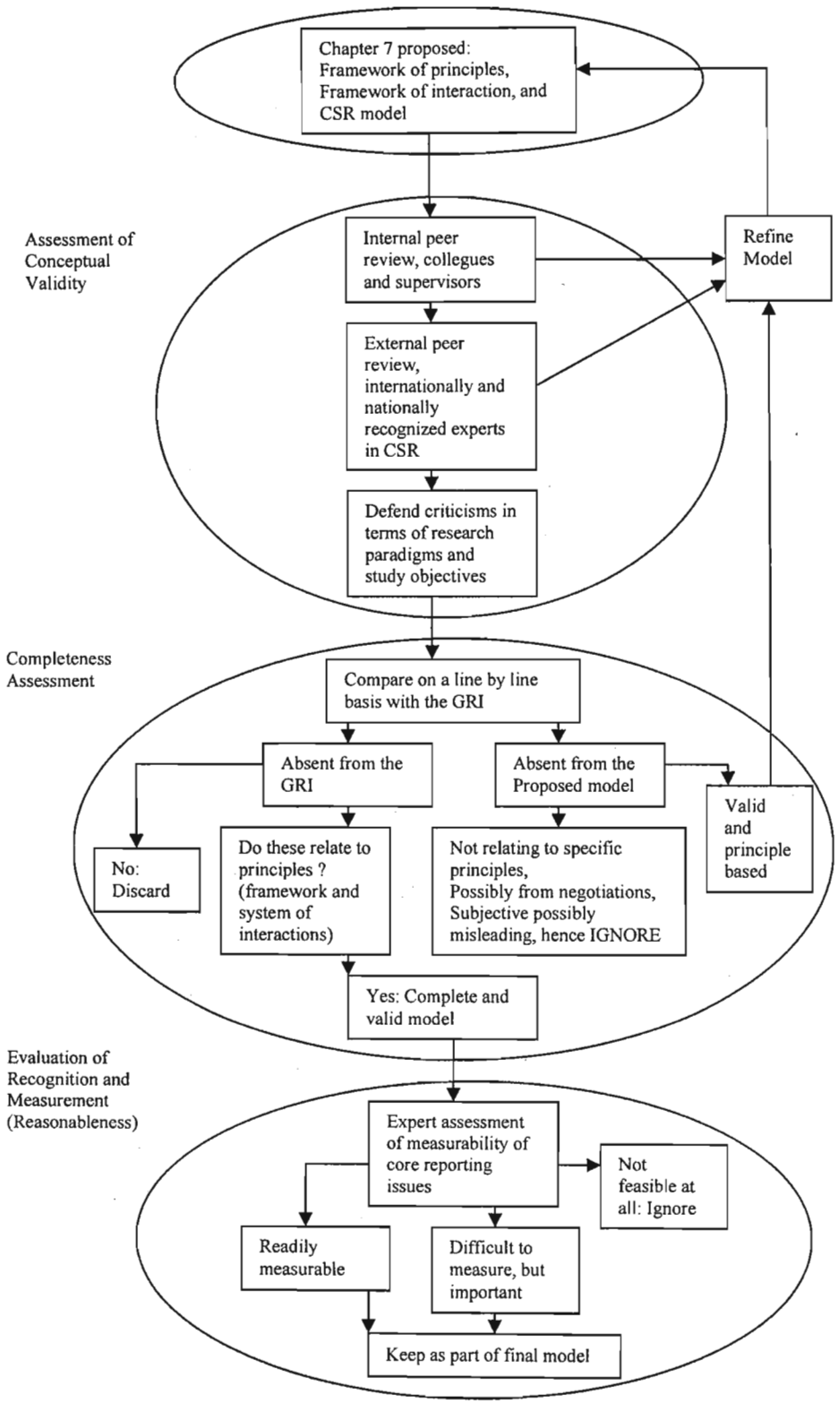
- From the conceptual model all significant categories of interactions would form the basis of the CSR model.
- Detail and notes for the model would be informed by ideas gleaned from review of other models, including the principle of the mass balance and key indicators.

Thus, this model differentiates itself from the more established and well-known models on the basis of its theoretical derivation. Models such as the GRI (see Section 8.3), were established by a process of negotiation, arbitration and expert consultation. Thus, such models are designed to meet the needs of key influential stakeholder groups, based on their power or influence. One needs to look carefully at the significant business representation in the composition of the founding bodies of the GRI. These models, although transparent in their formulation, are not necessarily theoretically complete in their derivation. Although the model proposed in this thesis was not developed by means of a consultation process with stakeholders, the expectations of such stakeholder groups were taken into consideration in the comprehensive stakeholder survey undertaken as part of the thesis. However, the theoretical derivation of the model excluded the domination of any single powerful stakeholder group.

Figure 8.1 illustrates the processes that will be used in this chapter to validate the proposed CSR model, including:

- Peer review,
- Comparison with the GRI, and
- Expert assessment or the measurement.

Figure 8.1 Processes used to validate proposed CSR model



8.2. Validation through the process of peer review

8.2.1. Principle of this approach

It is widely acknowledged in academia, that for a paper or concept to be considered acceptable, such a paper should have gone through the process of expert and peer review, normally undertaken by a panel of reviewers or editors linked to a specific relevant journal. Highly rated journals have reviewers of exceptional academic standing who themselves often carry some form of research rating. It should be noted that the selection of reviewers is never random, but rather purposeful, since an academic will choose the journal to which they wish to submit their work, knowing who the editorial staff and reviewers are, what the focus of the journal is and its Journal Impact Factor (JIF).

It is argued that for the proposed CSR model (of Chapter 7) to be accepted (as the basis for the rest of this thesis), that it should go through a similar peer review process.

8.2.2. Approach

After discussion with senior academics, two possible approaches where considered:

i) The first approach would be to write up the model in a full academic article in the style of journals, then try to locate two to three experts who would be prepared to review the article in depth (as with a normal article submitted for publication). The benefits of this approach would be the depth of consideration given by the reviewers. The disadvantages would be the timeframe for the review (up to six months), and finding experts with the time and inclination to undertake this review (for no academic acknowledgement).

ii) The second approach would be to send an abbreviated version of the model to as many acknowledged experts as possible, asking them to review the brief proposal. The benefits of this approach would be that those experts who currently have an interest in this field would be likely to respond, there would likely be more respondents (because the time involved in the review is shorter) and a quicker response could be expected. The limitation to this approach is that there would be no

guarantee that every component of the model had been thoroughly considered by those who reviewed it.

After consultation with the thesis supervisor, the latter approach was adopted. The reasons for this were:

- This model would still be further reviewed several times in detail by colleagues, supervisors and examiners.
- The model would need to be complete enough (and conceptually sound) to be used as a guideline to evaluate the reporting systems of companies. Deficiencies in the model would be noted in this process and corrected, (excluding areas that could be, but are difficult to measure).
- The model would, during the thesis process be written up as a journal article, and hence would still undergo the full academic review process.

The condensed format that was submitted to experts included: a covering explanatory letter (included as Annexure 6); a framework (refer to Figure 2 of Chapter 7); the principle of the model (refer to listing under Section 7.6, in Chapter 7); and the required notes (refer to Table 7.7, in Chapter 7). The reviewers were expected to consider: conceptual deficiencies; inappropriate or invalid assumptions; conflicts within the principles or paradigms, or inappropriate paradigm selection; and significant omissions.

The list of potential reviewers was derived from the reference list for the proposal for this thesis, specifically including those directly concerned with CSR, referred to more than once or as the primary authors. The mode of delivery was chosen as e-mail as delivery and return would be quick and return would be easy for respondents (as opposed to writing a letter, commenting on documents, and then having to post the documents back).

The above-mentioned documents were then e-mailed to the selected experts, who included:

- 4 South African experts, and
- 26 International experts from the USA, Canada, UK, New Zealand, Australia and Denmark.

Responses, (10 in total), varied from acknowledgement and indication of having only scanned the documents, to brief reviews with no significant comments, to detailed reviews and critique. Several prominent experts provided further references on conceptual issues as well as prior work.

The following are noteworthy criticisms received and suggestions made for references which were not originally consulted:

1. There is little connection between CSR and actual behaviour of companies.
2. A comprehensive model is not likely to be implemented without major and fundamental social and political changes.
3. It is questionable whether a rationalist and functionalist CSR design is actually possible.
4. Boland's critique (1979) had not been considered.
5. Allen's *Social Analysis, a Marxist critique and alternative* (1975) was not considered.
6. Other references Gray (AOS 2002), and Gray and Tinker (AAAJ 2004) should be consulted.

8.2.3. Response and defence of criticisms of proposed model

8.2.3.1. Aim of this section

This part of the chapter takes the criticisms provided by the external reviewers and provides a defence where appropriate, that is where the approach selected in the proposed model is still considered to be valid. However, in many cases especially where further references were provided, these were incorporated into the model and no amendments or further considerations would be noted. The author suggests that some of the criticisms stem from the fact that the reviewers took a practical, not theoretical or idealistic view of the work, or did not appreciate the paradigms upon which this model was based. This does not however necessarily negate any of the feedback received.

8.2.3.2. There is little connection between CSR and actual behaviour of companies

The author agrees with this comment provided by the reviewer, and this has been considered in this thesis. CSR has been criticised (see Gray & Bebbington 2001, cited in Chapter 4), thus:

- It is a green washing exercise, designed to promote the image of the companies.
- Work on the legitimacy theory has found a correspondence between the amount of disclosure and the need to generate public goodwill.
- Since there is no compulsory standard, nor verification process, companies can report on positives and exclude negatives, hence there is no correlation between CSR (amount or nature) and positive behaviour.

However, the basis of the model, as prepared in this thesis, is that it could potentially become a standard (compulsory) and that it would be verified (audited). On the basis of these assumptions, there would be:

- Assurance of completeness, hence if negatives are disclosed, there would be a correlation between actual behaviour and CSR disclosure.
- Assurance of fair presentation (including unbiased, per principle refer to chapter 2), through external verification.

It is on the basis of these assumptions that this work is prepared, and hence there would be a relation between behaviour of companies and CSR.

8.2.3.3. A comprehensive model is not likely to be implemented without major and fundamental social and political changes

In Chapter 3 the driving forces behind CSR (Section 3.4), specifically environmental reporting, were considered. It was noted that the bodies that set both voluntary and prescriptive (compulsory) guidelines and standards were significantly influenced both directly and indirectly (through governments) by industry. Industry functions on the economic principle of maximising its profits which is the principle of financial management (Ross, Westerfield, Jordan & Firer 2001). Hence, for these standard

setting bodies, they would be unlikely or reluctant to set a compulsory standard that would:

- Be costly and difficult to implement (and hence reduce profits for companies), or which
- Prescribe disclosure which could adversely affect the image of the company and hence business and profits, or
- Raise concerns about the legality or ethics of the company's activities which could potentially force such a company to close down or relocate to a country or region not enforcing such a standard.

Thus, the point raised that such a model is unlikely to be implemented without significant social and economic changes, is completely valid. It would likely require significant environmental degradation or acceleration of the global warming to sway public opinion enough to force the government or standard setting bodies to change. The alternative would be if governments themselves could be changed. The author, however, suspects that this is unlikely to come about due to the massive financial, media and technological support that industry provides to conservative governments (Beder 1997). The criticism of why develop a comprehensive CSR system if it seems unlikely that it would ever be implemented then stands. The argument for this can be found in the philosophical paradigm of this thesis that is, within the normative assumptions made in this work. These assumptions as applied to this criticism:

- The world is facing a severe environmental crisis, as well as an ongoing socio-political crisis.
- Industry as well as financial markets play a significant role in creating or continuing these crises.
- In terms of stakeholder theory, industry should (moral / ethical assumption) be accountable to the society in which it operates.
- CSR is the medium through which such accountability should be effected.
- Only a comprehensive CSR model would effectively provide such accountability (see present limitations of current CSR, Chapter 4).

Thus, this model has been proposed as the basis of a potential solution and does not claim to be able to effect the changes necessary to achieve such a solution.

8.2.3.4. It is questionable whether a rationalist and functionalist CSR design is actually possible

Rationalist as defined in the Oxford Dictionary fourth edition (1965: 667) is the noun derived from rational which means "reasonable, sensible or moderate". The comment most likely however, pertains to the concept of a rationalist paradigm, when in this case a model would be derived by deduction as opposed to an empirical approach in which such a model would be derived by research based on objectively observed and measured results. The author argues that the latter approach would be inappropriate to develop a new model, and in the case of CSR would only be appropriate to derive a model based on what is currently being reported, which as demonstrated in Chapter 6, does not adequately meet stakeholder expectations.

The model in this thesis, is based on the functionalist paradigm, which Burrell and Morgan (1979) state:

- Is based on sociology of regulation,
- Takes an objectivist point of view,
- Seeks to provide explanation for social order and integration,
- Is pragmatic (seeks practical solutions) and seeks to derive information that can be put to use, and
- Emphasises that engineering for social change can be achieved by understanding social order (systems).

Clearly, CSR is concerned with regulation, because it seeks to provide an objective framework for such reporting in a way that can be delivered i.e. is practical, and provides useful (practical) information to the stakeholders. The underlying premise of this thesis is that through adequate reporting, society will react to better regulated industry i.e. social change. It is thus argued that a reasonable (and moderate) CSR must be based on a structuralist framework.

The basis of this work is that such a model is possible. However, certain practical and social challenges remain before effective implementation can be achieved. It is the aim in Chapters 9 and 10 to identify and possibly offer solutions to these.

8.2.3.5. Bolands critique (1979) had not been considered

Boland citing Leach (1954, 1962) stated (1979: 262) that "functionalists take a static view of social structures which offers no help in understanding the dynamic process of social structures over time". Further, that the need is "in information system design now for social structure not in equilibrium. There is not one static underlying structure of the organisation or its environment available for determining information requirements."

This criticism of the stucturalist approach is valid, if one takes a radical structuralist view of this thesis. However, as noted and justified above, a structuralist approach was appropriate. The purpose of CSR is not to understand social change, but rather to provide information (accountability) as the basis for social change. As long as CSR provides accurate, relevant and reliable information, society can interpret such information and can react thereto. It may be necessary that other ways, such as persons working from the perspective of critical and radical change, will have to be found to make this information more meaningful to the public, such as authors, journalist and activists. However, the purpose of CSR is to place this information objectively in the public domain.

Boland (1979: 262) stated that "organisations' members each participate in the construction of their reality through the interaction and co-determination of each other's interpretive schemes. The structure of the organisation should be seen as the temporal resolution of the multiple interpretive schemes of its actors, and its dynamic is the communal process of making sense of social and economic reality". Boland also cites Weick (1969) who states that (1979: 263), "understanding of organisations does not start with hierarchically structured purposes, goals and objectives, but starts with action as an ongoing experience". Again it is argued that the objective of CSR is to place objective information in the public domain. It is questioned how useful it would be to the public to understand the functioning of an organisation, except in the case of activists specifically pressurising such a company.

Boland (1979) also considered control (as an element of power) focusing on the idea of 'control over' someone or something as in the case of an organisation's and

bureaucratic structures and control through socialisation where shared values and beliefs serve as a basis for co-ordinated action without order or external adjustment. Power is not ignored in this thesis. This CSR system does require disclosure of influence over political decisions, for example as the result of lobbying, as well as changes in labour and consumer power. However, measures of power are difficult to establish (refer to Chapter 6 Section 6.4.3).

8.2.3.6. Allen's *Social Analysis, a Marxist critique and alternative* (1975) was not considered

Allen (1975) proposes four limitations of a systems approach (and hence structuralism) to social analysis, which are:

- It is unable to analyse movement and hence change.
- It gives misleading priority to equilibrating factors.
- It gives immutable' qualities to existing organisational forms including the distribution of power, and hence provides them with metaphysical basis.
- It introduces simplifying but distorting assumptions such as rational behaviour, perfect knowledge and mobility of resources.

Allen (1975) proposes that dialectic materialism (Marx 1951) is a superior approach, because it does not presuppose relationships, but allows for empirical analysis of data. The author notes that earlier in this thesis when the paradigm for this work was selected the basis was not that of change, but a positivist interpretive approach, which looked at existing relationships and hence was a systems approach. Such an approach accepts the limitations noted above, in order to present and report an overall picture. Thus, the limitations of a systems and structuralist approach are noted. Future research could look at determining whether studies of empirical data could reveal the nature of such relationships, as the basis for change and improvement. However, as noted earlier this is not the objective of this study.

8.2.3.7. The work of Gray (2002) should be consulted

Gray (2002: 687) in "The social accounting project and Accounting, Organisations and Society" discusses a 25-year review of social accounting as an academic discipline and refers to most significant works in this field. This article provides a

useful checklist for this thesis to assess whether key academic work in this field has been acknowledged and considered.

Gray (2002) does note that in the social accounting project, the 'why' and 'so what' questions are difficult to justify when the author makes pragmatic and instinctive choices. This could be applied to this thesis, particularly with respect to the proposed CSR system, where reporting criteria can be logically argued but are difficult to academically substantiate. Gray (2002) notes that there is a lack of writing on and engagement with, significant practical developments in this field that could provide evidence and support for further developments.

8.2.3.8. The work of Gray and Tinker (AAAJ 2004) should be consulted

This paper offers valuable insights into both ethical and philosophical paradigms related to CSR. It presents a strong argument for taking a Marxist and hence critical view of industry, suggesting equivalence in: accumulation, growth, exploitation, and consumption. As noted previously, this thesis is based on the structuralist (positivist, interpretivist) paradigm, with justification. In Gray and Tinker (2004) many crucial references to philosophical and theoretical work related to CSR are provided, which was used as a checklist for material covered in the literature review for this study.

8.2.4. Conclusions on validity

Any system or model not exclusively reviewed and practically implemented is subject to concern regarding its validity. The process adopted in this thesis of expert and peer review has highlighted potential problems regarding the validity of the proposed CSR system. No problems or critiques that were not defendable, were identified by this process. This does not preclude the existence of such faults and limitations, as no reviewer completed a comprehensive critique. It does, however, indicate that the author took reasonable measures to identify and address such concerns. A pilot study was undertaken for review of the challenges to practical implementation of the model. This pilot study provided useful feedback that was used to make minor improvements to the model, and it was then used as the framework for a comprehensive multiple case study that sought to determine the challenges to the practical implementation of the proposed model (refer to Chapter 9). These case studies identified many barriers

to the implementation of the model, as well as areas in which the model would need to be improved.

8.3. Alternative validation and completeness assessment technique

8.3.1. Principle of this approach

As noted in the previous section, the peer and expert review was not without limitations and thus an alternative validation approach was considered to be necessary. One such approach would be to compare the proposed CSR model on a piecemeal basis with generally accepted accounting CSR practice. It must however be noted that since significant criticism has been levelled against CSR in actual practice (Rubenstein 1989), it is suggested that this comparison would not be adequate. The author suggests however, that the proposed model should be compared against best practice. Best practice at the time of writing in South Africa is practice in those companies that follow the GRI (2000), which is endorsed by the King Code on corporate governance (Institute of Directors 2002). This report requires all listed companies to report on their triple bottom line, namely economic, environmental and social impacts. The limitations of this approach would still however, include any limitations that are apparent in the reporting model selected.

Other international standards and guidelines that could be considered include:

- ISO 14001, this is largely limited to environmental issues, and thus would be inadequate by itself as its does not address social issues. A further limitation is that, since it is based on an EMS system, it reports largely to this and not necessarily to all impacts (Krut & Gleckman 1998),
- CERES, this is predominantly an environmental guideline, and has limited application at the time of writing in South Africa (Holcroft 1999), and
- EMAS, again this is an environmental guideline and has limited application in South Africa (Holcroft 1999).

Thus, it is argued that in South Africa, the most comprehensive and complete model with which to compare the proposed one, would be the GRI.

8.3.2. Process and results

The corporate social reporting model (proposed in Chapter 7), as represented by elements called 'principles' and 'required notes' (in Chapter 7), was coded (refer Table 8.1 below). The reporting areas of this model are broken down into physical designated by an 'A', socio-economic designated by a 'B', then second and third order impacts by 'C' and 'D' respectively. Each major category of items is listed numerically. For each of these major codes, notes and specific disclosure that are required to help users understand these impacts are disclosed by an A' for example if physical, followed by the numeric categories for which such disclosure applies e.g. A'1/2/5/6. Where such notes apply to second order impacts they would be designated as AC', if it related to examples of second order physical impacts.

These disclosable items per the proposed system were compared by the author on a line-by-line basis in Table 8.1 with the disclosure requirements of GRI, which is already codified. This comparison is reflected in the table below. Equivalence was assumed where a high degree of similarity was evident, and then equivalent GRI code was entered in the last column. Disclosure items for which no equivalent item is present in the GRI listing have been designated by a *N and are discussed in Section 8.4.1. Where the same or similar items is a requirement of disclosure of the GRI, this is taken to represent substantial support that such an item is a valid component of a CSR model, as all disclosable items per the GRI have undergone significant external review. The high degree of correlation between the two models, independently developed, supports the validity of the proposed model.

Table 8.1. Comparison of the proposed CSR model with the GRI

Note: Codes in first column refer to the proposed model per this dissertation

*Codes in last column refer to GRI, except *N which refer to missing items discussed below*

Physical					**GRI Codes**
A	1			Use (conversion) of artificial material (capital and operating assets)	EN1
A	2			Use (conversion) of natural products or material	EN1
A	5			Conversion ('production') of energy	EN4
A	6			Agricultural (biotic) production	*N1
A	8			Mining	EN26
		A'1/2/5/6	1	Complete input-output reconciliation i.e. mass balance	In: EN1, 5, Out: EN11
		A'1/2/5/6	2 a b c	Distribution before and after • land (controlled or not) • water • air	 *N2 EN12,20,21, 22 EN 8,9 10,30
		AC'	1	Additional notes on transformations through use and waste.	*N3
		AC'	2	Notes on final distribution	*N4
		A'1/2/5/6	3 a b c d	Per appropriate category e.g. • gases and liquids • metals • ceramics • compounds neutral or reactive	 EN 8,9,10,12,30 *N5 *N5 *N5
		A'1/2/5/6	4	Special notes on hazardous / radioactive chemicals produced	*N6
		A'1/2/5/6	5 a b c	Special notes: Impacts on biotic natural systems (local and other) Indicators for the following systems: • land • water • Air Impacts on biodiversity e.g. Biomass x rarity index	 EN 7,25,26 EN 7,25,26 +EN32 EN 7,25,26
		AC'	3	Additional notes of further impact on natural and biotic systems	*N7
A	3			use of energy	
		A'3	1 a b c d 	Total input, giving sources • fossil fuel • hydroelectric • nuclear • Other A note should explain the impact of these sources of derivation	EN3 *N8
			2	Output (transformed, stored, and wasted)	*N9
		AC'	4	Input of energy to use / consume products	*N10
A	4			use of labour (physical only	
		A'4	1	Details of efficiency	*N11
			2	Effects of training i.e. value added	*N12
A	7			Potential future effects (i.e. +change in level of operation-reduction due to policies, process improvement)	C1.2, C3.7, C3.16-19, EN35 expenditure

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Continued…

Socio-Economic (= assumed equivalent)					
B	1			Input value of natural / artificial material assets = payments made + unpaid costs	
		B′1	1	Input: Value of resources used + purchase costs + cost of conversion	EC3
			2	Output: Value (economic) of product	*N13
B	2			Input value of labour = wages paid + training & experience	EC5
		B′2	1	Input of labour hours	LA1
			2	Output: Payment for wages +Δ training & experience +Δ household esteem & well-being	LA 9,16,17
B	3			Support and valuation of goods and services = marketing and promotion costs	
		B′3	1	Input: Payment received	C2.8, EC1
			2	Output: Benefits provides (goods & services) (needs & tension reduction	*N14
B	4			Output of goods and services = payments received	
		B′4	1	Input: Cost of Providing	*N15
			2	Return: Loyalty, product need (measured on an index)	*N16
B	5			Productivity +interest or profits for rent of capital or credit = credit + control of capital + investments	
		B′5	1	Input: New ideas & cost of developing	*N17
			2	Output: Financial benefits (valuation) paid out	*N18
B	6			True or super profit (not for rent of capital) = entrepreneurship, that is new ideas etc.	
		B′6	1	Input: Provision of credit, facilitation of capital investment, structure, support & stability + actual capital (invest) & credit made available	*N19
			2	Output: Productivity (i.e. GDP) & taxes + financial support Interest + 'profits' paid or accrued on investments	EC 6,7,8,9
B	7			Potential future effects (including changes in levels of operations, strategy and policy)	C1.2, C3.7, C3.16-19
		BD′	1	Δ in power of governments or government decisions	SO3,5
			2	Δ in power of industry	*N20
			3	Δ in culture & values including objects (wealth) and lifestyles	*N21
			4	Δ in motivation	*N22
			5	Δ in capacity to work, including training	*N23
			6	Δ in technical knowledge	*N24
			7	Δ in labour power	*N25
			8	Δ in purchasing power	*N26
B	8			Supporting local community	SO1

2nd Order, Upstream / downstream business effects					
C	1			Proportionate share of suppliers (as created by demand for products and services)	C3.16, EN19,33
	2			Proportionate share of distributors (as required to service output)	C3.16, EN19, EN34 (transport)
3rd Order / Level (including all effects as a result of companies activities)					
D	1			Effects on households as users	*N27
	2			Effects on households as employees	*N27
	3			Effects on individuals as investors, funders or entrepreneurs	*N27
	4			Effects on polity and institutions	*N27
	5			Effects on biosystems (ecosystems)	EN14

In Table 8.2 below the comparison of the GRI with the proposed system is presented from the another perspective: whereas in Table 8.1 items were identified that were present in the proposed model but not the GRI, in Table 8.2 items that are present in the GRI but missing from the proposed CSR model are identified. These omissions are denoted by a *M, and are discussed in Section 8.4.1.

Table 8.2: GRI review of key sections and CSR equivalents

Importance 1-5, Needs measuring system Y / N

GRI Section	**Ref No**	**Details**	**CSR Ref**	
Vision & mission	1			
	1.1	Vision / strategy for sustainable development. Identification of stakeholders and how they are affected	*M1	5N
	1.2.	CEO statement on report. Challenges for integrating social, environmental and economic performance and strategy	*M1	4N
Organisational profile	2			
	2.1	Name	*M2	5N
	2.2.	Products & Services	B4	3N
	2.3.	Structure	*M2	1N
	2.4.	Divisions, subsidiaries & JVs	*M2	3N
	2.5.	Countries of operation	*M2	3N
	2.6.	Legal form of ownership	*M2	1N
	2.7.	Markets served	B4	3N
	2.8.	Overall scale (Net assets, sales, products employees, capitalisation etc)	B1-5	5Y / N
	2.9.	List of stakeholders and relationship with entity	*M3	4N
Report scope	2.10	Contact persons	*M4	2N
	2.11	Reporting period	*M4	2N
	2.12	Previous reporting date	*M4	2N
	2.13	Boundaries and scope limitations	*M4	5N
	2.14	Significant changes since last report	*M4	5N
	2.15	Basis for reporting JVs, Subs, Assocs, Leased facilities	*M4	2N
	2.16	Any restatements	*M4	2N
Report Profile	2.17	Any GRI principles not applied	*M4	2N
	2.18	Criteria and definitions applied	*M5	4N
	2.19	Any changes in measurement bases	*M5	4N
	2.20	Policies and Practices to provide assurance of accuracy, completeness and reliability	*M5	5N
	2.21	Independent assurance	*M6	5N
	2.22	Access to additional information and reports	*M4	3N

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Structure and management	3.			
Structure and governance	3.1.	Governance structures and committees and any responsibility for Economic, Environmental and Social performance	*M7	3N
	3.2.	Percentage of directors independent and non-executive	*M7	2N
	3.3.	Process of selecting directors with social and environmental expertise	*M7	4N
	3.4.	Board processes for assessing and managing EES risks	*M7	4N
	3.5.	Linkage between executive remuneration and non-financial goals	*M7	4N
	3.6	Organisational structure & key persons set up to achieve EES policies	*M7	4N
	3.7	Mission, values, polices and codes of conduct for EES performance	*M7	5N
	3.8	Mechanisms for shareholders to guide board of directors	*M7	3N
Stakeholder engagement	3.9	Basis for identification and selection of key stakeholders	*M3	5N
	3.10	Approaches to stakeholder consultation	*M3	5N
	3.11	Information from stakeholders consultation	*M3	5N
	3.12	Use of information from consultations	*M3	5N
Policies & systems	3.13	How the precautionary approach is applied	*M8	3N
	3.14	Voluntary charters, principles or protocols company subscribes to	*M9	5N
	3.15	Membership industry associations, international advocacy groups	*M9	5N
	3.16	Policies for managing upstream and downstream effects	*M10	5N
	3.17	Approach for managing indirect EES impacts	*M10	5N
	3.18	Major changes in operations or locations	A7 / B7	5N
	3.19	Policy and procedures for EES performance.	*M11	5N
	3.20	Certification of EES systems	*M9	5N
GRI content index	4.			
Performance indicator	5.			
Direct economic ind.				
Customers	EC1	Net sales	B4	5Y
	EC2	Geographic breakdown of markets	*M12	2N
Suppliers	EC3	Input costs of materials and services	B1	5Y
	EC4	Percentage of contracts paid per terms	*M13	2Y
	EC11	Supplier breakdown by company & country	*M14	2N
Employees	EC5	Total payroll and benefits	B2	5Y
Providers of capital	EC6	Distributions broken down into dividends, preference dividends and interest	B5	5Y
	EC7	Change in retained earnings	B5	5Y
Public sector	EC8	Total taxes (per country)	B5	5Y
	EC9	Subsidies received per country	B5	5Y
	EC10	Donations to communities / society	*M15	5N
	EC12	Spending on non core infrastructure	*M15	4N
Indirect economic impacts	EC13	Significant externalities associated with companies products and services	A1-7, B2-7	5N

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Environmental performance indicators				
Materials	EN1	Total materials use by type	A'1/2	5Y
	EN2	Percentage of materials used from other wastes	A1	4Y
Energy	EN3	Direct energy used per source (generated)	A3	5Y
	EN4	Indirect energy used per sources (purchased)	A3	5Y
	EN17	Initiatives to use renewable sources	*M16	4Y
	EN18	Energy consumption footprint (per product)	A'3 D1	4Y
	EN19	Indirect energy implications i.e. upstream and downstream	A'3C2	5Y
Water	EN5	Total water use	A2	5Y
	EN20	Water sources and affected ecosystems	A'2C5a	5Y
	EN21	Use of ground and surface water as percentage of renewable water available (per area)	*M17	4Y
	EN22	Recycling and reuse of water	*M17	4Y
Biodiversity	EN6	land used in sensitive / rich areas	*M18	4N
	EN7	Major impacts on biodiversity and eco-systems for activities and products and/ services	A'1/2 C5a, C5c	5Y
	EN23	Total land used for production or extraction	*M19	4N
	EN24	Amount of land surface Impermeable	*M20	4N
	EN25	Impacts on protected or sensitive areas	A'1/2 C5a	5Y
	EN26	Change in habitat from activities and percentage of land restored	A'1/2 C5a	5Y
	EN27	Programmes to protect or restore ecosystems	*M21	5N
	EN28	IUCN red list species in areas affected by operations	*M22	5N
	EN29	Units operating in or around protected or sensitive areas	*M22	5N
Emissions, effluents and waste	EN8	Greenhouse gas emissions per category, direct and indirect (from imported energy)	A'1/2 C2c or C3a	5Y
	EN9	Use and emission of ozone depleting substances	A'1/2 C2c or C3a	5Y
	EN10	Other significant emissions including NOx and Sox	A'1/2 C3a	5Y
	EN11	Total amount of waste by type and destination	A'1/2 C2a and C3	5Y
	EN12	Significant discharges to water by type	A'1/2 C2a	5Y
	EN13	Significant spills	A'1/2 C2b	5Y
	EN30	Other indirect greenhouse gas emissions	A'1/2 C2c or C3a	5Y
	EN31	Transport of hazardous substances	*M23	3N

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Emissions, effluents & waste	EN32	Water sources and related eco-systems affected by discharges and runoff	A'1/2 C5a	5Y
Suppliers	EN33	Performance of suppliers per requirements (environmental) of management policies and systems	*M24	3Y
Products and services	EN14	Significant environmental impacts of products and services	A'1/2/3 C5a/b and D	5Y
	EN15	Percentage of products reclaimable or recyclable	A'1/2 C1/2	4Y
Compliance	EN16	Fines and recorded non-compliance with regulations and legislation	*M25	5N
Transport	EN34	Significant environmental impacts	A'1/2 C6	5Y
Overall	EN35	Total environmental expenditure by type	*M26	3Y
Social performance indicators: Labour practice				
Employment	LA1	Breakdown of workforce	*M27	3Y
	LA2	Net employment creation and turnover	B2	3Y
	LA12	Extra employee benefits provided	B'2 C2	3Y
Labour / management relations	LA3	Employees' percentage represented by independent union	*M28	2N
	LA4	Involvement of employees in restructuring	*M28	2N
	LA13	Involvement of employees in management / corporate governance	*M28	2N
Health and Safety	LA5	Practices relating to occupational accidents	*M29	3N
	LA6	Formal health and safety committees	*M29	3N
	LA7	Injuries, lost days and absenteeism	B'2 C1/2	3N
	LA8	Policies and programmes for HIV /Aids	B'2 C2 *M29	3N
	LA14	Evidence of compliance with International Labour Organisation SHE standards	*M29	3N
	LA15	Agreements with workers regarding SHE issues	*M29	3N
Training and education	LA9	Average training hours per employee	B'2 C2	3Y
	LA16	Programmes for continued employability	*M29	3N
	LA17	Programmes for lifelong learning	*M29	3N
Diversity and Opportunity	LA10	Equal opportunities policies and programmes	*M29	2N
	LA11	Composition of senior management	*M29	2N
Human rights	HR1	Policies to deal with Human rights (HR)	*M30	3N
	HR2	Consideration of HR in investment decisions	*M30	3N
	HR3	Policies of HR in supply chain	*M30	3N
	HR8	HR in employee training	*M30	3N
	HR4	Policies against discrimination	*M30	3N
	HR5	Policy on Freedom of Association	*M30	3N
	HR6	Policy on Child labour	*M30	3N
	HR7	Policy on forced labour	*M30	3N
	HR9	Appeals practices and processes	*M30	2N
	HR10	Non retaliation policy, grievance system	*M30	2N
	HR11	HR training for security staff	*M30	2N

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Human rights	HR12	Policies on needs and rights of indigenous peoples	*M30	2N
	HR13	Community grievance system	*M30	2N
	HR14	Monies redistributed to local communities	B'5 C2	2N
Social Performance Indicators				
Society				
Community	SO1	Policies to manage impacts on communities	*M31	2N
	SO4	Awards received for social ethical and environmental performance	*M31	2N
Bribery & corruption	SO2	Policies and procedures to address bribery and corruption	*M31	4N
Political	SO3	Policy on political lobbying	*M31	5N
	SO5	Disclosure of all monies paid to political parties or related institutions	B'D4	5N
Competition and Pricing	SO6	Court rulings on anti-trust and monopolies	BD'2	2N
	SO7	policies to prevent anti-competitive behaviour	*M31	4N
Product Responsibility				
Customer Health & Safety	PR1	Policy for preserving customer health and safety (H&S)	*M32	4N
	PR4	Non-compliance with regulations on customer H&S	B'3 C2	4N
	PR5	Complaints upheld by regulators on H&S issues	B'3 C2	4N
	PR6	Voluntary code of compliance, labels or awards received	*M32	4N
Products and Services	PR2	Policies and procedure for product information and labelling	*M32	4N
	Pr7	Non-compliance with product information / labelling legislation	*M32	4N
	PR8	Policies and procedures to assess customer satisfaction	B'3 C2	4N
Advertising	PR9	Policies and procedures to ensure compliance to standards	*M32	4N
	PR10	Number of breaches of advertising and marketing regulations	*M32	4N
Privacy	PR3	Policies and procedures to ensure privacy	*M32	2N
	PR11	substantiated claims of breaches of privacy	B'3 C2	2N

8.3.3. Differences between the GRI and the proposed model

8.3.2.1. Items excluded from either model

The following items in Table 8.3 below are excluded from the proposed CSR model or not specifically included therein, but are included in the GRI guidelines. These items are evaluated below and their continued exclusion is justified by the author as part of the original work of this thesis (refer to the Table in 8.1 above for the reference number).

Table 8.3 Items disclosable per the GRI but excluded from the proposed model

Ref from Table 8.2	Details
*M1	The CSR model proposed, is aimed at objectively reflecting the impacts of the entity's activities on the physical and social surroundings, as the AFS reflect the financial transactions (interactions). The chairpersons' and directors' reports are not seen as being of the same nature as the AFS. While they may be true and accurate, and may offer valuable information and insights, they tend to reflect positive elements of the company's performance and potential. In a similar vein, in the case of CSR statements, where visions, policies and procedures with respect to social and environmental issues may exist, they do not represent actual performance and hence are excluded from the report itself. However, the existence of such policies and procedures, if functioning effectively (which can be verified by control tests), would mitigate the risk in these areas. Hence, as a result of this analysis this dissertation will suggest that a report would be included with the CSR listing the relevant policies (that are supported by structures and operational procedures) that would minimise or mitigate social and environmental risks.
*M2	Details of the company, and relevant background data, would also be useful if attached to the CSR, but do not form a core component of such a report.
*M3	A list of stakeholders, their representatives and contact details as well as their relationship to, meetings and other dealings with the entity would provide additional useful information for the users of CSR. However, this does not actually reflect on the entity's performance for that period.
*M4	Reporting details (period, scope etc), would provide additional useful information for the users of CSR. However, this does not actually reflect on their performance for that period.
*M5	Definitions, criteria, assurance measures, would provide valuable information to assess the CSR, and will be included with recommended additions to the report.
*M6	Details of actual external assurance procedures, should be noted as a prefix to the report (See recommendations).
*M7	See comments under M1 regarding risk minimisation with respect to policies and procedures.
*M8	The application of the precautionary principle in identifying and minimising risks, as noted in M1 would be useful additional information for users.
*M9	Membership of and subscription to charters and protocols, would also be useful information regarding risk minimisation.
*M10	See comments under M1 regarding risk minimisation with respect to policies and procedures.
*M11	See comments under M1 regarding risk minimisation with respect to policies and procedures.
*M12	The geographic distribution of the markets may give some (suggested minimal) risk data.
*M13	Relationships with suppliers may give some (suggested minimal) risk data.
*M14	Location of suppliers may give some (suggested minimal) risk data, especially where they operate from less developed countries (LDC).
*M15	Donations to and infrastructure provided for local communities forms part of marketing, brand awareness and customer loyalty building. This should be disclosed as marketing expenditure. Separate disclosure would be misleading.
*M16	Initiatives to use renewable resources, although praiseworthy, would be misleading and is separately disclosed. If successful, the effects should be noted in the inputs to the mass balance.

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*M17	Recycling of water, and percentage of total available supply, could be assessed by comparison of annual mass balances. Separate disclosure could be misleading.
*M18	Land use in sensitive areas would be useful in risk assessment.
*M19	Total land use, and information on impermeable surface cover may be vaguely useful, but more significant is the impacts of such use.
*M20	Total land use, and and information on impermeable surface cover may be vaguely useful, but more significant is the impacts of such use.
*M21	Programmes to protect and restore ecosystems, although praiseworthy, would be misleading if separately disclosed.
*M22	Operations in or around sensitive areas would provide useful information on risk assessment.
*M23	The extent that hazardous substances are transported, would be useful information for risk assessment.
*M24	The performance of suppliers in terms of specifications would provide information that would mitigate the 2nd order impacts. However, these should be evident in the CSR.
*M25	Fines and legal non-compliance would be useful risk assessment data.
*M26	Environmental related expenditure, could be very misleading if separately disclosed. The impact thereof in the CSR should rather be assessed.
*M27	The composition of the workforce would be useful information for those concerned with racial issues, and to identify workers at risk of exploitation.
*M28	Workers as a % represented by trade unions, would be useful information for risk assessment.
*M29	Practices, policies procedures and evidence of SHE structures would be useful information to assess social risk.
*M30	Policies and procedures relating to human rights would be useful information for risk assessment.
*M31	Policies and procedures relating to fair trade and political independence would be useful information relating to risk assessment.
*M32	Policies and procedures relating to advertising, privacy, product labelling and information and customer safety would be useful information for risk assessment.

The above analysis must not be seen as a criticism of the work of the GRI, but rather should be seen as a suggestion that disclosed information should be spilt between actual performance, risk minimisation and risk indicators. The author suggests that disclosure on risk minimisation can be misleading unless independently verified as being embodied in control procedures that are functioning effectively.

The author argues that, in principle, it is critical to ensure objectivity in CSR disclosure. The following examples indicate increased controls, or appropriate policies, or even indicators of success, but they do not relate to actual financial performance:

- The company spent more money on advertising,
- Old plant was replaced with new technology,

- The directors developed plans to improve performance and reduce environmental impacts,
- The company increased expenditure on staff benefits, and
- Insurance was improved and extra security staff hired.

A CSR model, such as the GRI, may allow such data to be reported which may be interesting or even make stakeholders feel their concerns have been addressed, but which does not objectively reflect actual performance.

8.3.3.2. Items included in the proposed CSR model, but absent from the GRI model

The following items in Table 8.4 below, proposed by the author and which have been included in the proposed CSR model, are not specifically required by the GRI. Brief arguments are presented below for their inclusion in a CSR model (refer Table 8.1. for the reference number). This represents a significant part of the work of this thesis in developing the proposed model.

Table 8.4: Items excluded from the GRI model

Ref from Table 8.1	Details
*N1	It would be important for users of CSR of agricultural based entities, to know details of their production, land use, coverage of alien species and GM plants.
*N2,4 & 5	Although land based distribution is well controlled in developed countries e.g. the USA. it is important to know the location, i.e. account for, all outputs and waste. The form of solid based wastes should also be disclosed, particularly their reactivity, and their final storage / disposal type.
*N3	CSR should indicate down-steam effects of users i.e. the final impact of products per the generally accepted principle of cradle to grave.
*N6	Users of CSR would be interested in all hazardous and radioactive chemicals produced.
*N7	Details of output and distribution alone, although useful, does not convey immediate and long term impact on biotic / eco systems.
*N8	Users should not only be aware of transformation of material but energy transformation as well as use. Energy used also has significant upstream effects.
*N9	The final form of such energy used is significant in terms of efficiency and heat (and noise) pollution.
*N10	The consumption of the final products will also have significant energy impacts.
*N11	Use of labour versus mechanised processes not only affects profitability, but also has impacts on the economy and environment.
*N12	Although probably of little interest to many CSR users, financial rewards to employees only represent a portion of the value received. They sacrifice a significant portion of their lives, for a range of other benefits.
*N13, 15	Although covered in the AFS, the GRI does not specify the output value to be disclosed (assumed to be the input value to the economy), nor the input value of products and services the difference between which is traditionally reflected as the value added in the Value Added Statement.
*N14	Although difficult to assess the GRI does not consider the benefits consumers received from products and services purchased. This is assumed to be equal to economic sacrifice (amount paid).
*N16	The GRI does not specify an assessment of product need or product loyalty. These are difficult to assess without a marketing audit, or purchasing data from external marketing agency. However this data is critical for users to assess ongoing viability of company and products.
*N17, 18	The disclosure of ongoing research and development potential is sensitive data, however it is also critical for users to assess ongoing potential of business.
*N19	It is very difficult to quantify or describe the value of institutional and state support in terms of infrastructure, credit, money supply and stability, however these are critical to investment decisions.
*N20-26	Structuralist and positivist approaches, on which this model, and upon which most CSR models are based, do not lend themselves well to assessing changes in power, skills and knowledge. These are generally left to users to judge. However some guidance from the entity, which has direct experience would be valuable.
*N27	The GRI does not require 3rd order reporting, that is details of the impacts of the final users of the product; or from employees, investors and funders using their remuneration, interest or profits to consumer further products.

8.3.4. Summary and conclusions with respect to comparison of the proposed model with the GRI

Aspects of disclosure that form part of the GRI but have not been included in the draft CSR system proposed have been categorised into three types by the author, based on the nature of these omissions. These types of omissions are discussed in Table 8.5 below:

Table 8.5. Items included in the GRI but omitted from the proposed CSR model

Type	Details	Examples included in the GRI	Evaluation in terms of principles proposed for CSR models
1	Background data	• Name, locations, • Reporting details • Lists of Stakeholders • Donations	This information would be useful, but does not necessarily add value.
2	Policies	• Environmental, • Human resources, • Human rights, • Membership of Charter and protocols	It is suggested that this information alone could be misleading and portray an overly positive picture of the company. It would be better to report on corresponding internal controls and procedures and the degree of compliance therewith.
3	Other specific information that indicates exposure to risk	• Operations in sensitive areas • Hazardous substances that are transported	It is argued that such information is useful in assessing risk, but does not relate to actual impacts.

The suggested CSR model proposed by this thesis, has many aspects that are not covered by the GRI. These can be broken down into three categories, discussed in Table 8.6 below:

Table 8.6. Items proposed in this thesis but not included in the GRI

Type	Details	Examples	Comments
1	Useful information not necessarily prepared by entities, but essential to CSR, and readily determinable with current technology	• Full energy reconciliation • Mass balance	It is argued that this information must be reported.
2	Information not readily or easily determinable	• Consumer power • Labour power, well-being • Consumer loyalty, satisfaction	These areas are potentially difficult, or may even be currently impossible or not feasible to measure. Refer to Section 8.4 of this chapter.
3	Upstream and downstream impacts	• 2nd order impacts of suppliers and distributors • 3rd order impacts of consumers, investors, funders, employees	It is argued that these may be difficult to determine, since an entity would require this information from its suppliers. However, ISO 14001 certification is becoming a requirement for conducting business, and entities must be able to prove that their suppliers are certified in order to be certified themselves. Suppliers are providing such information at the request of their customers (in order to retain certification). Thus, it is argued that provision of upstream and downstream information is possible and should be retained in the suggested system.

8.4. Assessment of measurability of disclosable items suggested by the proposed CSR model

8.4.1. Introduction

In the proposed CSR system, developed in Chapter 7, attention was focused on key interactions within the social and physical realities. The author argues that all such key interactions and impacts, should be reported. Section 8.3 above noted that many of these interactions and impacts have been omitted from the GRI, which has been used as the baseline for comprehensive CSR in South Africa. It is suggested that these omissions may relate to the difficulty or impossibility of being able to measure these impacts, certainly to the level of those caused by individual companies.

In this section the aim is to examine the major categories of impacts so that the mechanisms and feasibility of measuring such impacts can be determined. It must be noted that if a particular aspect is difficult to measure, that does not reasonably mean that it should be precluded from the model, or that companies should ignore this. This would, however indicate the need for further work in that area and may suggest that if a prescribed standard were to be established for South Africa, that specific area would have to be left as an optional disclosure item.

8.4.2. Approach to assessing measurability

The approach adopted for this section was to group reportable impacts into areas pertaining to distinct academic disciplines, because it is argued that it would be relatively easy to identify potential experts in recognised disciplines, and use a 'snowball' technique: if initial contacts indicated they were not suitably qualified to comment on some or all the measurement issues in that grouping (discipline), they could recommend other experts. For each discipline a recognised regional or national expert who had published in recognised peer reviewed journals in that broad academic field, was selected. This expert was then interviewed and asked to comment on and or briefly assess the feasibility of measuring the impacts per the model pertaining to their relevant academic discipline. The motivation for selecting this approach is based on the argument that any single person (the author) researching all these related disciplines, within a limited period of time could never become an expert (with a lifetime's understanding) in all of these disciplines. Thus, it would be reasonable to consult recognised experts.

The selection of these experts was purposeful, using a 'snowball' technique, (using the references of other experts). This approach could be criticised as the selected persons may not be the leading national expert within each field and most likely not be a leading international expert. However, the author argues that these persons, who are university professors or hold a minimum of a PhD in these fields, would reasonably be expected to have a broad enough knowledge of and be aware of relevant measurement issues relating to the academic discipline. In several cases, where the expert initially selected felt that another expert was more appropriate, he or she referred the author to such an expert, and only the results of the discussion with the latter expert are discussed below.

The final list of experts used in each field or academic discipline are listed below in Table 8.7:

Table 8.7: Experts consulted on measurement issues

Field / Discipline	**Expert**	**Reference in Section 8.4.3 and Table 8.8**
Physical systems (chemistry)	Dr S Spankie Dr C Southway	1
Biotic systems (ecology)	Prof. M Hammer	2
Human interactions, well-being, lifestyles (Psychology)	Dr G Lindegger	3
Employees' motivations, remuneration (Human Resources)	Dr C Hunter	4
Consumer behaviour and customer welfare (Marketing)	Prof. D Vigar	5
Social systems (Sociology)	Dr S Burton	6
Overall systems (Systems theory)	Dr S Luckert	7
Financial and economic systems (Economics)	Prof. T Nicola	8

8.4.3. Results and discussion

The selected experts were individually interviewed using semi-structured interviews. During these interviews they were asked to provide responses to questions on various measurement issues. These included the following questions with respect to interactions and impacts (per the framework of Chapter 7) that related to their fields of expertise:

- How would these interactions be measured and recorded?
- How easy or difficult (practically) would this be?
- Could the impacts of individual companies be isolated?
- What are the theories underlying this phenomenon?
- What are the key references?

The following table summarises the results of these interviews.

Table 8.8: Measurement issues relating to proposed CSR system

No	Field / discipline	T= Traditionally reported in CSR, N= not traditionally reported	Interactions	Theory and references	Measurement issues
1	Physical systems (Chemistry)	T	Conversions of natural and artificial materials in artificial materials. Creation of waste, by-products. Energy conversion	Basic Chemistry, Newtonian Physics, air flow modelling	Effluent and groundwater can be monitored and sources traced (particulate, dissolved substances, heavy metals, and oxygen demand). Emissions can be monitored, and using air-flow models, potential sources identified. Internally, companies can accurately measure emission and effluent at source (including fugile emissions).
2	Biotic systems (ecology)	N	Biotic systems, impacts of humans (through lifestyles, wastes, pollutions), impact of industry, agriculture	Indicator species, indices	Two most common methods are: indicator species whose health and population correlate to health of eco-system. Alternative is indices designed for specific environments, for example the SAS for South African river systems, which measures the presence of a variety of sensitive species. Methods easily available, difficulty is isolating the impacts of one company, or one pollutant (or even its source) Not possible to identified on a larger scale, as too many variables.
3	Human interactions, well-being, lifestyles (Psychology)	N	Well-being and lifestyles of consumers, workers (households)	Indices, pathway analysis	Various indices are available to measure quality of life. Difficulty in isolating changes and impacts caused by specific companies (or impact of products). Companies can use pathway analysis to identify factors causing harm or dissatisfaction.
4	Employees' motivations, remuneration (Human Resources)	T	Motivation, remuneration, training and skills, status	Workplace skills assessment, absenteeism, satisfaction surveys, Hertzbergs motivators and hygiene factors. Self esteem / efficacy	Widely used techniques and indicators available to assess worker's skills and training needs, and job satisfaction.

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5	Consumer behaviour and customer welfare (Marketing)	N	Spending, loyalty, propensity to buy, receipt of goods and services, satisfaction, needs, fulfilment	Profiling, brand awareness, marketing audits	Various measures exist, the only limitation is the cost. Companies can conduct marketing audits. CSI, customer satisfaction index available. In SA Markinor conducts research, assembling databases of customers, brand awareness, and market share. Living standards measure (LSM) also available. Other agencies, All Media Product Service (AMP), and Unilever conduct research on market profiles. Data are available, or can be generated, but cost is prohibitive.
6	Social systems (Sociology)	N	Leadership, government, institutions, social systems (and change thereof), propaganda, protection	Structuralism (Parsons 1959), functionalism, network theory, legitimacy theory	Systems theory, well developed and includes structuralism, with pattern variables which can be measured (with difficulty). Large numbers of uncontrollable, independent variables, cannot all be controlled, cannot reasonably isolate effects of one company.

The interviews indicate that impacts on physical systems can be comprehensively measured, whilst impacts on biotic systems can be measured using various techniques although it is difficult to isolate the impact of specific companies on eco-system health.

With regard to social systems, certain disciplines that have commercial value have established measurement systems, such as in the case of marketing for example determining the impact of advertising campaigns on consumers, and in the case of human resources, where skills, training, health, motivation and productivity can be measured. Similarly, the impacts of businesses on the overall economy can be measured. However, in areas that have limited or no commercial value, such as determining the impacts of products of society and social patterns, and the quality of lifestyle, this cannot be readily determined

8.4.4. Conclusions

Traditional CSR disclosures are well defined and measurement techniques well developed. However, non-traditional areas, many of which were noted to be excluded from the GRI (Section 3), are not well defined, nor are measurement techniques well established. Thus, it is suggested that such areas will be largely excluded from the

internal reporting systems of companies, and hence their external CSR systems. This will be considered in Chapter 9.

8.5. Overall criticisms of CSR

8.5.1. Background to evaluation of effectiveness of CSR

The final part of this chapter questions the effectiveness of the contribution of CSR by business to provide social accountability to its affected parties (the stakeholders). CSR is "the process of providing information designed to discharge social accountability" (Gray et al. 1987:4)

Accountability, in general[53], in the context of CSR is "the duty to provide an account or reckoning of those actions for which one is held responsible" (Gray et al. 1996:38), and assumes a contract, not necessarily legal, but a social contract between the public and the organisation, governed by the rules, values, ethics and principles of society. Such a relationship assumes the existence of power to control or influence the activities of that organisation, even if this power is not actively exercised[54]. Gloeck (2003) argues that in defining social accountability, account should be taken of change and evolution, and he supports McCandless (1994:39) in his definition, which states that accountability is "the obligation of an organisation to allow the public to challenge its fairness".

CSR research is largely based on Systems theory (Gray et al. 1996), which considers all inter-related factors (elements) within the system that influence the functioning of that system and, in this case, the nature and form of CSR. Legitimacy theory assumes the stakeholders, whom businesses continuously try to placate using CSR, hold a significant portion of power and businesses need to obtain their continued approval to operate. It can hence be argued that CSR is used by businesses to maintain their power, by undermining any legitimate objection of the stakeholders, by providing evidence of positive measures to protect the environment, care for their employees and contribute to the community. As a consequence, Legitimacy theory has value in understanding relationships and change, and in understanding how CSR aids business

[53] Not just social accountability, which is the context in which this is written.
[54] This is consistent with International Financial Reporting Standards (IFRS) criteria for control, International Accounting Standards Committee Foundation (IASCF) 2004.

in extending and maintaining its power base. Gray, Owen and Maunders, 1988 (cited in Gray et al. 1996:35) note that "to achieve radical or evolutionary change in business CSR should be enforced with compliance to standards, with legally forced disclosure and external audits"[55]. This would amount to moving to radical structuralism (Burrel & Morgan 1979), which focuses on change and emancipation by considering structure, domination (power) and deprivation. Thus, CSR would have to facilitate change and contribute towards improved conditions for human society by doing either or both of the following:

- Providing information necessary for change.
- Point to or provide mechanisms[56] for such change.

8.5.2. Accountability for what?

Gray et al. (1996) apply a principal-agent relationship between society (principal) and the business (agent) that is expected to provide information on its activities, to discharge its social accountability. However, this is not the limit of the relationship, since society includes not only employees, investors, and consumers but also all humankind as the custodian of all natural resources and life. Thus, society collectively, including all stakeholders, would expect information with respect to all impacts that business has, from each stakeholder perspective.

The following table, which was developed by the author, considers the effects of business from a 'give and take' perspective, corresponding to the interests of principal stakeholder groups.

[55] Regulation is in place in the form of the King II Report (Institute of Directors 2002) as prescribed for listed companies by JSE, but refers to triple bottom line reporting, and the Global Reporting Initiative (GRI) which is merely a guideline (see limitations in Section 3.2).
[56] Gray et al. (1996:34), argue that a change in information can reflect as a change in society, by changing the distribution of influence.

Table 8.9: The 'give and take' of business activities

AREA ⟶	**Funds**	**Environment**	**Raw materials (& available energy)**	**Artificial materials**	**Employees, time**	**Customers' time**	**Consumers money *5**
TAKE (stake-holder impact)	Invest	Balance in natural systems, natural biomass, biodiversity	Extract and use	Use (convert)	Use (+/- 70% of adults waking life dedicated to work related activities)	Reading, listening to advertising, marketing	Spend
RETURN	Dividends, interest, capital growth	Nil	Little (artificial material with support life value *3)	Products and services, some life-supporting* 1, Waste	Skills*2, funds, less (time) life left, less health	Biased information & artificial needs	Products and services*4, some life-supporting
Net gain / deficit summary	Varies	Significant deficit	Significant deficit	Replaced as long as supply of raw materials lasts	Theoretically nil, unless labour is unreasonably cheap (supply and demand)	Net deficit (some consumers view this as a form of entertainment though)	Net deficit (economic principle of supply and demand)

Notes:

1: Normative assumption, human life is invaluable, however significant trade-off between quantity (length) and quality (well-being)

2: Skills have potential value for individual (income generating), to society and to business

3: Conversion often irreversible, raw material may not be self-renewing, hence irreplaceable (depending upon supply and demand), hence may have infinite value (Daly & Cobb 1990)

4: Ultimate goal of business to take consumers money, which must be greater than, the cost of marketing + R&D costs + cost of manufacturing (measured by internalised costs only)

5: The process repeats itself, over and again in an ever-expanding circle hence all deficits are accumulating at an ever-increasing rate. Refer to Figure 8.2.

Table 8.9 suggests significant deficits, with respect to:

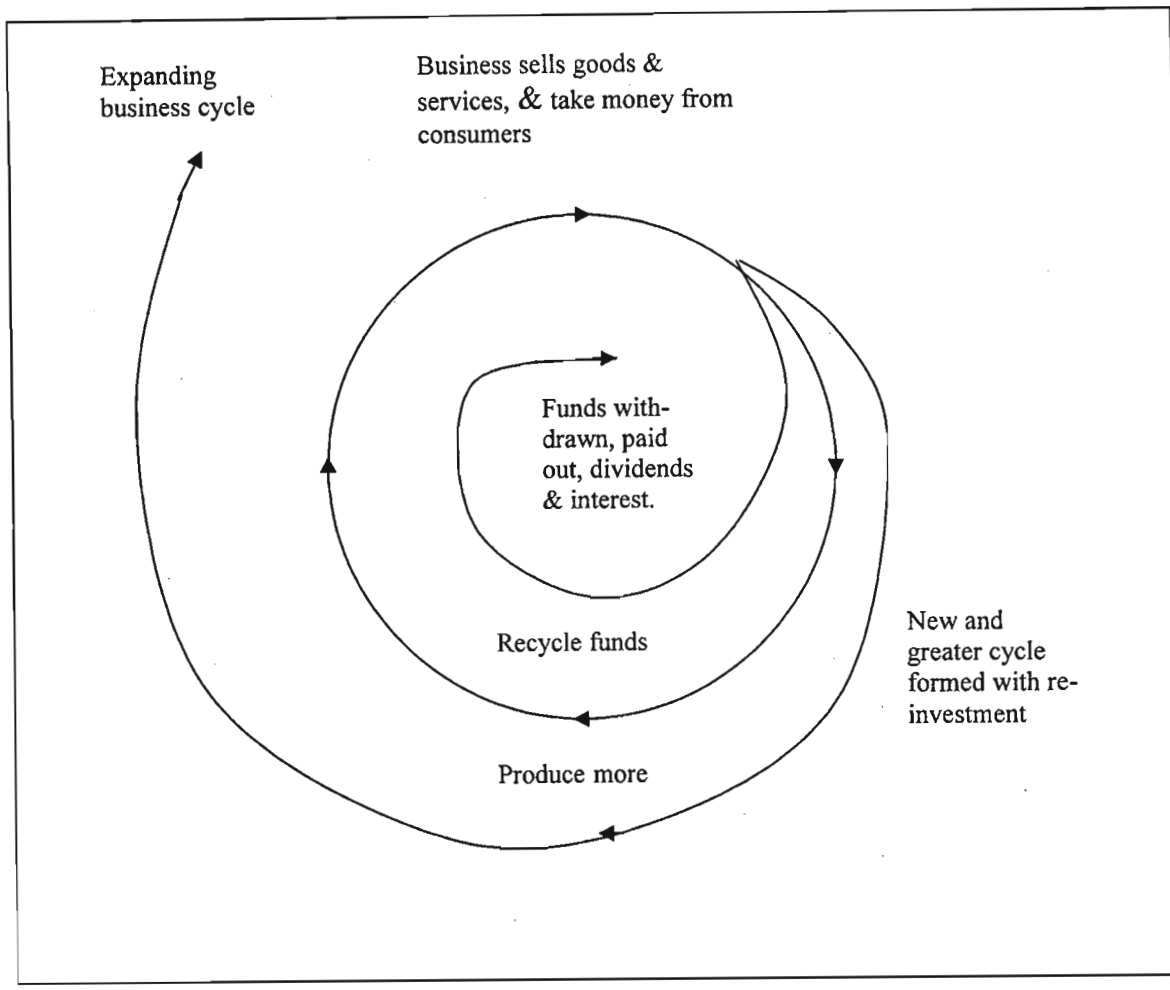
- Environment,
- Raw materials (and sources of energy),

as well as possible deficits with respect to:

- Employees time / health,
- Consumers' / customers' time.

However, to appreciate the full extent of these deficits Figure 8.2 would need to be considered which depicts the cycle of business funds. Although some funds are returned to stakeholders, most funds are re-circulated, thus continuously adding to the deficit where these are not self-replenishing. The greatest concern is, however, the excess funds (be it profits or new investments), which create new and greater business cycles thus exponentially increasing the accumulating deficits.

Figure 8.2: 'Give and take' of funds as business cycle



As noted in Chapter 7, Antal and Dierkes (2002) classify CSR into four levels:

1. Early models, which include elements of cost accounting and using socio-economic variables.
2. Extension of level (1) models to include outputs (Dierkes 1979).
3. Integrated multifaceted models which include: social reporting, value added accounts and societal impact accounts.
4. A final level, which includes 'goal accounting and reporting' (Antal & Dierkes 2002). Such reporting identifies social and environmental goals, then provides quantitative and qualitative data to demonstrate how these have been achieved by the business, as well as shows impacts of activities.

Levels 1 to 3 include accounting for inputs and outputs with quantitative and qualitative disclosure. Advanced models at level 3 include accounting for all measurable variables and can provide comprehensive data on overall businesses

outputs and impacts of business. However, the author argues that without a suitable framework or interpretation these models would not address the key principle of stakeholder theory, that is, to present meaningful accounts to stakeholders so that they can assess whether business activities are acceptable in terms of their relationship and social contract with business.

Level 4 of such reporting identifies social and environmental goals and then provides quantitative and qualitative data to demonstrate how these goals have been achieved by the business. Gloeck (2003:66) notes that central to social accountability is "a public declaration of an organisation's mission and how it will go about achieving this". ISO 14001, although not without significant limitations (Krut & Gleckman 1998), is one such example of a level 4 reporting system. This includes requirements for an EMS, which is goal driven, and comprehensive CSR disclosure requirements. This system has become a prerequisite for international trade in many business sectors (Turner 2004).

In South Africa, strong support by stakeholders for environmental reporting was found (De Villiers & Vorster 1995, De Villiers 1998) as well as support for general CSR by (De Vries & De Villiers 1997). Mitchell and Quinn (2005) found strong support for comprehensive (level 4) disclosure on the part of environmental stakeholders, and level 3 disclosure on the part of listed companies.

Furthermore, the fourth level of CSR suggested by Antal and Dierkes (2002) incorporates descriptions of organisational goals and progress towards achieving such goals. Idealistically, such models could be used to address deficits by codifying them into organisational goals. However, such models without compulsory standards, with legally required disclosure and external verification / audits could, by omission, highlight only areas of success and become part of the existing 'green washing' problem. Therefore, it is suggested that without fundamental reform to CSR, even this 4th level of reporting would be ineffective to bring about positive social change. However, challenges identified with respect to present CSR suggest that stakeholders would not necessarily be aware of social and environmental impacts and deficits from business activities, due to limitations of current CSR practice up to and including level 4 of the Antal and Dierkes 2002 model (refer to Chapter 7).

In South Africa, where job creation, economic development, wealth distribution and black empowerment are priorities, social and political pressure exists to address these concerns, and hence to report on appropriate measures taken by business, which are commonly included under CSR. This, however, only constitutes a part of the range of activities and impacts that companies could, and this thesis argues, should be reporting on in CSR. These include areas currently reported on internationally (Bendell 2005) for example occupational health and safety, labour, human rights, anti-corruption, environmental impacts and management systems, and support for company-sponsored community-based projects, as well as areas not traditionally reported on[57]. Furthermore there are many other non-traditional areas that, it is argued, should also be reported upon, as noted in Chapter 7. However, the social pressures that presently operate in South Africa require only the former areas to be reported upon, while the latter areas may be omitted.

8.5.3. Stakeholders' perceptions

The author argues that deficiencies from business activities are inherently evident when core activities are appropriately categorised, as in a 'give and take' analysis (Table 8.9) that details core activities. However, almost every member of the public i.e. every person, is a potential stakeholder with respect to each of the major activity categories. How they would respond to the data of CSR, would depend upon how they perceive themselves, and thus the stakeholder group to which they primarily relate, which is related to their personal values and belief systems.

The author suggests the following categories (Table 8.10), represent priorities of many stakeholders from commercialised developed countries.

[57] Refer to Table 7.2 for broad areas for impact.

Table 8.10: Common primary and secondary orientation of stakeholders, based on values systems

Orientation of stakeholders based on personal values systems			**Objective or purpose**	**Highest value or goal**
Primary	1	Consumer	To spend	To get more material possessions & valued services.
	2	Employee	To earn	To get more money to facilitate more consumption.
	3	Investor	To earn & accumulate	To secure future consumption.
Secondary	4	Physical person (creature)	To maintains health	Quality of air & water. Healthy levels of stress.
	5	Social person (being)	To enjoy social interactions, maintain well-being	Enjoyment of friends, family, social interaction. Time for relaxation. Aesthetic quality of environment.
	6	Concerned citizen (social and environmental issues)	To protect nature, protect other persons (not in positions to do so for themselves)	Protecting 'mother' nature, the balance and variety in nature, functioning eco-systems. Protecting the rights of other persons.
	7	Parent or guardian	To maintain a healthy environment for children.	Preserving birthrights, rights of descendants.

Note: The above table represents the views of the author. Values will differ between individuals and population subgroups depending upon socialised norms. The rankings suggested above represent common priorities of persons living in commercialised developed societies, as influenced by business (Beder 1997).

It is suggested in Table 8.10 that, due to the common orientation of many stakeholders primarily as consumers, employees and then as investors, even if they were aware of such significant deficits with respect to nature and natural resources, this would not motivate them to react, since this is not their primary area of concern and business is satisfying (albeit partially) these other primary needs. In South Africa 76% of the entire population fall into the black African population group. For this group the average per capita income for the lower income half of this group is $1.04 per day, which is barely above the widely accepted minimum of $1.00 per day needed to survive and the average for this entire population group is a mere $1.65 (Devarajan and Van der Mensbrugge 2000). Thus, in South Africa, where the majority of the population is unlikely to have formal employment and is living in relative poverty, the author argues that the majority of persons will be focused as consumers, solely on value for money, with little concern for altruistic issues (Maslow 1970)[58]. Even if

[58] Maslow's Hierarchy suggests that persons will address their basic needs first (food, security, shelter), before considering higher needs such as self-actualisation, which would include caring about others and the environment.

stakeholders were specifically aware of net deficits in specific areas noted in Table 8.9, business would need to do little to legitimise its activities due to stakeholders' primary orientation as consumers (Table 8.10).

8.5.4. Can these challenges be overcome?

It is argued that if CSR clearly highlighted significant deficits, this would not necessarily lead to significant change. Gray et al. (1996) note that a change in information available to society, including that provided by CSR[59] disclosure, can effect a change in society. This information could be used to reinforce or change the distribution of influence and power. The author argues however that, under Legitimacy theory, CSR is being used to reinforce the pattern of influence and hence to achieve radical change, which would require significant change in social patterns, belief and value systems. Clearly activists could use the data from CSR to draw public attention to key issues and to sway public opinion (if they had accurate and complete data). However, they would be working against the collective might of industry (Beder 1997). To be effective, CSR would need to shift socialised values, perceptions and instilled beliefs that support the present modus operandi of businesses. These values and perception are entrenched in the commercialised media and mass education (Beder 1997). This would be difficult in a developing middle-income country such as South Africa, where business is seen as a provider of jobs, taxes and general economic development, which it is suggested would take priority over accountability and CSR.

An important principle in (general and social) accountability and change are the notions of *voice* and *exit* (Hirschman 1970, Paul 1991, Meyers & Hood 1994 cited in Gloeck 2003). These notions require stakeholders' ability to 'exit', or raise their 'voice' in dissatisfaction (since South African stakeholders are unlikely[60] to be able to leave jobs or choose more expensive products), and hence significant change is unlikely. In South Africa, which has a legacy of socio-political problems, to which business was seen to have contributed in a pre-democratic era, it would be natural for

[59] Society reacts to information, changing opinions and hence influence.

[60] Official unemployment is South Africa is 37% (Kingdon & Knight 2001), hence employed persons would not readily leave a job, knowing that they will be competing with so many other unemployed persons to get a new job. The low per capita income of the majority of the population as discussed on page 12, would mean that as consumers they would be unlikely to be able to choose a more expensive product.

employees to now expect transparency and accountability as this has been intrinsically linked with democracy (Loots 1991 cited in Gloeck 2003). Thus, since the transition to black majority rule in 1994 and the adoption of a new constitution that underpins the principles of transparency and accountability and greater democracy, the author argues that CSR as a form of accountability should have increased. Antonites and De Villiers (2003) noted a decrease in the disclosure in specific environmental information from 1998, and a stabilisation of general environmental information from 1999. De Villiers and Vorster (1995) and De Villiers (1998) noted that selected stakeholder groups expected more CSR disclosure, both voluntary and compulsory. The findings discussed in Chapter 4 record that an expectation gap exists between what stakeholders perceive to be reported and what they actually require. Thus, while current levels of CSR may not be adequate to meet stakeholder expectations, the author submits that this does not detract from its potential to effectively contribute towards social accountability.

8.5.5. Conclusions with respect to limitations of CSR disclosure

In this section of the chapter the usefulness of CSR as an effective mechanism to provide social accountability is reviewed. Academically, CSR is at a cumulative research peak, with extensive work having been conducted in the 1990s, and research and progress on model building continuing in the new millennium. Business has accepted CSR with significant increases in disclosure (Deegan & Gordon 1996, Kolk 2000, Wilshurst & Frost 2000)[61], and level 4 systems such as ISO14001 are becoming a standard for international trade. However, even if the present limitations of CSR could be overcome, without significant changes in the perceptions of stakeholders, it is argued that CSR alone will be ineffective to effect radical social and hence environmental change. Slow and evolutionary change, the goal of social accountability (McCandless 1994), which might not be timeous enough to stop the world's declining bio-diversity, might yet be able to slow and eventually stop the destruction in time to save the planet's ecosystems. Jorgensen (2002) argues for a voluntary approach, however this author suggests that compulsory CSR standards could accelerate such change. De Villiers (1998) and De Vries and De Villiers (1997) noted most stakeholders' expected compulsory disclosure, and Mitchell and Quinn

[61] South Africa has however experienced a slowdown in disclosure since 1998 and 1999 (Antonites & De Villiers 2003).

(2005) determined that most stakeholders surveyed expected that the JSE, SAICA or another standard setting body should be providing compulsory standards. Linowes (1973: 39) called for the business world to "get on with it". Over three decades later, the author echos this call, asking for policy, standards, legislation and regulation.

8.6. Conclusions

In this chapter the framework for CSR as developed in Chapter 7 was evaluated. A technique of peer review was performed to determine if any significant faults were obvious. Specific criticisms offered were taken into consideration, in the application of this model.

The model was then reviewed for completeness and validity by comparing it with the international standard, the GRI (which as noted earlier is the only guideline endorsed by the JSE). The omissions of the proposed system could be defended and it was suggested that they pertained to individual stakeholders' needs, not to fundamental interactions, which had been omitted. There were, however, many areas that had been included in the CSR model that had no equivalent in the GRI. It was suggested that many of these could have been excluded because of inherent measurement difficulties.

The proposed model was then reviewed by acknowledged experts in respetive academic disciplines related to measurement of specific impacts for which the proposed model would require disclosure. Areas traditionally reported upon were found to be easily measured, while other areas, such as those excluded from the GRI, were not as well-defined and not easily measurable, especially when trying to isolate an individual company's impact.

It was discussed that effective CSR would not necessarily result in social change, but could support social accountability and hence it was imperative that such CSR should be adopted and, preferably, enforced. However, the author of this thesis suggests that in South Africa, current social pressures would induce companies to report on specific current issues such as empowerment and equity and that there is little pressure to report on broader CSR areas. A comprehensive, enforceable, principle-based CSR model requiring assurance (independent external verification), as proposed in this

thesis would ensure relevant, reliable and fair reporting. Such an approach would ensure all pertinent issues were reported upon, and pressure would be placed on companies by the relevant concerned stakeholder groups, to address these issues.

CHAPTER NINE
EVALUATION OF THE CSR MEASURING, MONITORING AND REPORTING SYSTEMS OF INDUSTRY

9.1. Introduction

This thesis has demonstrated that CSR should be based on sound fundamental principles and a conceptual framework, as opposed to the many primarily rule-based systems in existence at present. To this end, in Chapter Seven a set of principles for CSR, with many similarities to the principles and conceptual framework for financial reporting, was developed. The results of an extensive survey of all key stakeholder groups in South Africa, assessing what they considered to be important for CSR was presented in Chapter Six. These areas that stakeholders considered important, and based on the principles developed in Chapter Seven and based on a framework of interactions and impacts of a business with elements and subsystems of social and physical reality, were built into a CSR system / model in Chapter Seven. This model and the system upon which it was based was validated in Chapter Eight, which examined measurement issues and identified several potential difficulties with respect to measuring and recording areas not traditionally included in CSR. In Chapter Eight the proposed system was compared with the GRI, as the most widely accepted and used (GAAP equivalent) CSR system worldwide. The GRI did not include many conceptually important impacts and interactions, which were identified in several cases as being difficult to measure. The proposed CSR model did not include many areas included in the GRI, these were either policy issues, which it was argued could be misleading or areas which may be useful to specific stakeholders but are not specifically related to any key interactions, impacts or principles.

To improve CSR, which is non-existent in many companies, this would at the minimum require such companies to present some form of CSR disclosure and / or reports. In South Africa, CSR reporting is limited mostly to very large companies (De Villiers 2003), with such reporting uncommon in other large, medium and small sized companies. In this chapter an attempt will be made to determine what the barriers are to the implementation of CSR for such companies. The pilot study (as discussed in Section 5.5 of the methodology chapter) noted that these could include practical barriers due to measuring and reporting systems not being in place, or financial

limitations and socio-political barriers, which could be due to the lack of social or legal pressure and an unreceptive corporate culture and / or management.

Although the basis for an 'ideal' theoretical model has been developed in this thesis, it is argued that such a model could be very difficult to implement practically (refer to the measurement challenges identified in Chapter 8), and that the most immediate model that could (and should) be implemented would be the GRI. Thus, in the assessment of the challenges to possible implementation, both the application of the theoretical model and the GRI will be considered.

9.2. Approach, aim and objectives

It is the aim of Chapter Eight to assess the feasibility of implementing comprehensive CSR (represented either by the proposed model or the GRI) in South African companies.

To achieve this aim, the following research questions were answered, namely to determine:

- Do such companies have a comprehensive CSR system, or what do they have?
- If nothing, why not?
- Could they implement a comprehensive CSR system at either or both the GRI or the proposed system levels (do they have measuring and reporting systems in place for both environmental and social reporting)?
- If the systems are not in place, what would be the practical barriers to implementing them (no information, no way to measure, no finance, no time, staff or resources)?
- What are the social barriers (corporate culture, management commitment)?

The detailed methodology to achieve the aims and objectives of this part of the thesis are set out in full in Chapter Five. It must be noted that although three companies were selected for each sector, three responses were not necessarily obtained for each question per sector, as not all companies responded to all questions.

9.3. Results and discussion

In this section, the results of discussions with the various representatives from the selected companies are detailed. These results are presented, as the modes for each sector (not companies, as these may not be representative of that business sector). The following tables show the results of the interviews with the respective companies. The tables presented and discussed group the results for the various managers interviewed per their area of responsibility:

- Table 9.1: CEOs and Managing Directors
- Table 9.2: Human Resources Managers
- Table 9.3: Marketing or Sales Managers
- Table 9.4: Financial Managers
- Table 9.5: Industrial Chemists, Environmental Managers, Production Engineers and any other relevant experts

As noted in the methodology section, the initial sectors were collapsed into larger, but similar groupings, which were tested to determine if significant differences existed between them, the results of which are also presented in the tables as the result of the Kruskal-Wallis Chi Square test.

Table 9.1: Results of discussions with CEOs and MDs

No	Questions (CEO)	Modes for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
		Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
1	Part of listed group	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	N	N	Y	Y	N	4.131	0.659
1b	No Employees	231	800	110	53	184	183	105	230	279	53	140	221	249	181	257	878	479	703	N/A	N/A
2	Prepare CSR	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	Y	N	5.565	0.474
3	To any standard?	ISO	ISO	ISO	ISO	N/A	GRI	N/A	N/A	N/A	Other	N/A	ISO	N/A	ISO	N/A	Other	GRI	GRI	7.037	0.317
4	If GRI, estabkish definition & measurement basis	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053
5	If not (CSR) why not	N/A	N/A	N/A	N/A	N/A	N/A	Ni idea	N/A	No leg	N/A	No leg	No leg	N/A	N/A	N/A	N/A	N/A	N/A	6.827	0.337
6	Any other EMS system	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	N	Y	Y	Y	11.536	0.073
7a	Have policy for Sus. Dev.	N	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y	\N	\N	N	Y	Y	Y	15.582	0.016
7b	Identify stakeholders	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y	9.706	0.138
7c	Socio-environ. Objectives	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	3.801	0.704
8	Man. Committee assess risks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
9	Stakeholder consultation	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064
10	Donations to communities	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
11	Address grievances of communities	N	N/A	Y	Y	Y	N/A	N	N	N	N/A	N	Y	N	N	N	Y	Y	N	10.637	0.100
12	HR (Human rights) in policies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000

Continued next page…

Continued...

13	HR in investments	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y	N	N	7.590	0.270
14	HR in supply chain	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	Y	Y	Y	3.979	0.679
15	HR in empl.training	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
16	HR in security training	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.000	0.677
17	No child or forced labour	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
18	HR in disciplinary proceedings	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
19	Policy against corruption	Y	Y		Y	Y				N		Y	Y	Y	Y	Y	Y	Y	Y	12.170	0.058
20	Identified sources (countries) of supply	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.037
21	Upstream & downstream impacts	N	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	Y	N	5.582	0.472

Codes for industry groupings

Aut: *Automotive and components*
Bev: *Beverages, food and farming*
Che: *Chemicals*
Con: *Construction, Building materials and Real Estate*
Edu: *Education*
Ele: *Electonics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footware*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non financial)*
Tra: *Transport*

In Table 9.1 the results from the discussions with the CEOs and MDs of the companies are presented. Many businesses were companies from listed groups (20 of the 52). Since listed companies are required in terms of the King Code on corporate governance (Institute of Directors 2002), to report on their triple bottom line (per the GRI), this should favourably influence the results of this study, since such companies should be preparing comprehensive CSR. This was confirmed by the results of subsequent questions which indicated that businesses in most sectors prepared some form of environmental or social report, with ISO 14001 being the predominant format. However a few companies were reporting per the GRI. It is significant to note that all sectors except healthcare, household products, IT engineering and forestry had other EMS. Consistent with these systems, those companies had environmental or sustainability and social policies and had identified relevant stakeholders. Not all groups had established forums with stakeholders and many of those that did, used pre-existing structures such as community, air quality and environmental forums, as their means of communication. Clearly, in many cases no specific mechanisms would be necessary as the possible impacts on the surrounding communities would be negligible, such as in the case of retail outlets or a hotel in the CBD.

All companies implicitly are required to address human rights in their policies, employee and security training and disciplinary procedures in order to comply with the South African constitution. Only in the case of the financial services sector, where the companies formed a part of large listed companies which reported on the GRI and belonged to sustainability indexes, was there evidence of consideration of human rights in their supply-chain or investment decisions. Only the financial services sectors and IT had formal policies against corruption, although in many companies it would represent a dismissible offence. All sectors were aware of the sources of their inputs, and market forces dictate that these would include South East Asia and countries from South America. Although the results indicate that only companies in the oil, chemicals and financial services sectors had formal policies to address upstream and downstream effects of their products and services, what are not evident are the roles of ISO 14001 and the automotive vehicle industry, which are specifically concerned with the exact source (and environmental impact of the extraction thereof) of all raw materials.

In Table 9.2 below the results from the discussions with the human resources managers of the companies are presented.

Table 9.2: Results of discussions with Human Resources Managers

(1= completely, 2= partially, 3 = not at all)

No	Questions (HR)	Modes for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
		Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
1	Record input of labour (hours & levels)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
2	Staff turnover, job creation	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
3	Value staff training	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
4	Extra staff benefits	3	2	3	2	2	3	3	3	3	2	3	3	3	2	3	3	3	3	9.801	0.133
5	Δ In household well-being	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
6	Δ In purchasing power	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
7	Δ In labour, power	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
8	Δ In employee motivation	1	2	2	1	1	1	2	1	3	1	1	2	2	2	1	1	2	2	3.559	0.736
9	Δ Employee health & / capacity to work	1	1	1	1	1	-	1	1	1	2	2	2	1	1	1	1	1	1	8.078	0.232
10	Record above for suppliers & distributors	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
11	Why are any of the above less than fully measured	No leg.	No leg	Cost	Cost	No leg	little int s	little int	little int	No leg	fiff.	No leg	Ni idea	Little sig.	No leg	diff.	No leg	No Pres.	-	13.160	0.041

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12	Diversity, non-discrimination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
13	Empoloyees in man. Decisions	N	N	N	Y	N	Y	N	N	N	-	Y	N	N	N	Y	N	N	Y	5.693	0.456
14	% employees in Trade Unions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
15	Freedom of association	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
16	H&S in line with ILO & OSACT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
17	Safety committees	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
18	Record absenteeism, injuries	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
19	Policies, programmes for AIDs & HIV	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	14.000	.0.030
20	Trade Union agree to working condition	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	5.252	0.512
21	Assess health of workers	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	4.125	0.660

Codes for industry groupings

Aut: *Automotive and components*
Bev: *Beverages, food and farming*
Che: *Chemicals*
Con: *Construction, Building materials and Real Estate*
Edu: *Education*
Ele: *Electonics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footware*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non financial*
Tra: *Transport*

All sectors measure labour input, staff turnover and job creation as a result of compliance with labour act legislation and the need to account for staff costs. Responses to whether companies valued staff training and any extra non-financial staff benefits varied. However, all companies are required to pay taxes for staff development and have to be registered with specific SETAs[62], to which they must submit formal staff training plans and through which they access external training. Most companies considered these systems to be their means of valuing or assessing staff training. Nevertheless, many companies, particularly those that belong to listed groups and those in high risk businesses such as chemicals, have formal staff training and assessment plans that extend beyond just this system. No companies surveyed had any formal system or plans of measuring household well-being, household purchasing power or labour power. All sectors (except household products) had internal mechanisms for assessing employee motivation. All sectors had systems to assess workers' health. It is suggested that the basis for the minimum of such systems would be labour act requirements, as in the case of retails and leisure, where workers are subject to low risk. However, in the case of most other sectors, the health assessment would be tailored to the risks that the workers are exposed to, with most manufactures conducting hearing and lung-functioning tests. Some companies, for example the chemical sector, conducted sophisticated blood tests on those members of staff exposed to toxic chemicals. Other companies, periodically had monitors attached to their workers over a period of time which then would be analysed for exposure to various chemicals. The role of legislation and trade union pressure cannot be overemphasised as contributing to such measures.

No companies assessed workers' health in the category of suppliers. Reasons given for not measuring and assessing more than they did, included: that there was not enough legal pressure, were prohibitive costs, and it being considered as not relevant to their business.

All companies had internal policies that sought to promote diversity and avoid discrimination, which can be attributed to compliance with the Equity Act. The involvement of workers in management cannot be related to specific sectors, except in

[62] A SETA is a government appointed organisation that co-ordinates training for specific industry. sectors.

the case of the financial services (who comply with the GRI). All companies involved workers in Health and Safety function up to a managerial level and several progressive companies had feedback systems for workers to communicate with management.

All companies had freedom of association (a legislative requirement) and knew the exact numbers of employees represented by trade unions. All companies complied with the OSHACT (Occupational Health and Safety Act), having: health and safety systems, safety committees, and records of accidents and absenteeism.

As noted earlier, all companies had some form of health assessment. Policies and procedures of companies for AIDS / HIV varied from a minimum of awareness programmes and distribution of condoms, to integrated health systems, providing VCT (voluntary counselling and testing), healthcare and ARVs (Anti-retro virals). Most companies had an on site clinic and at least one registered nurse. However, no companies were authorised to provide ARVs, so staff requiring treatment were referred to authorised medical facilities, however, support was in most case provided for persons who confided their positive status. Several companies had a contract with a doctor in which case ARVs could be provided on site to staff requiring such treatment. The larger companies had medical plans which extended to factory workers and covered treatment for AIDS / HIV.

In Table 9.3 below the results from the discussions with the sales and marketing managers of the companies are presented.

Table 9.3: Results of discussions with Marketing / Sales Managers

(1= completely, 2= partially, 3= not at all)

No	Questions (MM)	Modes for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
		Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
1	Product need, changes, cost maint.	N/A	1	2	1	N/A	1		2	2	N/A	1	1	2	N/A	N/A	2	1	2	4.829	0.566
2	Level customer loyalty	1	1	2	1	N/A	1	1	1	1	N/A	1	1	1	N/A	N/A	1	1	1	4.673	0.566
3	Benefits to consumers	N/A	N/A	N/A	3	N/A	3	-	2	3	N/A	3	3	3	N/A	N/A	3	2	2	8.732	0.189
4	Δ In lyfestyle & culture	N/A	N/A	2	3	N/A	3	-	3	3	N/A	3	3	3	N/A	N/A	3	3	3	5.046	0.538
5	Customer satisfaction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.806	0.703
6	Above for suppliers & distributors	2	3	N/A	3	3	N/A	3	3	3	3	3	3	3	3	3	3	3	3	7.464	0.280
7	Why are any of the above less than fully measured?	N/A	No leg	diff	No Press	No Int	Not poss	-	Other	Not poss	N/A	No Leg	No idea	-	No int	N/A	No int	-	-	2.615	0.855
8	Adequate product labelling, ensure consumer health	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.028	0.673
9a	Compliance leg. Product labelling	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
9b	Compliance leg. Advertising stds	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.329	0.887

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10	Monitor customer complaints	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.800	0.253
11	Ensure customer privacy	Y	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	11.119	0.085

Codes for industry groupings

Aut: *Automotive and components*
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Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footware*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
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The results for marketing are limited. Many of the companies surveyed were part of a listed group and were in many cases just a manufacturing site, and undertook no direct marketing, with their head offices or group undertaking that function. Other medium (to large) manufacturers were just that, specialised manufacturers, and outsourced their marketing to agents. Two of the three companies in the mining and metals sector were primary listed companies and had specialised marketing departments (linked with the technical departments), however these were the exception. All companies (even if they did not undertake their own on site marketing) surveyed customer satisfaction and had systems to follow up customer complaints. Of those companies that did undertake their own marketing, none specifically considered material benefits to consumers or impacts on lifestyles. None considered the upstream or downstream effects of marketing.

All companies surveyed have strict policies on protecting the privacy of their customers and complied (with legislation) regarding product labelling and advertising standards.

Table 9. 4: Results of discussions with Financial Manaager

(1= completely, 2= partially, 3 not at all)

No	Questions (FM)	Modes for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
		Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
1	Record full input cost per product	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
2	Output value per product	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
3	Cost of marketing and promotions	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6.446	0.375
4	Cost of modifying products	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4.349	0.630
5	Investment & credit received	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
6	Taxes paid, value received	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.000	1.000
7	ROI (to whom, how)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
8	Productivity, cont. to economy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
9	Environmental expenditure (per category)	2	2	2	1	2	1	2	1	3	2	2	2	2	2	3	2	1	2	7.7.02	0.261
10	Know above for suppliers & distributors	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	8.186	0.225
11	Why are any of the above less than fully measured	No int.	No int	Not leg	No int	No int	Not imp		Not imp	No int	Not leg	No int	No int	-	Not imp	Not leg	Not leg	No int	-	4.102	0.663
12	How far are budgets prepared	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	6.346	0.386

Codes for industry grouping in Table 9.4 aboves

Aut: *Automotive and components*
Bev: *Beverages, food and farming*
Che: *Chemicals*
Con: *Construction, Building materials and Real Estate*
Edu: *Education*
Ele: *Electonics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
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Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non financial)*
Tra: *Transport*

Most businesses surveyed were private companies, in many cases they were owned by or were part of a listed South African company. The South African Companies Act of 1973 (as amended) requires such companies to prepare and present audited financial statements that comply with GAAP, which is interpreted as the Statements of GAAP as issued by the SAICA (South African Institute of Chartered Accountants), which are the international statements (IASCF 2004). Thus, all items listed would be and were fully recorded as excepted and as noted below.

Companies recorded their taxes paid and subsidies received, but made no attempt to value services received from government (to compare such value against taxes paid). This would be considered to be impractical and of little benefit, taxes were considered an unavoidable cost and not seen as payment for services to be rendered by the government. All companies had at least one cost code against which to charge environmental costs, yet few companies surveyed indicated reporting these costs in any significant detail. Several of the larger companies, had separate cost codes for different environmental cost codes, while other companies has one cost code for health, safety and environmental costs. The health, finance, service and chemical sectors had the most detail, while engineering and housing reflected the least. In the case of finance and service sectors these were progressive and listed companies, which in several cases prepared sustainability reports, and hence recorded as much detail as necessary for such reports.

In Table 9.5 below the results from the discussions with the industrial chemists, engineers, environmental managers and other relevant managerial staff (in the case of specialist companies) of the selected companies are presented.

Table 9.5: Results of discussions with Production and Development Manager/s

(1= completely, 2= partially, 3 = not at all)

No	Questions	Modes for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
		Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
Industrial Chemist (IC)																					
1	Prepare & reconcile a mass balance	2	2	1	1	1	N/A	1	1	1	2	2	2	2	2	1	1	1	2	9.072	0.170
2	Account for distribution of output	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
3	Record outputs per category	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	2	4.511	0.608
4	Identify all hazardous outputs	1	1	1	1	N/A	1	1	1	1	1	N/A	1	1	1	1	1	1	1	3.553	0.737
5	Identify any inputs from other waste	1	1	1	1	1	N/A	1	3	1	N/A	N/A	1	N/A	1	1	1	1	N/A	7.269	0.297
6	Know above for suppliers & distributors	3	3	1	1	3	3	3	3	3	2	3	3	3	3	3	2	3	3	7.594	0.269
7	Know above for consumers	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	3	7.262	0.297
8	Why are any of the above less than fully measured	N/A	No int	N/A	Not imp	No int	N/A	No int	N/A	Not int	Not imp.	N/A	Not leg	Not imp	cost	Not leg	Not imp	-	-	6.750	0.345
Environmental manager																					
1	Impacts on immediate environment	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283
2	If yes, what std. and or rules	Other	ISO	ISO	ISO	Oth	ISO	Oth	Oth	Oth	Oth	Oth	ISO	Other	ISO	Oth	Oth	Oth	Oth	11.470	0.075
	How frequently	Ann	Ann	Ann	Ann	Ann	Ann	Ann	Month	Ann	Ann	Ann	Ann	Ann	Ann	Ann	Ann	Week -ly	Ann	26.911	0.000

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3	Estimate full impacts regionally etc	3	3	2	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	7.400	0.285
4	Estimate the impact of transport	N/A	N/A	2	N/A	N/A	2	3	N/A	N/A	1	N/A	N/A	2	N/A	N/A	N/A	2	3	3.873	0.694
5	Know above for suppliers & distributors	3	3	2	1	3	3	3	3	3	3	2	3	3	3	3	3	3	3	7.975	0.240
6	Know above for consumers	3	2	2	2	1	N/A	2	3	3	3	2	2	2	2	3	3	3	3	10.594	0.102
7	Use of water, impacts on water resources	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421
8	Why are any of the above less than fully measured	No Leg	Not leg	No Press	No sig.	No leg	No sig.	No Sig.	N/A	No int	No int.	No leg	Cost	No Press	Not poss	Notleg	No leg.	Not poss.	-	2.955	0.814
9a	Operate in environmentally sensitive areas	N	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	Y	N	6.888	0.331
9b	Know impacts (on above areas)	N/A	Y	N/A	Y	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	Y	N/A	12.005	0.062
10	Programs to restore degraded land	N/A	Y	N	Y	Y	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	Y	N/A	9.847	0.131
11	Know surface impermeable	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.400	0.285
12	Record accidents & spills	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.400	0.285
13	Responsible cradle to grave	N	V	N	Y	N	N/A	N	N/A	N	N/A	N	N	N	Y	N	N/A	Y	N/A	14.561	0.024
14	Comply with national and international regulations	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000

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Engineer (Eng)																					
1	Sources and amounts of all energy	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548
2	Reconcile energy used	3	2	1	1	2	3	2	3	2	1	2	2	2	2	2	2	3	3	10.645	0.100
3	Measure efficiency	N/A	2	1	1	N/A	N/A	3	3	2	N/A	N/A	2	N/A	2	1	N/A	N/A	3	5.807	0.445
4	% products recyclable, biodegrable, renewable sources	Y	1	1	1	1	N/A	1	3	2	2	1	1	N/A	1	2	1	1	N/A	9.562	0.144
5	Know for suppliers (distributors)	3	3	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5.464	0.486
6	Know above for product (including consumption), full/ "energy footprint"	3	1	1	3	1	3	1	2	1	3	2	3	1	3	3	1	1	3	11.509	0.074
7	Why are any of the above less than fully measured	N/A	Not leg	N/A	Cost	Not sig	N/A	Cost	N/A	No int	No Press	No leg	No int	Not sig.	Not pos	Diff	Not poss	N/A	-	3.999	0.677
8	Measures to improve efficiency, use renewable sources	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.228	0.646
Other / Specialists (only if applicable)																					
R&D 1	Value of new products created	N/A	Y	N/A	N/A	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/S	N/A	10.529	0.104
R&D 2	Why are any of the above less than fully measured	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.800	0.253

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Agr 1	Biomass created (per type)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A	7.800	0.253
Agr2	Why are any of the above less than fully measured	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000	1.000
EP 1	Limited fossil fuel used	N/A	N/A	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.667	0.034
EP 2	Why are any of the above less than fully measurd	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000	1.000
Min 1	Portion of world limited supply	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.963	0.014
Min 2	Why are any of the above less than fully measured	N/A	Nor poss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.963	0.014

Codes for industry groupings

Aut: *Automotive and components*
Bev: *Beverages, food and farming*
Che: *Chemicals*
Con: *Construction, Building materials and Real Estate*
Edu: *Education*
Ele: *Electonics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footware*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non-financial)*
Tra: *Transport*

It must be noted that ISO 14001 does not specifically require the preparation of a complete mass balance, that is a full reconciliation of the mass of the input to a process to the mass of the output, including waste. However, it does require that all waste be accounted for, which implies that such waste must be completely accounted for and hence measured. All sectors performed some form of reconciliation of input and output. However, only in the chemical sector were there complete mass balances performed accounting for the nature and location of all output. Those sectors where the output is significant in terms of containing hazardous outputs and material with significant potential value for recycling, categorised all output, whereas retail and leisure sectors did not.

Retail, healthcare, leisure and financial services, use no recycled products or waste. No companies measured or assessed the full output of their suppliers, distributors or consumers, except in the chemical sector, where the companies are extensively involved with their consumers and their use of the product.

Reasons attributed to not measuring or accounting for output in greater detail or the impacts and effects of suppliers, distributors or consumers included that it was: not legally required, of little significance, not important, and expensive and time consuming to measure, i.e. limited resources.

With regard to measuring the impact on the environment, almost all companies measured this, some partially (such as retail, leisure, household, automotive, engineering and forestry), while others did so comprehensively. Partial assessments were often done using external consultants, who would look at emissions, effluent, perimeter noise and in some cases groundwater and stormwater. In the mining, oil, chemical and automotive industries such assessments were done according to ISO 14001, which requires comprehensive assessment on a list of specified criteria.

The frequency of specific assessments varied, although all were found to be conducted as least once annually (which would be the minimum requirements of ISO 14001 certification). Other significant factors found to influence such assessments was found to be (besides ISO 14001 certification) legal requirements and potential penalties. The discharge of effluent requires a licence and is tested monthly with

potential fines from the processing body, namely Umgeni Water. Air emissions were monitored by those companies having stacks with heavy particulate or sulphur emissions, in compliance with the National Air Quality Act (2005). Ground water and storm water testing was only found in the case of those companies certified under ISO14001. Only one company had a river running through their site, with a reservoir and they conducted surface water testing before and after their site.

No companies estimated regional impacts or considered the impacts of their suppliers and distributors. Companies in the mining and metals, oil, chemical, construction, automotive and engineering sectors partially know the environmental (or potential environmental) effects of their consumers' use of their products. Mining, oils, chemicals, construction, automotive, engineering and forestry sectors know their full impacts on water resources, while all other sectors knew some effects or at least their usage.

Those industries that do have locations in environmentally sensitive areas know the impacts of such operations. Where companies have degraded land they have programmes to restore such land, all companies know their land surfaces which are impermeable and keep records of accidents and spills (legislated).

Only the automotive sector had a policy of 'cradle to the grave' although several companies surveyed in other sectors also have this philosophy to their products, such as in the chemical sector, where containers and unused material is returned to the supplier.

During interviews with environmental managers, (or another appropriate official such as the SHE (Safety, Health & Environment) officer, production manager, senior engineer or even the managing director where there was no specific environmental manager), when asked if they complied with national legislation, (and where they exported if they complied with international legislation), they all claimed to do so. ISO 14001 certification would ensure that they comply with national legislation. Retrospective evaluation suggests that this question should have been split into two separate questions to test compliance with national and international legislation respectively.

Questions asked specifically of engineers concerned energy consumption primarily. All sectors partially or completely measured energy usage. However, the finance, health, retail and leisure (non-manufacturing) sectors made no attempt to reconcile this usage. A few companies that manufactured or mass processed product, such as in the mining and oil sectors, knew the energy footprint of the products. It is suggested that cost factor makes this a necessity, as almost all companies surveyed had processes in place to try to improve their efficiency. Those companies involved in the production of a product partially or completely knew the proportions of that product, which were recyclable or biodegradable.

Very few companies surveyed were conducting significant research and development on site. Two companies were involved in extraction (mining or quarrying) and two companies in the forestry sector were involved in the creation of biomass. All these companies determined the financial costs of such processes, however, 'free' natural resources were not internalised.

9.4. Summaries of findings from interviews with managers

9.4.1. Principles noted

There are several important principles that are noted from these interviews that contribute to the measurement and recording of data relevant to CSR. This study makes no attempt to prove these statistically (as was stated earlier in this chapter), however, observations can be made from the case study approach used.

9.4.1.1 Market forces and ISO14001

The author notes that the implementation of ISO14001 in most of the companies studied was alleged to be as a reaction to customer requests, specifically in the automotive sector and the companies (including engineering) supplying them, or for European based customers.

The implementation of ISO 14001 not only ensures full compliance with all national environmental legislation but also requires the implementation of a full EMS and measurement of all significant outputs. Waste collection and disposal as well as

transport (even when subcontracted out) must still fall within set parameters, as the company that generates this waste, is still responsible for it.

9.4.1.2. Legislation

The existence of legislation, such as the OSHACT, Labour Act, Employment Equity Act and Training Act (SETAs), requires the regulation and reporting of many (social) impacts on employees. Other legislation ,such as enforceable standards regulating the labelling of products, as well as advertising standards protect consumers and addresses the issue of consumer rights. Environmental regulations such as NEMA and Air Quality Act, Water Act and municipal by-laws and regulations protect the environment and the public, and ensure that air, effluent and water outputs are measured by appropriate authorities.

Compliance with all the above standards was observed at all selected companies, confirming that regulation encourages compliance, as opposed to a voluntary system, in which companies may choose not to participate. This is a very important finding as it provides evidence that CSR standards should be mandatory with legal backing, to ensure that they are adhered to.

9.4.1.3. Cost and financial imperatives

Profitability or controlling costs and losses encourages businesses to determine output rates and hence to identify losses. Further recycling reduces waste disposal costs, hence increases profitability. Energy efficiency is encouraged by high energy costs, as well as by businesses determining the energy input per product.

9.4.2. Application of findings to proposed CSR model and the GRI

The results reflected in Tables 9.1 to 9.5 in Section 9.3 above have been summarised in two tables below. Table 9.6 organises the data according to the CSR model as proposed in Chapter 7 of this thesis, while Table 9.7 places the data in context of the GRI.

The objective of this exercise was to determine the feasibility of and challenges to the implementation of the proposed CSR system and the GRI to industry in South Africa. The data collected in the interviews for Table 9.1 to 9.5 was intentionally structured to

cover all key elements of the proposed reporting model and the GRI, ascertaining for each reportable element (which needed the collection of primary data), the extent to which such data are measured and recorded by businesses and hence the potential for such businesses to report on these aspects of their performance. Certain items listed in the GRI were not tested in the case studies, where it could be assumed that such data would be available within these businesses, such as details of the nature of the business locations, number of employees, products etc.

The findings as noted in these specific two formats are then discussed and conclusions are drawn on the feasibility of implementation for the selected businesses and hence whether business generally would be in a position to implement such systems.

Table 9.6: Results of discussions with Managers as applied to the proposed CSR system

(1= completely, 2= partially, 3 = not at all)

CSR Index	Reporting area	Q No	Medians for each industry grouping (means where less than three per sector)																		Kruskal Wallis Chi Square	Sig.
			Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
A1	Use /(conversion) of artificial material (capital and operating assets) [EN1]	Ic1	2	2	1	1	1	N/A	1	1	1	2	2	2	2	2	1	1	1	2	9.072	0.170
A2	Use (conversion) of natural products or material [EN1]	Ic1	2	2	1	1	1	N/A	1	1	1	2	2	2	2	2	1	1	1	2	9.072	0.170
A5	Conversion ('production') of energy [EN4]	Eng 1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548
A6	Agricultural (biotic) production	Agr 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A	N/A	7.800	0.253
A8	Mining [EN26]	Min 1	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.963	0.014
A'1/2/5/61	Complete input-output reconciliation i.e. mass balance [In: EN1, 5, Out: EN11]	Ic1	2	2	1	1	1	N/A	1	1	1	2	2	2	2	2	1	1	1	2	9.072	0.170
A'1/2/5/6.2 a b c	Distribution before and after • land (controlled or not) [EN12,20,21, 22] • water[EN 8,9 10,30] • air	Ic2	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
AC'1	Additional notes on transformations through use and waste	Ic3, Ic7	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	2	4.511	0.608
AC'2	Notes on final distribution	Ic7	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	3	7.262	0.297
A'1/2/5/6.3 a b c d	Per appropriate category e.g. • gases & liquids [EN 8,9,10,12,30] • metals • ceramics • compounds neutral or reactive	Ic7	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	3	7.262	0.297

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A'1/2/5/6.4	Special notes on hazardous & radioactive chemicals produced	Ic4	1	1	1	1	N/A	1	1	1	1	1	N/A	1	1	1	1	1	1	1	3.553	0.737
A'1/2/5/6.5 a b c	Special notes: Impacts on biotic natural systems (local and other) [EN 7,25,26] Indicators for the following systems: [EN 7,25,26] • land • water [EN32] • air Impacts on Biodiversity e.g. Biomass x rarity index [EN 7,25,26]	Em 1 Water: Em 7	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283
AC'3	Additional notes of further impact on natural and biotic systems	Em 1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283
A 3	Use of energy	Eng 1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548
A'3.1 a b c d	Total input, giving sources [EN3 • fossil fuel • hydroelectric • nuclear • other A note should explain the impact of these sources of derivation	Eng 1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548
A'3.2	Output (transformed, stored, and wasted)	Eng 2	3	2	1	1	2	3	2	3	2	1	2	2	2	2	2	2	3	3	10.645	0.100
AC'4	Input of energy to use or consume products	Eng 6	3	1	1	3	1	3	1	2	1	3	2	3	1	3	3	1	1	3	11.509	0.074
A 4	use of labour (physical only	Hr1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
A'4.1	Details of efficiency	Eng 3	N/A	2	1	1	N/A	N/A	3	3	2	N/A	N/A	2	N/A	2	1	N/A	N/A	3	5.807	0.445
A'4.2	Effects of training i.e. value added	Hr3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465

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A 7	Potential future effects (i.e. +change in level of operation-reduction due to policies, process improvement) [C1.2, C3.7, C3.16-19, EN35 expenditure]	Eng 8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.228	0.646
B 1	Input value of natural or artificial material assets = payments made + unpaid costs	Fm1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′1.1	Input: Value of resources used + purchase costs + cost of conversion [EC3]	Fm1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′1.2	Output: Value (economic) of product	Fm2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B 2	Input value of labour = wages paid + training and experience [EC5]	Fm1 +Hr 3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
B′2.1	Input of labour hours [LA1]	Hr1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′2.2	Output: Payment for wages +Δ training & experience +Δ household esteem & well-being [LA 9,16,17]	Hr3, 4,5	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
B 3	Support and valuation of goods & services = marketing and promotion costs	Mm 2, Fm3	1	1	2	1	N/A	1	1	1	1	N/A	1	1	1	N/A	N/ A	1	1	1	4.673	0.566
B′3.1	Input: Payment received [C2.8, EC1]	Fm2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′3.2	Output: Benefits provides (goods &services) (needs & tension reduction	Mm 3	N/A	N/A	N/A	3	N/A	3	-	2	3	N/A	3	3	3	N/A	N/ A	3	2	2	8.732	0.189
B4	Output of goods and services = payments received	Fm2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′3.1	Input: Cost of Providing	Fm1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B′3.2	Return: Loyalty, product need (measured on an index)	Mm 2	1	1	2	1	N/A	1	1	1	1	N/A	1	1	1	N/A	N/ A	1	1	1	4.673	0.566
B 5	Productivity +interest + profits for rent of capital & credit = credit + control of capital & investments	Fm7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000

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B′5.1	Input: New ideas & cost of developing	Fm3		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
B′5.2	Output: Financial benefits (valuation) paid out	Fm7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B6	True or super profit (not for rent of capital) = entrepreneurship + new ideas etc		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
B′6.1	Input: Provision of credit, facilitation of capital investment, structure, support & stability + actual capital (invest) & credit made available	Fm5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6.446	0.375
B′6.2	Output: Productivity (i.e. GDP)& taxes + financial support, Interest + 'profits' paid & accrued on investments [EC 6,7,8,9]	Fm8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
B 7	Potential future effects (including changes in levels of operations, strategy and policy) [C1.2, C3.7, C3.16-19]		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
BD′1	Δ in power of governments & political decisions [SO3,5]		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
BD′2	Δ in power of industry		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
BD′3	Δ in culture & values including objects (wealth) and lifestyles	Mm 4	N/A	N/A	2	3	N/A	3	-	3	3	N/A	3	3	3	N/A	N/A	3	3	3	5.046	0.538
BD′4	Δ in motivation	Hr8	1	2	2	1	1	1	2	1	3	1	1	2	2	2	1	1	2	2	3.559	0.736
BD′5	Δ in capacity to work, including training	Hr9	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
BD′6	Δ in technical knowledge	Hr3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
BD′7	Δ in labour power	Hr7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
BD′8	Δ in purchasing power	Hr6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
B 8	Supporting local community [SO1]	Ceo 10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
C 1	Proportionate share of suppliers (as created by demand for products & services) [C3.16, EN19,33]	Em 5, Mm 6	3	3	2	1	3	3	3	3	3	3	2	3	3	3	3	3	3	3	7.975	0.240

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C2	Proportionate share of distributors (as required to service output) [C3.16, EN19, EN34 (transport)]	Em 5, Mm 6	3	3	2	1	3	3	3	3	3	3	2	3	3	3	3	3	3	3	7.975	0.240
D1	Effects on households as users	Em 6	3	2	2	2	1	N/A	2	3	3	3	2	2	2	2	3	3	3	3	10.594	0.102
D2	Effects on households as employees	Hr5, Hr6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0.000	1.000
D3	Effects on individuals as investors, funders & entrepreneurs	Fm7 Ltd	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
D4	Effects on Polity and institutions	Fm6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.000	1.000
D5	Effects on Bio & ecosystems [EN14]	Em 1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283

Codes for industry groupings

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Edu: *Education*
Ele: *Electronics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footwear*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non financial)*
Tra: *Transport*

From the preceding table, it is evident that physical aspects of the proposed system are, albeit partially, measured by most sectors. However, no companies surveyed actually measured the impact on biotic systems (other than of the input of potential toxins). The major difficulty of the proposed system is in the measurement of the impacts on the social systems. These can be measured from a purely financial perspective. As noted in Chapter 8, significant progress would need to be made in the related disciplines for improvements. It should also be noted that, besides the difficulty associated with trying to measure these effects and impacts, some companies, cited them as being of little or no interest. Unless there is a financial imperative (costs to be controlled), legislation, or a market condition (such as ISO14001) aspects and impacts are unlikely to be measured.

More abstract social impacts, such as the change in power, influence or motivation is also not likely to be measured, primarily due to the inherent difficulty of trying to quantify such impacts.

Upstream and downstream effects (Sections C and D) are not specifically recorded and when done so only in specific cases. For example, in the motor sector all materials sources must be identified and be environmentally compliant. In the chemical industry, the impacts and use by customers is monitored by producers as part of their service to the client. However, these represent the exceptions. Interviewees quote various reasons, such as impracticality of assessment, little or no interest, prohibitive costs and the lack of legal requirements as being factors why they do not measure these impacts.

The following table (Table 9.7) reviews all the codes for the GRI and under each code provides the findings of the research. In certain instances, data are assumed (A) to be available e.g. name of company, location, and in other cases a policy (P) would need to be set (if not already in existence), so no actual measurements would be required. In other instances, management would need to review risks (R), or data may already be collected for the annual financial statements (AFS). So as not to waste managers' time, they were not asked whether such data was available and questions focused on matters that would require specific measurement.

Table 9.7: Results of discussions with Managers as applied to the GRI

(1= completely, 2= partially, 3 not at all) A= Assumed, P= Policy to be set, R= risk identified, AFS= in AFS

GRI Index	Reporting area	Q No	Medians for each industry grouping (means where less than three per sector)																	KW chi square	Sig.
			Modes (all)	Min	Oil	Che	Con	Fin	Bev	Heal	Hou	Ret	Lei	IT	Tran	Aut	Eng	For	Ser	Edu		
1	**Vision & Mission**																				
1.1	Vision & strategy for sustainable development. Identification of stakeholders and how they are affected	Ceo7	N	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y	\N	\N	N	Y	Y	Y	15.582	0.016
1.2.	CEO statement on report. Challenges for integrating social, environmental and economic performance and strategy	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2	**Organisational Profile**																				
2.1	Name	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.2.	Products & Services [B4]	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.3.	Structure	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.4.	Divisions, subsidiaries & JVs	AFS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.5.	Countries of operation	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A

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2.6.	Legal form of ownership	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	N/A	N/A
2.7.	Markets served [B4]	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.8.	Overall scale (Net assets, sales, products employees, capitalisation etc) [B1-5]	AFS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.9.	List of stakeholders and relationship with entity	Ceo7b, Ceo9	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y	9.706	0.138
	Report scope																					
2.10	Contact persons	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.11	Reporting period	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.12	Previous reporting date	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.13	Boundaries and scope limitations	Ceo4	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053
2.14	Significant changes since last report	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
2.15	Basis for reporting JVs, Subs, Assocs, Leased facilities	policy	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A	N/A
2.16	Any restatements	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
	Report Profile																					
2.17	Any GRI principles not applied	Ceo4	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053

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2.18	Criteria and definitions applied	Ceo4	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053
2.19	Any changes in measurement bases	Ceo4	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053
2.20	Policies and Practices to provide assurance of accuracy, completeness and reliability	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A	N/A
2.21	Independent assurance	Ceo3	ISO	ISO	ISO	ISO	N/A	GRI	N/A	N/A	N/A	Other	N/A	ISO	N/A	ISO	N/A	Other	GRI	GRI	7.037	0.317
2.22	Access to additional information and reports	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
3.	**Structure and Management** *Structure and Governance*																					
3.1.	Governance structures and committees and any responsibility for EES (environmental. economic & social) performance	Ceo8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
3.2.	% directors independent and non-executive	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
3.3.	Process of selecting directors with EES expertise	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A	N/A

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3.4.	Board processes for assessing and managing EES risks	Ceo8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
3.5.	Linkage between executive remuneration and non-financial goals	Ceo8b	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	could not be deter-mined	N/A	N/A
3.6	Organisational structure & key persons set up to achieve EES policies	Ceo8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
3.7	Mission, values, polices and codes of conduct for EES performance	Ceo4	N/A	Y	Y	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A	12.429	0.053
3.8	Mechanisms for shareholders to guide board of directors	AFS Corp govern	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	AFS	N/A	N/A
	Stakeholder engagement																					
3.9	Basis for identification and selection of key stakeholders	Ceo9	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064
3.10	Approaches to stakeholder consultation	Ceo9	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064
3.11	Information from stakeholders consultation	Ceo9	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064

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3.12	Use of information from consultations	Ceo9	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064
	Policies & systems																					
3.13	How the precautionary approach is applied	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A	N/A
3.14	Voluntary charters, principles or protocols company subscribes to	Ceo3, Ceo6	ISO	ISO	ISO	ISO	N/A	GRI	N/A	N/A	N/A	Other	N/A	ISO	N/A	ISO	N/A	Other	GRI	GRI	7.037	0.317
3.15	Membership industry associations, international advocacy groups	Ceo6	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	N	Y	Y	Y	11.536	0.073
3.16	Policies for managing upstream and downstream effects	Ceo21	N	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	5.582	0.472
3.17	Approach for managing indirect EES impacts	Ceo21	N	Y	Y	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	5.582	0.472
3.18	Major changes in operations or locations [A7, B7]	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
3.19	Policy and procedures for EES performance.	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A	N/A
3.20	Certification of EES systems	Ceo3, Ceo6	ISO	ISO	ISO	ISO	N/A	GRI	N/A	N/A	N/A	Other	N/A	ISO	N/A	ISO	N/A	Other	GRI	GRI	7.037	0.317

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4.	**GRI Content Index**																					
5.	**Performance Indicators**																					
	Direct Economic Indicators *Customers*																					
EC1	Net sales [B4]	Fm2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
EC2	Geographic breakdown of markets	Assu-med / AFS	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
	Suppliers																					
EC3	Input costs of materials and services [B1]	Fm1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
EC4	% contracts paid per terms	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
EC11	Supplier breakdown by Co. & country	Ceo20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.037
	Employees																					
EC5	Total payroll and benefits [B2]	Hr1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
	Providers of capital																					
EC6	Distributions broken down into dividends, preference dividends and interest [B5]	Fm7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
EC7	Change in retained earnings [B5]	AFS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
	Public sector																					
EC8	Total taxes (per country) [B5]	Fm6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000

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EC9	Subsidies received per country [B5]	Fm6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.000	1.000
EC10	Donations to communities & society	Ceo10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
EC12	Spending on non-core infrastructure	Ceo10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
	Indirect economic impacts																					
EC13	Significant externalities associated with company's products and services [A1-7, B2-7]	Up-stream & down-stream effects	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	Data not specif-ically gather-ed	N/A	N/A
	Environmental Performance Indicators *Materials*																					
EN1	Total materials used by type [A'1/2]	Ic1	2	2	1	1	1	N/A	1	1	1	2	2	2	2	2	1	1	1	2	9.072	0.170
EN2	% materials used from other wastes [A1]	Ic5	1	1	1	1	1	N/A	1	3	1	N/A	N/A	1	N/A	1	1	1	1	N/A	7.269	0.297
	Energy																					
EN3	Direct Energy used per source (generated) [A3]	Eng1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548
EN4	Indirect energy used per sources (purchased) [A3]	Eng1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2	1	4.967	0.548

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EN17	Initiatives to use renewable sources	Eng8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.228	0.646
EN18	Energy consumption footprint (per product) [A'3 D1]	Eng6	3	1	1	3	1	3	1	2	1	3	2	3	1	3	3	1	1	3	11.509	0.074
EN19	Indirect energy implications i.e. upstream and downstream [A'3C2]	Eng5	3	3	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5.464	0.486
	Water																					
EN5	Total water use [A2]	Em7	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421
EN20	Water sources and affected ecosystems [A'2C5a	Em7	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421
EN21	Use of ground and surface water as % of renewable water available (per area)	Em7	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421
EN22	Recycling and reuse of water	Em7	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421
	Bio-diversity																					
EN6	land use in sensitive or rich areas	Em9	N	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	Y	N	6.888	0.331
EN7	Major impacts on bio-diversity and eco-systems for activities and products & services [A'1/2 C5a, C5c]	Em1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283

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EN23	Total land used for production or extraction	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
EN24	Amount of land surface impermeable	Em11	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.400	0.285
EN25	Impacts on protected or sensitive areas [A'1/2 C5a]	Em9	N/A	Y	N/A	Y	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	Y	N/A	12.005	0.062
EN26	Change in habitat from activities and % land restored [A'1/2 C5a]	Em10	N/A	Y	N	Y	Y	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	Y	N/A	9.847	0.131
EN27	Programmes to protect or restore ecosystems	Em10	N/A	Y	N	Y	Y	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y	Y	N/A	9.847	0.131
EN28	IUCN red list species in areas affected by operations	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
EN29	Units operating in or around protected or sensitive areas	Em9	N	Y	N	Y	Y	Y	N	N	N	N	N	N	N	N	N	Y	Y	N	6.888	0.331
	Emissions, effluents and waste																					
EN8	Greenhouse gas emissions per category, direct and indirect (from imported energy) [A'1/2 C2c or C3a]	Ic2/3	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437

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EN9	Use and emission of ozone depleting substances [A'1/2 C2c or C3a]	Ic2/3	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
EN10	Other significant emissions including NOx and Sox [A'1/2 C3a]	Ic2/3	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
EN11	Total amount of waste by type and destination [A'1/2 C2a and C3]	Ic2/3	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
EN12	Significant discharges to water by type [A'1/2 C2a]	Ic2	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
EN13	Significant spills [A'1/2 C2b]	Em12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.400	0.285
EN30	Other indirect greenhouse gas emissions [A'1/2 C2c or C3a]	Ic2/3	1	1	1	1	2	N/A	1	1	1	2	2	1	1	1	1	1	1	1	5.879	0.437
EN31	Transport of hazardous substances	Ic4	1	1	1	1	N/A	1	1	1	1	1	N/A	1	1	1	1	1	1	1	3.553	0.737
EN32	Water sources and related eco-systems affected by discharges and runoff [A'1/2 C5a]	Em7	1	1	1	1	1	2	2	2	1	2	2	2	2	1	1	1	1	1	6.018	0.421

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	Suppliers																					
EN33	Performance of suppliers per requirements (environmental) of management policies and systems	Em5	3	3	2	1	3	3	3	3	3	3	2	3	3	3	3	3	3	3	7.975	0.240
	Products and services																					
EN14	Significant environmental impacts of products and services [A'1/2/3 C5a/b and D]	Em1	1	1	1	1	1	1	2	1	1	2	2	1	1	2	2	1	1	1	7.425	0.283
EN15	% of products reclaimable or recyclable [A'1/2 C1/2]	Eng4	1	1	1	1	1	N/A	1	3	2	2	1	1	N/A	1	2	1	1	N/A	9.562	0.144
	Compliance																					
EN16	Fines and recorded non compliance with regulations and legislation	Em14	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
	Transport																					
EN34	Significant environmental impacts [A'1/2 C6]	Em4	N/A	N/A	2	N/A	N/A	2	3	N/A	N/A	1	N/A	N/A	2	N/A	N/A	N/A	2	3	3.873	0.694
	Overall																					
EN35	Total environmental expenditure by type	Fm9	2	2	2	1	2	1	2	1	3	2	2	2	2	2	3	2	1	2	7.7.02	0.261

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	Social Performance Indicators: Labour Practice *Employment*																					
LA1	Breakdown of workforce	Hr1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
LA2	Net employment creation and turnover [B2]	Hr2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.000	1.000
LA12	Extra employee benefits provided [B'2 C2]	Hr4	3	2	3	2	2	3	3	3	3	2	3	3	3	2	3	3	3	3	9.801	0.133
	Labour / management relations																					
LA3	Employees % represented by independent union	Hr14	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
LA4	Involvement of employees in restructuring	Hr13	N	N	N	Y	N	Y	N	N	N	-	Y	N	N	N	Y	N	N	Y	5.693	0.456
LA13	Involvement of employees in management & corporate governance	Hr13	N	N	N	Y	N	Y	N	N	N	-	Y	N	N	N	Y	N	N	Y	5.693	0.456
	Health and Safety																					
LA5	Practices relating to occupational accidents	Hr16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
LA6	Formal health and safety committees	Hr17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000

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LA7	Injuries, lost days and absenteeism [B'2 C1/2]	Hr18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
LA8	Policies and programmes for HIV /Aids [B'2 C2]	Hr19	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	14.000	.0.030
LA14	Evidence of compliance with ILO SHE standards	Hr16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
LA15	Agreements with workers regarding SHE issues	Hr20	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	5.252	0.512
	Training and education																					
LA9	Average training hours per employee [B'2 C2]	Hr3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
LA16	Programmes for continued employability	Hr3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
LA17	Programmes for lifelong learning	Hr3	1	2	3	1	1	1	1	2	1	1	2	1	2	2	1	2	2	1	5.640	0.465
	Diversity and opportunity																					
LA10	Equal opportunities policies and programmes	Hr12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
LA11	Composition of senior management	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A

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	Human rights																					
HR1	Policies to deal with human rights (HR)	Ceo12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR2	Consideration of HR in investment decisions	Ceo13	N	N	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y	N	N	7.590	0.270
HR3	Policies of HR in supply chain	Ceo14	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	Y	Y	Y	3.979	0.679
HR8	HR in employee training	Ceo15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR4	Policies against discrimination	Hr12	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR5	Policy on freedom of association	Hr15	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
HR6	Policy on child labour	Coe17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR7	Policy on forced labour	Ceo17	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR9	Appeals practices and processes	Ceo18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR10	Non-retaliation policy, grievance system	Ceo18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
HR11	HR training for security staff	Ceo16	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.000	0.677
HR12	Policies on needs and rights of indigenous peoples	Ceo11	N	N/A	Y	Y	Y	N/A	N	N	N	N/A	N	Y	N	N	N	Y	Y	N	10.637	0.100
HR13	Community grievance system	Ceo11	N	N/A	Y	Y	Y	N/A	N	N	N	N/A	N	Y	N	N	N	Y	Y	N	10.637	0.100

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HR14	Monies redistributed to local communities [B'2 C2]	Ceo10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	0.000	1.000
	Social Performance Indicators																					
	Society *Community*																					
SO1	Policies to manage impacts on communities	Ceo9	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	Y	Y	Y	11.906	0.064
SO4	Awards received for social ethical and environmental performance	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
	Bribery & corruption																					
SO2	Policies and procedures to address bribery and corruption	Ceo19	Y	Y	-	Y	Y	-	-	-	N	-	Y	Y	Y	Y	Y	Y	Y	Y	12.170	0.058
	Political																					
SO3	Policy on political lobbying	Ceo19	Y	Y	-	Y	Y	-	-	-	N	-	Y	Y	Y	Y	Y	Y	Y	Y	12.170	0.058
SO5	Disclosure of all monies paid to political parties or related institutions [B'D4]	Fm6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0.000	1.000

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	Competition and pricing																					
SO6	Court rulings on anti-trust and monopolies [BD'2]	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A
SO7	Policies to prevent anti-competitive behaviour	Ceo19	Y	Y	-	Y	Y	-	-	-	N	-	Y	Y	Y	Y	Y	Y	Y	Y	12.170	0.058
	Product Responsibility *Customer Health & Safety*																					
PR1	Policy for preserving customer health and safety (H&S)	Mm8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.028	0.673
PR4	Non-compliance with regulations on customer H&S [B'3 C2]	Mm9a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
PR5	Complaints upheld by regulators on H&S issues [B'3 C2]	Mm10	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	7.800	0.253
PR6	Voluntary code of compliance, labels & awards received	Mm9a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
	Products and Services																					
PR2	Policies and procedure for product info. and labelling	Mm8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	4.028	0.673

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PR7	Non-compliance with product information & labelling legislation	Mm9a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	6.500	0.370
PR8	Policies and procedures to assess customer satisfaction [B'3 C2]	Mm5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.806	0.703
	Advertising																					
PR9	Policies and procedures to ensure compliance to standards	Mm9b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.329	0.887
PR10	Number of breaches of advertising and marketing regulations	Mm9b	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	2.329	0.887
	Privacy																					
PR3	Policies and procedures to ensure privacy	MM11	Y	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	11.119	0.085
PR11	substantiated claims of breaches of privacy [B'3 C2]	Assu-med	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	N/A	N/A

Codes for industry groupings

Aut: *Automotive and components*
Bev: *Beverages, food and farming*
Che: *Chemicals*
Con: *Construction, Building materials and Real Estate*
Edu: *Education*
Ele: *Electonics and telecommunication*
Eng: *Engineering*
Fin: *Financial Services, Insurance and Assurance*
For: *Forestry, plantations, paper and printing*
Hea: *Health and Pharmaceuticals*
Hou: *Households products, textiles, clothing and footware*
Med: *Media and entertainment*
Met: *Metals, minerals and mining*
Oil: *Oils, gas and energy*
Ret: *General retail*
Ser: *Services (non financial)*
Tra: *Transport*

When the questionnaire was designed as the basis for the interviews, items from the GRI disclosure guidelines that were considered to be normally available were name, markets, structure and data normally included in the AFS. Table 9.7 demonstrates that many of the reportable and disclosable areas of the GRI could be reported upon (even if partially) by many companies in most sectors, based on current reporting systems. Companies would however need to set policies (with corresponding procedures).

9.4.3. ISO 14001 accreditation

The discussions with managers suggested a relationship between ISO 14001 accreditation and the existence of environmental and some social systems. Correlation tests were run comparing ISO 14001 accreditation against respondents answers. Significant correlations were found between ISO14001 accreditation and several potentially reportable impacts and influences, indicating that ISO14001 does influence the degree to which social and environmental impacts are reported.

9.5. Conclusions

To achieve the aim in this chapter, the objectives were to determine with respect to selected companies the following:

- If they did not have a comprehensive CSR, or what they did have.
- If they had nothing, why not.
- If they could implement a comprehensive CSR at either or both the GRI or the proposed system levels (did they have measuring and reporting systems in place for both environmental and social reporting).
- If the systems were not in place, what the practical barriers to implementing them would be (no information, no way to measure, no finance, no time or staff resources).
- What the social barriers (corporate culture, management commitment) would be.

In this chapter the author determined the extent to which the possible impacts of business activities were measured by selected companies in different business sectors. Also reviewed were managers' perceptions of factors that influenced the recording and reporting of such impacts, or the absence of such monitoring systems. The

findings of this chapter are discussed and analysed more fully in Chapter 10, in the context of the theoretical framework and literature review.

CHAPTER TEN
DISCUSSION

10.1. Introduction

Studies of CSR in South Africa conclude that stakeholders expect greater levels of CSR disclosure (Antonites & De Villiers 2003, Mitchell & Quinn 2005), whilst international studies record significant applied and theoretical limitations of existing CSR disclosure and reporting models (Rubenstein 1989, Krut & Gleckman 1998), which are not necessarily mutually exclusive. The aim in this thesis was to contribute towards improving CSR in South Africa, which required determining what aspects of CSR would need to be and could be improved, for which the sources of information for this were twofold. As the first source, a comprehensive literature review was conducted that, besides providing the theoretical context to the thesis, determined what specific criticisms have been levelled against existing CSR disclosure and CSR systems. In this thesis it is argued that many of these limitations arise out of the many primarily-rule based systems in existence and use, that CSR should rather be based on sound fundamental principles and a conceptual framework and that CSR should be an enforceable standard i.e. with legal backing to ensure compliance. The second source of information on possible areas that could be improved in CSR, was the users of this CSR disclosure, namely the stakeholders. In the first part of the thesis a user or stakeholder survey was undertaken to determine their perceptions regarding which sectors of reporting were perceived to be of importance and which needed to be better reported.

Having identified areas of weakness and where potential improvements could be made in current CSR, from both the stakeholders' perceptions and the literature review, the author undertook to determine how these areas could be better reported. An assessment was needed to determine if, in fact, these areas could be measured (and hence reported). This was undertaken in the second part of the thesis. A major component of this, and part of the contribution of this thesis, was to develop a CSR framework.

What practical barriers existed to implementing CSR systems in business were determined by the author in the third part of this thesis. It was evident that a principle-based CSR system would remedy many of the limitations of existing rule-based

systems. Thus, a framework of principles for CSR was developed and built into a proposed model. However, potential measurement difficulties were identified with this model. Thus, in the third part, when the applied implementation of a comprehensive CSR system was evaluated in industry, both the proposed model and the GRI (as the most widely used, and only officially endorsed CSR guideline in South Africa) were considered.

Specific findings and conclusions of the work are discussed and reviewed in more detail in this chapter.

10.2. Part 1: the stakeholder survey

The stakeholder surveys found support for the notion that all stakeholders, including direct and indirect investors and consumers, had the right to information regarding the impacts of businesses. Most stakeholders perceived that CSR should be a separate report, prepared to the same standards as annual financial statements and externally verified. Most core areas businesses activities impacted upon, were rated as being important by all stakeholder groups, with however the exception of the financial intermediaries and professional analysts who considered many impacts on employees, the public and consumers as being only partially important. However, the stakeholder groups directly impacted by such activities did consider these areas and impacts as important to disclose.

What was important in terms of the objective of the thesis, was that significant expectation gaps were found with respect to CSR specifically regarding reporting the impacts on employees, on the public and consumers and on the physical and biotic environment. Finding expectation gaps provided evidence to support the call for improvements in actual reporting in these traditional CSR areas and hence justification for the research of this thesis. Prior research in South Africa records that stakeholders expect employee reporting (Stainbank 2003), and greater amounts of voluntary and compulsory environmental reporting (De Villiers & Vorster 1995, De Villiers 1998, De Vries & De Villiers 1997), which was consistent with the findings of international research regarding stakeholder perceptions (Deegan & Rankin 1997, 1999, Craig & Hussy 1982, Tilt 1994).

It was on the basis of the Ethical Stakeholder theory, which assumes that these stakeholders are entitled to such accountability, that this study was conducted. The above findings indicate that a significant difference exists between the expectations of stakeholders as to what CSR should deliver and what they perceive CSR disclosure actually does deliver. This expectation gap justifies the argument that there needs to be further improvement made to CSR in South Africa.

10.3. Part 2: the conceptual framework and proposed model

In Chapter 7 the principles and practice of South African CSR disclosure were reviewed. The author specifically looked at major criticisms and offered suggestions as to possible ways forward. It was noted that there was a need for improved CSR and a greater degree of accountability and transparency by business that improved CSR could provide. It was argued that reporting, other than financial, that includes CSR should be prepared using a conceptual framework of principles, similar to that used in financial reporting. Thus a principle-based approach to CSR as opposed to a rule-based approach is advocated. It was argued that such a principle-based approach would address many of the qualitative criticisms levelled against CSR practice and current rule-based systems. Using a systems-based approach, a framework of interactions and impacts caused by businesses on social and physical systems was developed, which was used as the basis for a proposed CSR model. This model was independently developed from the aforementioned principles and it represents the unique contribution of this thesis to CSR reporting. The model was validated by using a peer and expert review and by comparison with the GRI, which was used to represent international and South African best practice. The author identified potential difficulties with measurement that would represent potential challenges to the implementation of the proposed model, and indicate the possible need for further development. This model was not tested by practical application as this was beyond the scope of this thesis, although this would be valuable future research, which could contribute to further refinement of the proposed reporting criteria. Thus, in the third part of this thesis, the proposed model and the GRI were used both to assess what challenges would be faced by businesses that tried to apply such systems in practice, and to recommend solutions.

Little prior research has been conducted in South Africa with respect to CSR modelling (Dewar 1994), although Vorste and Lubbe (1994) did undertake a comprehensive analysis of the Accounting Framework (FASB 1976) for application in environmental reporting. Pioneering CSR modelling research starting in the 1970s and extending into the 1990s is characterised by the following approaches:

- Mathematical models (Estes 1976, 1977),
- Social income statements and value added statements (Seidler 1973, Estes 1976, Ramanathan 1976),
- Listing of key activities and indicators (Christophe & Bebbington 1992, Dilly & Weygandt 1973),
- Social income, equity and assets (Ramanathan 1976),
- Links to corporate social responsibility (Wartrick & Cochran 1985), and
- Economic principles and ecological accounting (Schaltegger et al. 1996, Gray et al. 1993).

The following can be said about the framework for the proposed model:

i) It included a conceptual framework of principles for reporting (including recognition, measurement and presentation). As noted earlier this was considered in South Africa by Vorster and Lubbe (1993). The accounting framework was evaluated (and criticised) for use in CSR by Hibbert (1999), although much of these criticisms have been refuted by this study thus providing support for the use of such a framework. The academic papers on CSR modelling by Ramanathan (1976) and Gray (1992) refer to conceptual principles, but do not directly extend these to reporting frameworks and models.

ii) It included a framework of interactions. This is unique to this model and although such a framework many have been indirectly considered in other models, it is not directly stated or presented in any of the work reviewed. The extensive disclosure listings of ISO14001 and the GRI were drawn up in negotiation between relevant authorities and key stakeholders, with the input and experience of a variety of experts. The use of a framework, as proposed in this thesis, does however establish all key potential

interactions and impacts that result from business activities, many of which have not been listed in the GRI. Potential measurement of such impacts was in many cases determined to be difficult to assess with current technologies available in the relevant disciplines. Nevertheless this does not negate the significance of such impacts.

iii) It was principle-based. The model as proposed in this thesis differs from other models in current use in that it is principle-based. This is not to suggest that the developers of the GRI have not adhered to certain fundamental principles, in fact they recommend certain objectives and principles to preparers, However, their guidelines do not appear to be, nor do they claim to have been developed from conceptual principles. This proposed model has been developed from the framework of interactions, to achieve objectives of completeness, relevance and reliability.

iv) It is suggested key categories of disclosure for 1st order (primary) interactions. They are listed below as Table 10.1.

Table 10.1: 1st order disclosure for CSR model

Physical Impacts and Interactions to be disclosed (as balanced inputs and outputs) with respect to the following areas • Use (conversion) of artificial material (capital and operating assets) • Use (conversion) of natural (products) material • Use of energy • Use of labour (physical only) In case of specialised industries, will also detail • Conversion ('production') of energy • Agricultural (biotic) production
Socio-economic Impacts and Interaction to be disclosed as balanced inputs and outputs for the following areas (= 'assumed equivalent') • Input value of natural & artificial material, assets = payments made + unpaid costs • Input value of labour = wages paid + training & experience • Support and valuation of goods / services = marketing and promotion costs • Output of goods and services = payments received • Productivity +interest & profits for rent of capital or credit = credit + control of capital + investments • True (super) profits (not for rent of capital) = entrepreneurship& new ideas etc

Note: The concepts and ideas represented in the above table are discussed and explained in detail in Chapter 7

It should be noted that the above listings essentially represent the visable output of the proposed model. In this thesis, the proposed disclosure was not extended to detailed listings of disclosure requirements. This is possible within a principle-based approach to reporting (IASCF 2004), but it would, however, be premature, until the principles of the proposed model have been accepted.

v) It is unique in that it suggests that 2nd and 3rd order impacts should be disclosed, where 2nd order are those impacts from the activities of suppliers and distributors, that are initiated by the demand for services and materials created by the reporting entity's business activities. Impacts of the 3rd order are those from and on the users (of the products and services). 3rd order impacts, also includes the impacts of the employees using their salaries and wages, and of the shareholders, funders and governments using profits, interest and taxes generated by the business. This model proposes the disclosure of many (2nd and 3rd order) socio-economic impacts, which are extremely difficult to quantify and its proposal goes beyond the range of the Life Cycle Analysis of the ISO14001 standard, recognising that there are numerous impacts created by the business activity. Many of these are positive, such as the creation of employment, supporting families and communities, the creation of wealth and tax collection, which pay for social support and infrastructure. The author acknowledges that limitations of current data collection techniques might result in such 2nd and 3rd order impacts being limited to their financial implications, which might be not that much different from current Value Added Statements. Nevertheless, the intention is that more comprehensive and qualitative data should be provided. The criteria and notes suggested for 1st order impacts in the proposed model would be equally applicable to these 2nd and 3rd order impacts.

vi) It provides guidance as to how the above categories might be presented to achieve the conceptual principles of completness, relevance and reliability. These key suggested notes as detailed in Chapter 7, as listed below in Table 10.2.

Table 10.2: Suggested notes for comprehensive CSR system

Required Notes: Activity & Impact	**1st and 2nd Order Reporting Input-Output (Physical reality)**	**1st and 2nd Order Reporting Output & Impacts**	**Additional notes for 3rd Order Reporting Input-Output**
Physical Use (conversion) of artificial and natural resources	Complete input-output reconciliation i.e. mass balance, noting: Distribution before and after • land (controlled or not) • water • air Per appropriate category e.g. • gases & liquids • metals • ceramics • compounds neutral or reactive Special notes on hazardous and radioactive chemicals produced	Special notes: Impacts on biotic natural systems (local and other) Indicators for the following systems: • land • water • air Impacts on biodiversity e.g. biomass x rarity index	Additional notes on transformations through use and waste. Notes on final distribution Additional notes of further impact on natural and biotic systems.
Use of energy	Total input, giving sources of: • fossil fuel • hydroelectric • nuclear • other A note should explain the impact of these sources of derivation	Output (transformed, stored, and wasted)	Input of energy to use (consume) products
Use of labour	A brief note on efficiency	Estimated effects of training i.e. value added	
Specialised e.g. energy production or agriculture	As above	More detailed notes on impacts on natural and biotic systems	
Socio-Economic Conversion of natural resources	**Input** Value of resources used + purchase costs + cost of conversion	**Output & Impacts** Value (economic) of product	***Other Socio-economic indicators*** (Only as result of business activities & impacts) Δ in power of governments & decisions Δ in power of industry Δ in culture & values including objects (wealth) and lifestyles Δ in motivation Δ in capacity to work, including training Δ in technical knowledge Δ in labour power Δ in purchasing power
Wages & salaries for labour	Input of labour hours	Payment for wages +Δ training & experience +Δ household esteem & well-being	
Provision of value of goods & services	Payment received	Benefits provides (goods &services) (needs & tension reduction)	
Marketing, promotion & support services	Cost of Providing	Loyalty, product need (measured on an index)	
Profits for new ideas & innovations (R&D)	New ideas & cost of developing	Financial benefits (valuation) paid out	
Productivity + interest (as rent for capital) + profits	Provision of credit, facilitation of capital investment, structure, support & stability + actual capital (invest) & credit made available	Productivity (i.e. GDP)& taxes + financial support Interest + 'profits' paid / accrued on investments	

Δ = Change or change in value of
This table is explained in detail in chapter 7

The suggested notes as presented in Table 10.2 above, were developed in order to achieve the conceptual principles of the model that is to present relevant and reliable information that fairly presents all the material, social and environmental impacts of businesses' activities for the reporting period. These notes also took the findings (that is expectations) of the stakeholder survey into consideration. The notes listed above

suggest for example that in the case of physical impacts from the conversions of natural and artificial materials, what would be required is a full mass balance, accounting for the final distribution of all outputs and indicating whether such outputs are controlled or not. The notes suggested in Table 10.2 also require disclosure of the impacts on biotic systems and biodiversity, using established index systems. Such notes are not as detailed as the listings of for example the GRI, however, the model requires independent verification (assurance), per the reporting principles, and thus the onus is upon both the preparers and the assurers to ensure that the reports are complete (no material omissions), relevant (understandable and useful) and reliable (accurate). The latter process would ensure all relevant impacts for each specific business are disclosed.

In this thesis many of the socio-economic indicators and impacts were identified as being difficult to measure and assess and were not currently being monitored by industry. Nevertheless, it was however argued by the author that these should still be considered and disclosed, even if in limited ways by businesses, because these impacts are in any case significant. This thesis is unique in suggesting that these items be reported upon (at all). The author argues that if such impacts are widely regarded as being significant, systems and indices will be developed (or in most cases improved) to monitor these impacts.

10.4. Part 3: the case study assessment of the challenges to implementing CSR systems in business

The third part of this thesis was to determine what the challenges would be to implementing a comprehensive CSR system in South African business. The existence of some form of CSR, either as the ISO14001 or the comprehensive GRI, would suggest successful implementation, since such businesses would already have monitoring, measuring, recording and reporting systems in place. Even though significant limitations with respect to the scope of implementation of the proposed model were noted, as discussed below, even the ISO14001 standard (Krut & Gleckman 1998) and triple bottom line reporting of the GRI (Henriques & Richardson 2005) are not without significant limitations, many of which this thesis attempts to address.

With regard to the range of potential areas for reporting, an assessment was made to determine if these aspects were already being monitored and measured. Where they were not measured, if the reason for this could be determined, this would provide important evidence as to how a change might be effected. Some of the more commonly provided reasons for not measuring and monitoring included:

- 'Not important' or 'too difficult'. This was a common response from companies not measuring the impacts of their activities on the public, consumers and the mental health of their employees. As noted in the second part of this thesis, significant challenges exist for the measurement of such impacts. These are not included in the GRI and are not likely to be implemented in any compulsory system.
- 'The company does not have resources', 'Costs are too great', 'There is not enough pressure'. Such responses indicate that such an aspect is not considered important (enough) to be measured at present. Legislation, public or market pressure could be used to overcome such challenges.
- 'There is no legal requirement'. This response indicates that for this aspect to be reported, a legally enforceable, mandatory reporting system would be required.

An important factor, which was found to contribute to the extent of a company's measuring systems, was to be determined by the respective company's risk assessment strategy, often undertaken by the company's insurers. Where impacts on the environment, on health and safety, or on road users from companies in the transport industry, in the case of accidents or spills, were noted to be a significant risk, measurement systems and control procedures had been put in place by most companies. Perhaps the most significant part of risk, besides the potential loss in earning capacity, is potential litigation. Common law litigation does encourage companies to monitor and protect the health of their workers and consumers. Legislation such as NEMA (1998) and the National Air Quality Act (2005) does encourage companies to monitor their environmental impacts. Thus, a combination of risk and legislation encourages monitoring and measurement.

As noted in Chapter 9, market forces, such as those that exist in the motor vehicle industry (which is controlled by legislation in the EU), encourage companies to become ISO14001 accredited. While 30% of the surveyed companies had ISO14001 accreditation or were in the process of obtaining it, only 5% of the companies had any other CSR system, and none of them reported on the GRI (individually). The primary reason for having ISO140001 accreditation was as a result of customer specification. Many cases in this study found ISO14001 certification was a requirement for component suppliers in the automotive industry, as a result of export requirements or international group policy. The strong correlation between measurement and the existence of company policies and procedures with ISO14001 certification suggests that it is an effective mechanism to facilitate CSR. Many such companies could possibly report on the GRI, yet they did not as there is no legal or significant other requisite to do so.

Significant challenges exist as to the possible implementation of many of the key areas identified in the proposed CSR model, specifically where measurement problems already exist, and no companies were found to be in a position to report on these aspects other than in limited respects.

The findings of the thesis suggest that increased pressure should be placed on companies to become ISO14001 certified as this would facilitate increased CSR reporting. The author suggests that ISO14001 certification would be more effective in ensuring environmental protection, than simple CSR disclosure.

Bebbington (1993) notes that to achieve effective and meaningful results in CSR, it would be necessary to change accounting concepts, rules and methodology; while Gray and Bebbington (2001) suggest that the response of industry would be financially / profit orientated, but also dependent upon management commitment to sustainability. This was found in the case studies of this thesis, where the existence of monitoring and reporting systems, including the ISO14001, was often the result of the initiative and commitment of senior management, while in companies where such systems were absent, management attributed this to a lack of legal requirement and substantive pressure. The existence of such legislation, as for example the extensive legislation that exists in South Africa on human resource and labour issues, was found

to reflect in the findings, where all companies that were studied were found to collect such data.

Gray and Bebbington (2001) note the response of business would be influenced by business principles. The present author found that the operation of market forces in the chemical and automotive sectors was reflected in the industry-wide adoption of the ISO14001 standard, which requires internal EMS systems.

Existing legislation and financial imperatives were found to have influenced measurement and recording of certain impacts and influences. At the same time, many managers suggested that lack of financial (and other) resources, as well as the absence of legal requirements were some of the reasons why other impacts and influences were not measured. Thus, it could be concluded that legislation enforcing CSR, together with financial incentives (or penalties for failure to meet such standards), could play a significant role in improving CSR in South Africa.

10.5. Overall analysis and conclusions

Significant deficiencies were found to exist with respect to CSR disclosure in South Africa from the perspective of stakeholders. Prior research has highlighted deficiencies in current CSR which suggest qualitative deficiencies exist in such reporting. Such qualitative deficiencies could be overcome by a comprehensive principle-based approach to CSR. The author suggests that CSR models should be constructed from a conceptual framework of reporting principles. Using such a proposed framework, and a comprehensive framework of interactions between businesses and social and physical reality, a suggested CSR was developed and validated in this study. However, theoretical problems with the measurement of many such interactions were identified. This indicated these components of the model (that is these specific disclosures) could not be practically implemented. A multiple case study review of selected businesses confirmed this finding that many such interactions and impacts would not be measurable at present. As noted earlier, this would not preclude monitoring such impacts, and the author suggests that further research will be required to develop such measurement and assessment systems.

With respect to impacts and interactions that could reasonably be measured, in both the proposed model and the GRI, the study found that many companies measured these impacts and interactions, although often only partially. A variety of reasons were attributed to why certain areas of impacts were not, or not fully, measured which included a lack of management interest, not being a priority or insufficient resources being allocated to this by the company. These barriers, the author suggests, could in many cases be overcome by increased pressure, through market forces, specifically using the ISO14001, or by using legislation, possibly including a compulsory CSR standard.

CHAPTER ELEVEN
CONCLUSION

11.1. Introduction

This chapter reviews the aim and objectives of the study, as encompassed in the specific objectives of the three phases as set out in Chapter 1, and then concludes on how these have been achieved through the results and findings of the study.

11.2. Overall aim and objective

The overall aim of this study, as specified in Chapter 5, was to determine what needs to be done to improve present CSR in South Africa. To this end three research questions, (answered from both a theoretical, conceptual and practical perspective), were established, namely:

1. What is current South African and international CSR practice, and specifically what are the inadequacies and limitations of such CSR?
2. What activities and impacts should be reported upon in CSR?
3. Can this be achieved and what are the barriers to this happening?

To answer the above research questions (considered separately from a theoretical and practical perspective), specific overall aims and objectives were developed, as discussed in the next section.

11.3. Specific overall objectives of the study

11.3.1. Limitations of present CSR

i) To determine what the theoretical limitations of present CSR and existing CSR models are (specifically in South Africa).

The overall approach to achieve this objective was to conduct a comprehensive literature review of critical reviews of CSR and of other relevant prior research.

ii) To determine what the limitations of present CSR are from stakeholders' perspectives.

The overall approach to achieve this objective was to conduct a comprehensive stakeholder survey, which did not ask for opinions on what inadequacies exist. Rather, it asked what aspects and areas of CSR disclosure were considered to be important and how well that aspect was considered to be

reported at the time. Thus, where significant differences exist, (where aspects have been rated as important but are considered to be inadequately reported), these represent deficiencies that need to be remedied.

11.3.2. What should be reported?

i) To determine what should be reported theoretically.

Overall Approach: Develop a conceptual framework of interactions and impacts of business activities identifying all significant (perceived) interactions that should be reported.

ii) To determine what stakeholders believe should be reported upon.

Overall Approach: Stakeholder survey as in Section 11.1. sub-point (ii) above.

11.3.3. Can all significant disclosure of an ideal CSR be reported upon, and what are the barriers to such disclosure

i) To determine if all proposed aspects can be theoretically measured.

Overall Approach: Interviews with acknowledged experts.

ii) To determine if proposed disclosure can be practically implemented.

Overall Methodology: Case studies of existing companies.

11.4. Parts of the study

To achieve the above objectives, the study was grouped into three integrated parts. The first part of the study aimed to determine the perceived limitations of existing CSR, and thus specifically what would need to be addressed in an improved system. The second part of the study aimed to develop a conceptual framework of interactions and impacts resulting from business activities, and then model a CSR system thereon, taking the findings of the first part of the study into consideration. This second part also considered the theoretical validity and applicability of the proposed model. The third part of the study determined which aspects of the proposed CSR system could be implemented by industry, by assessing the readiness of companies to report, and identify which key areas, and why, they could not report on. If it could be established why they were not in a position to report, then it could be determined what measures could be adopted to change this.

11.5. Specific objectives

11.5.1. Part 1

i) To identify and group all possible material and major effects of core corporate activities.

ii) To develop a conceptual model[63] relating to these impacts and activities.

To achieve the above objectives, a conceptual framework was developed in Chapter 7, demonstrating material impacts and interactions between a business and its social and physical environment. This framework was further developed to incorporate the principles of structuralism (Parsons 1959). The framework, together with a proposed reporting model, was subjected to an expert review. Reviewers' critiques were defended.

iii) To determine stakeholders' (users and preparers) views on the possible relevance and materiality of such information.

iv) To determine whether each of these aspects (of corporate activity) are adequately described or portrayed in the corporate reports (and any specific component of the annual report including the AFS and CSR), in the view of the stakeholders.

v) Thus, to determine what areas of corporate activity are not being adequately reported, in terms of the model developed in (ii) above, and the perceived importance of these areas.

vi) Thus, to be able to determine the perceived limitations and inadequacies of existing CSR in its current formats.

To achieve the above objectives a comprehensive stakeholder survey was conducted (Chapter 6), to determine those areas and impacts that stakeholders considered to be important, and how effective present CSR disclosure was perceived to be. This survey addressed areas and stakeholders not considered by prior surveys in South Africa (Booysen 1993, Everingham 1994, Stainbank 2003, Mitchell and Quinn 2005, De Villiers & Vorster 1995, De Villiers 1998, De Vries & De Villiers 1997). The survey was conducted with two approaches. Where feasible, samples of stakeholder

[63] This model will need to be generic enough, so that any specific report on corporate activities can be based thereon. It will also need to be the basis for any conclusions and suggestions arising from the study.

populations were surveyed by means of self-completed questionnaires. The questions were based on the material interactions as determined by the framework developed above. Areas traditionally associated with CSR, such as impacts on society (the public), consumers, employees, the physical and biotic environment, were considered to be important, but not adequately reported on. An expectation gap was noted with respect to many areas traditionally disclosed in annual corporate reports, including corporate governance. Stakeholders believed that all stakeholders, not just shareholders, had a right to CSR disclosure (accountability) and that CSR should adhere to the same standard as AFS, and should be independently verified.

Where it was not feasible to survey stakeholder groups, key representatives of such groups were interviewed, to determine their views on areas of importance and the adequacy of current reporting. Data from such interviews were not statistically representative and only yielded persuasive evidence. These interviewees believed that many CSR areas were not adequately reported upon, and that there was not enough pressure on companies to report.

11.5.2. Part 2

i) To develop a conceptual framework of the principles for a CSR model.

ii) To review the conceptual model of interactions (as developed in Part 1) relating to the impacts and activities, and identify possible key reporting issues.

As noted earlier in this section, the above was undertaken in Chapter 7: in Figure 7.1 the interactions are represented and in Table 7.2 the key interactions and impacts are listed. In Section 7.5 the initial model was extended to include a functional approach. In Chapter 7 the application of a conceptual model of reporting principles, similar to the FASB (1976) accounting model was also considered. It was concluded that many of these principles were transferable and, if applied, would address many of the shortfalls of present CSR.

iii) To determine, for all key reporting issues, if and how these could be measured, recorded and reported.

This was undertaken in Chapter 8 Section 8.4, by consulting experts in academic disciplines that dealt with the nature of key interactions and impacts as identified by the conceptual framework of interactions. It was noted that areas traditionally included in CSR had well-defined measurement systems, however, those areas absent from such traditional CSR were undeveloped. It was thus suggested that no measurement systems would exist for these areas in most companies and hence this would represent obstacles to improving CSR disclosure.

iv) To synthesise the above into a reporting model.

In Chapter 7 Section 7.6 the principles of reporting and a framework of interactions were applied in the development of the basis of a CSR model.

v) To assess the reporting model for validity.

In Chapter 8, Section 8.2 the proposed model and the framework of interactions upon which the model was based, were sent to 30 leading national and international CSR experts asking for critique. Ten experts responded, with several providing significant critique. These specific criticisms could all be defended.

vi) To assess the reporting model for completeness.

This was undertaken in Section 8.3 of Chapter 8, using the contents of the GRI as the baseline to test completeness. This review was conducted in both directions, namely, to determine what was included in the GRI, but missing from the proposed model: and to determine what was in the proposed model but missing from the GRI. Several significant components of the proposed CSR model were not specifically included in the GRI, such as a mass balance and energy reconciliation. Other aspects specifically relating to social dimensions, which had been previously identified as not measurable, were also excluded.

There were three categories of items, not present in the proposed system, but present in the GRI, these were:

- Background data

- Policies
- Data relevant to risk.

It was argued that not all of the above data, provide actual information on impacts, and that disclosure of policies could be misleading and amount to 'green washing'. Data relevant to risk could however be useful.

11.5.3. Part 3

It was assumed in this part that if all companies reported to all areas in the above model, this would result in (theoretically) improved (ideal) CSR. The objectives of Part 3 were:

i) To assess whether all key areas can be or are:
   - Measured,
   - Recorded, and
   - Reported,

   by South African companies in all major sectors.

ii) To determine where key areas are not presently and comprehensively measured, recorded and reported (MRR), and why this is not so.

To achieve the above objectives, a study was conducted of businesses within a selected group of South African businesses, namely the Pietermaritzburg Chamber of Industry. The population of this group was stratified into business sectors, and then within each sector the businesses were stratified into size groupings (based on number of employees). For each sector, three companies were selected from the largest companies. A case study approach was used to survey the selected companies, using semi-structured interviews. From the findings of the case studies it was noted that market forces and the adoption of ISO14001 had been the biggest motivating influences on companies to measure their impacts. Social impacts, which are not included in ISO14001, where not specifically required for OSHACT, were not measured. Companies cited limited resources (specifically financial) and there being no legal requirements to do so as reasons for not measuring impacts.

iii) To suggest potential generic (not detailed) solutions to overcome the reasons for the limitations or restrictions identified in (ii) above.

Based on the findings of the case studies, companies are unlikely to measure (and hence be potentially able to report) unless required to do so by legislation or market forces (customers). Formalised procedures also assist in measurement as in the case of ISO14001.

11.6. Recommendations for further studies

This study had limitations, which could be addressed in further studies, which could:

- Try and achieve better responses from groups included in stakeholder surveys, and could use larger samples.
- Find ways to survey those groups not formally surveyed by the self-completed questionnaire.
- Extend the work on developing a formal framework of principles for CSR.
- Extend the work on the framework of interactions, which was underdeveloped in this study.
- Further develop or modify and improve the proposed CSR model and test the feasibility of applying such a model in practice.
- Extend the study of businesses reviewed by using a larger sample and one that is preferably nationwide.

11.7. Conclusions

The aim of this study was to identify problem areas that needed to be addressed to improve CSR in South Africa, these are:

- A framework for principle-based CSR
- A comprehensive CSR model that is standardised and externally verified, that considers all material interactions and impacts as well as key stakeholder expectations,
- Comprehensive standards enforced by the market or legislative.

It is suggested that market forces requiring companies to comply with CSR would, however, be influential only if they required the disclosure of upstream impacts, as in the case of the ISO14001 standard and those in the automotive sector in South Africa. In this case, the source of every component must be tracked, and pressure is placed on

all suppliers to be ISO14001 certified. A ripple effect occurs of companies throughout associated industries, where companies that aspire to acquire or maintain lucrative contracts with motor vehicle manufacturers, all strive to obtain ISO14001 certification, as a prerequisite for doing business in this industry.

A comprehensive principle-based CSR model as proposed in this study, if made compulsory, would overcome many of the shortfalls of current CSR. The author suggests that the likelihood of such a model being widely and unilaterally adopted is remote. However, if more academics and accountants became involved in the processes of developing CSR guidelines, a shift towards principle-based reporting could be achieved. In accounting, this process has already occurred with many countries throughout the world adopting the International Accounting Standards (IASCF 2004), which are principle-based. One of the key elements that has contributed to the worldwide acceptance of both the ISO14001 (Krut & Gleckman 1998) and GRI guidelines is the inclusiveness of the processes by means of which such standards were established, as still continue to be developed. The GRI will, in July 2006, be issuing a revised standard, which will take the contributions of multiple stakeholders into consideration, and does provide for mechanisms for on-going contributions to be made.

A comprehensive CSR model would require the disclosure of social impacts, which are by their very nature difficult to measure, and until further process is made in the simplification and standardisation of such measurement, this remains an obstacle to comprehensive CSR reporting. The significance of the model proposed in this thesis, is that it highlights the importance of such impacts and does not ignore them. The author proposes that a strong call should be made on the relevant academic disciplines (within the social sciences) for research to develop monitoring, measuring and assessment systems that have commercial application in CSR.

Within the limits of current technology, there exists significant scope for the improvement of environmental aspects of CSR. The author concludes that, although the ideal solution to CSR would be local and / or international compulsory CSR standards, the widespread implementation of a comprehensive and externally

controlled and certified standard such as ISO14001, would significantly improve the potential for CSR on environmental aspects of businesses performance.

In the 1970s there was an initial increase in interest in CSR and CSR research after the emergence of the environmental movement and its prominence in the late 1960s, which was however followed by a lull in the 1980s. In the 1990s there was a really significant increase in CSR, which occurred concurrently with the Rio Conference, the international adoption of Agenda 21 and the concept of sustainable development. There has not been any decline in the 2000s of public and academic interest in CSR: the author suggests that CSR will remain part of doing business in the 21st century. It is hoped that with the continued attention that CSR has been receiving, the proposals of this thesis will be considered in the future developments of CSR.

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Corporate Reporting Questionnaire Annexure 1

Thank you for completing this questionnaire, we sincerely appreciate you taking time out of your busy schedule to do so.

- This questionnaire consists of five sections. Sections A and B require you to place a rating, either nothing or 0, or a 1 to a maximum possible 4 in respective columns. (Draw a line through any column / box you wish to leave out). The is an additional optional part to section B, which you may leave out
- Sections C, D and E required ticking the appropriate box for each question.
- A separate page has been attached with further explanations for completing this questionnaire, which you are encouraged to refer to, should you encounter any difficulties.

Section A

Corporate business activities, have numerous and varied impacts and possible effects. For each of the possible areas of impact listed below:

i) How important do you believe it is for companies to report on these impacts, to any potentially interested stakeholder group? (mark the first column 0-4), and

ii) How effectively do you believe these impacts are currently being reported (in present corporate reports)? (Tick the appropriate column).

[0: if not at all , 1: if a little, 2: if important, 3: if very important, and 4: if extremely important]

	Part (i)	Part (ii) How well are these currently reported? Tick a column.				
Impacts of Activities	How important (0 – 4)	Not covered (0)	Covered a little (1)	Partially covered (2)	Well covered (3)	Compre-hensively (excellent= 4)
Economic / Financial **Current Performance**						
Past Performance						
Present Financial Position						
Potential / Likely Future Performance						
Governance and Control						
Legal **Compliance with Company Law**						
Compliance with Labour, Financial and Environmental Law						
Socio-Political **Effect of Marketing / Advertising on trends /fashions / expectations**						
Effects of corporate lobbying on political decisions						
Shareholders & Funders **Benefits received interest /dividends**						
Benefits accrued / share value						
Employees **Benefits received - earnings**						
Effects on social status (from promotions etc), and value of increased skills base						
Effect on mental health (stress / self esteem)						
Effect on physical health from work conditions and stress						
Assistance and support provided to disabled employees and members of disadvantaged groups						
Public **Effect on consumer mental well-being from marketing activities i.e. tension created by new needs and expectations for products / services**						
Effect on physical health on consumers from using products						

	How important	Not covered	Covered a little	Partially covered	Well covered	Compre-hensively (excellent)
Public cont. **Indirect effect of pollution through impaired functioning of environment, loss of aesthetics**						
Direct effect of pollution						
Direct contributions to society						
Physical Environment **Conversion of natural assets (raw materials) to artificial assets**						
Other conversions of materials and chemicals						
Effect on owned natural assets e.g. land, such as pollution						
Effect on shared natural resources e.g. air, water quality, hazardous waste						
Use and sources of energy						
Biotic Environment **Effect on Bio-diversity (species richness)**						
Effect on eco-systems health / functioning						
Effect on Biomass (live plant and animal quantities)						

Section B

How **effectively** do you believe that corporate activities and their impacts (as listed in section A above) **are** currently being reported, (that is accounted for), to stakeholders generally through current corporate reporting?
(Please place a rating in the first column, completing the remaining columns is optional)

[Do not mark, if not reported at all (or you may place a 0), 1: if partially (that is, inadequately), 2: if fairly well (that is, adequately), 3: if very well, and 4: if comprehensively (excellent)]

Please place an overall (general), rating in the first column for each activity		If you are familiar with the content and format of the specific components of corporate reports, indicate how effectively you believe such components convey the impact of these activities (using the above scale), *else* if you are unfamiliar with the specific details of present corporate reporting or would prefer not to answer this part, **please draw a line through these remaining columns**										
Activity	**Give overall rating (0-4)**	Directors & Chairman Report	Auditors Report	Income Statement	Balance Sheet	SOCIE	Cash Flow Statement	Notes to the AFS	Media Press JSE	Value Added Statement	Environ mental Report	Social Report
Research & Development												
Production / Conversion												
Selling, Marketing, Advertising												
Administration												
Packaging & Delivery												
Consumption of company's products / Waste												
Taxes Paid												
Dividends & Interest												
Overall Profitability & Performance												

Activity	Give overall rating (0-4)	Directors & Chairman Report	Auditors Report	Income Statement	Balance Sheet	SOCIE	Cash Flow Statement	Notes to the AFS	Media Press JSE	Value Added Statement	Environmental Report	Social Report
Investment in Assets												
Financial Investment												
Potential future events and performance												

Optional Section

Core business activities have various impacts and potential effects, which affect stakeholders (interested parties) differently. How important do you believe the potential impacts of the following core business activities, are to key stakeholder groups?

[For example, you may believe that information on research and development into new products is:

- Critical (4) for investors, to indicate future profitability,
- Important (3) to funders and banks, to ensure future cash flows and ability to repay loans,
- Of some importance (1) to customers, to ensure improved products,
- Of relevance (2) to the public and environmental groups, to ensure new technologies and improved lifestyles, and to minimise pollution and environmental impacts,
- Important (3) to employees to ensure future jobs
- Of no relevance (0) to government regulators]

[Do not mark, if not relevant to them (or you may place a 0), 1: if of some interest, 2: if relevant, 3: if important to these specific groups, and 4: if it is critical that this particular group are informed about the (potential) impacts of this activity]

Activity	Shareholders & Potential Investors	Funders & Banks	Customers	Suppliers	General Public i.e. Society	Environment & Concern Groups	Employees	Other e.g. Government / Regulators
Research & Development								
Production / Conversion								
Selling, Marketing, Advertising								
Administration								
Packaging & Delivery								
Consumption of company's products / Waste								
Taxes Paid								
Dividends & Interest								
Overall Profitability & Performance								
Investment in Assets								
Financial Investment								
Potential future events and company performance								

Section C

Core business activities have **various impacts** and potential effects, which **affect stakeholders** (interested parties) **differently**. Where disclosed, the impacts of these activities are often reported in separate components of the annual report, including (possibly) a:

- Social Report
- Value Added Statement
- Employees' Report
- Environmental Report

The following questions pertain to such separate reports:

1) Do you believe that environmental, social and economic **information** should be **reflected** in **separate reports** or in separate components of the annual report?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

If you answered 'not at all' to this question, you may ignore questions 2 to 4 below

2) Do you believe that companies should **tailor** such reports to the **specific needs** of **key stakeholder** groups including employees, consumers, funders, suppliers, environmental concern groups and the government; possibly even to the extent of having separate reports available for each key stakeholder group?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

3) Do you believe that any such **separate reports**, (as mentioned in questions 1 and 2 above), should be prepared to the **same standards** of accuracy and completeness that the annual financial statements are?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

4) Do you believe that any such **separate reports** should be **externally verified** / audited, (like the annual financial statements are)?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

Section D

The following are six specific questions relating to stakeholders' right to information, and how that information should best be presented:

1) Do you believe that a **direct investor** (or potential investor) in a company has the **right** to know the full impact and effects of all activities that such a company undertakes?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

2) If you have money invested in the bank, are a member of a medical aid scheme, or contribute towards a pension, provident or retirement annuity fund (i.e. **indirect investment**), do you believe you have the **right** to know where your money is being invested, (i.e. in what types of companies or in which bonds)?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

3) As a **consumer** of products and services do you believe you have a **right** to know the full impact that the production processes involved in manufacturing a specific product (or the provision of a specific service), have had on the environment and workers' health?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

4) **Generally**, do you believe that all **stakeholders**, have a **right** to know the impacts that corporate activities do, and can possibly, have on them, their health, society, the environment and the economy?

☐ Not at all ☐ A little ☐ Some ☐ Mostly ☐ Completely

5) Assuming that stakeholders **did** wish to know the full impacts (environmental, social, health and economic) that have occurred as a result of business activities, **where** would such impacts be **most** effectively reported?

☐ On the product packaging, or (invoice in case of services) ☐ In the annual corporate reports, or ☐ Other e.g. media, internet etc

6) Many of the impacts of corporate activities, as highlighted by this questionnaire, are encouraged disclosure suggested by the Global Reporting Initiative guidelines, which are recommended by the King II Report on Corporate Governance in South Africa, as endorsed by the JSE. What do you believe would be the most significant reason **why** a company would **choose not to** disclose such information?

☐ Information is not available ☐ Amounts can't be quantified ☐ Reporting is too difficult / time consuming ☐ Costs exceed any potential benefits ☐ Data is too sensitive ☐ Not legally compulsory

Section E: Demographics

The following are a few questions about you to help us see if there are any overall relationships between respondents' answers and their position, education, experience (age), gender or social beliefs.

1) What is your position in your organisation / company / firm?

☐ Other, worker or specialist ☐ Supervisor ☐ Manager ☐ Line Manager ☐ Senior Manager ☐ Director / CEO

And are you?

☐ Administrative ☐ Technical ☐ Financial ☐ Other e.g. legal

2) Into which age grouping do you fall?

☐ Less than 35 ☐ Over 35 but less than 50 ☐ Over 50

3) What is your gender?

☐ Male ☐ Female

4) What is your highest education to date?

☐ Primary or Secondary Schooling ☐ Diploma (or any tertiary education) ☐ Bachelors Degree (3 year) ☐ Post Graduate, Honours, or 4 year degree ☐ Professional Certification e.g. engineer or accountant ☐ PhD, Masters, or MBA

5) Do you have prior knowledge or experience with corporate social or environmental reporting?

☐ None ☐ Very little ☐ Some exposure ☐ Training or courses ☐ Expert

The following is an optional question i.e. do not answer if you would prefer not to

6) What is your socio-political viewpoint?

☐ Ultra-conservative ☐ Conservative ☐ Moderate ☐ Liberal ☐ Socialist/Marxist

Thank you for taking the time to complete this questionnaire.

Additional explanations and guide to completing the questionnaire (for use only if needed):

Section A:

- Corporate activities impact on various stakeholders (see section B below) in a variety of different ways. Few of these impacts are presently disclosed in corporate financial statements, although many may be included in additional social and environmental reports. This first section looks at all the major impacts of corporate activities that might be important to stakeholders.
- In this section, in the first column, we would like you to indicate how important you think these impacts are on a scale from 0 to a maximum of 4
- For each impact, in terms of your personal experience, how well (if at all) do you think these are being disclosed by corporate reporting (from formal annual reports to less formal media releases)? Tick the appropriate column.
- Some explanations of the less obvious impacts are included on the next page.

Section B:

- The impacts as noted in Section A, are being caused by core corporate activities undertaken.
- Some of these are presently described in financial terms in current corporate reports. This section aims to determine how well you think the impacts of these specific activities (i.e. the cause of the impacts), are presently being conveyed by formal and informal corporate reporting.
- We would really like all respondents to put a rating in the first column, even if it is just your general impression, (we do not expect all respondents to have specialised knowledge of corporate reporting).
- Those persons without such specialised knowledge / experience (of corporate reporting) may draw a line through the remaining columns. (But please try answer the first column)
- There will however, be many specialised persons completing this questionnaire including Brokers, Fund Managers, CAs, CFAs and Bankers. If this applies to you, in your case you may have personal experience, (and possibly certain frustrations), with the presentation (or lack thereof) of key information by companies. Please then indicate which, if any, of the components of corporate reports provide you with the relevant information on corporate activities. Leave boxes blank, where in your experience, typically no useful information is provided.

Section C:

- Legally companies are answerable only to the government and their shareholders. However the premise of modern corporate social reporting is that, corporate activities impact on various groups of people (stakeholders), and that companies have a responsibility to account / report to these affected parties.
- There are four questions in this section to assess whether you believe that companies should prepare separate reports for their environmental, social and financial impacts, whether these should be tailored to specific stakeholder needs, how accurate they should be and whether they should be externally verified.
- For each question, tick the box that seems most appropriate to you.
- If you answer 'not at all' for the first question, you may ignore the rest of the questions in this section and proceed to section D.

Section D:

- These six questions are relatively self-explanatory, and pertain to your belief as to whether shareholders and other stakeholders have the right to detailed information on the effects and impacts of corporate activities.
- For each question, tick the box that seems most appropriate to you.

Section E:

- The overall study seeks overall to determine general stakeholder needs and perceptions of corporate reporting. This section seeks to collect demographic information on ALL respondents, the purpose of which is to isolate factors, which are not unique to the stakeholder group to which the respondent belongs, that could have influenced their answers.
- All information collected will be treated as highly confidential, and no details of any respondent will be released.

Terminology

Components of corporate reports (selected elements only)

- Directors and Chairpersons Report: these are largely statements on key activities and the performance of the company.
- Auditors Report: this verifies the fair presentation of the financial statements.
- Income statement (I/S): reflects the financial performance of the company.
- Balance sheet (B/S): reflects the financial position of the company.
- Cash Flow Statement (CF): summarizes the cash flows for the year, under key groupings.
- SOCIE: reflects movements in the financial reserves of the company.

- Notes to the AFS: provides more financial details to specific items in the I/S, B/S, CF and SOCIE.
- Value Added statement: identifies how the value created by the company has been distributed.
- Environmental and Social reports: these are not regulated in SA by any standards, and vary from company to company, with many companies not producing any at all.

Corporate Activities (selected elements only)

- Research & development: strives to develop new products and technology.
- Production / Conversion: this is the manufacturing process.
- Administration: the day-to-day activities involved in running a company.
- Packaging and delivery: these processes can be very costly, and can also generate significant quantities of waste products such as plastic, polystyrene and cardboard.
- Consumption of company's products: in many European countries companies can be held responsible for the use of their products and any resulting waste and pollution. This principle is known as responsibility from 'the cradle to the grave'.
- Taxes paid: reduces the profits available to the company and shareholders, but then become funds available for governments to spend on various public projects and administration.
- Investment in Assets: this is the funds companies spend on new equipment and machinery.
- Financial Investments: this is the funds that companies invest in banks, bonds and other companies.
- Potential future events and performance: is the company's / directors' medium and long-term plans and budgets and possibly also the potential effects and implications of these.

Impacts (selected elements only)

- Performance: indicates how well the company has done, financially.
- Governance and control: indicates how well the directors have managed and controlled the company and hence the shareholders' funds.
- Effects of marketing: indicates how significantly the marketing campaigns of companies have influenced consumers, by changing and creating demand for new or different products and influencing fashions / trends.
- Effects of corporate lobbying on political decisions: represent the single or collective influence that industry has had on political and government decisions such as taxes, legislation, incentives, labour and environmental law and policy.
- Employees, effect on social status and values of skills base: reflects the effect on employee's position and value in society, based on their job title and seniority, as well as the value that person has to society and their family as a result of the scarce, specialised or other skills they have acquired.
- Effect on mental health: the pressure that some employees work under may adversely affect them as they battle to cope with the stress, and hence this also impacts on their friends, family and community.
- Marketing and advertising: influences consumers', (public), wants and needs, creating tension, so that only purchasing these products or services satisfies these needs. This tension motivates people to take measures to address their needs. This can have positive, or negative effects on people. The latter is especially so where these needs cannot be met, for example as a result of insufficient financial resources.
- Indirect effect of pollution / industrialisation: can have negative impacts for people who live or work in or near industrial zones, and impair their quality of life.
- Direct contributions to society: represent donations and contributions by businesses to communities.
- Conversion of natural assets: refers to using up abundant, scare, renewable or non-renewable natural resources such as minerals, metals and organic products, to produce products or processed materials.
- Conversions of materials and chemicals, into other states / compositions: occurs intentionally and as by-product of industrial activity. New materials may be useful or harmful, for long or short time periods. Some processes can easily be reversed while others cannot be.
- Effect on shared natural resources: includes impact on air quality, global warming, water quality, radiation levels, and the ozone layer.
- Use and sources of energy: include efficient or inefficient use of energy, and whether that energy has been derived from renewable sources such as wind and solar, or from non-renewable fossil fuels.
- Effect on biodiversity (species richness): specifically of concern here is the direct, (on the plants or animals themselves), and indirect, (on their habitat), impact on threatened or endangered species, be it from pollution, waste, or the mining, sourcing or farming of the raw materials.
- Effect on the ecosystems health: specifically looks at the impact of pollution / by-products on the effective functioning of the natural living systems (the eco-systems).
- Effect on biomass: is determined as to whether as a result of the impact of industrial activities there are more or less natural living organisms (in mass) afterwards.

Annexure 2

Questions for representatives of stakeholder groups not formally surveyed on Corporate Social Reporting (CSR)

Part 1:

a) Is CSR currently adequate to meet the needs of users / stakeholders to convey corporate impacts on: *(tick either yes or no)*

	Yes	No
• The environment	☐	☐
• Employees	☐	☐
• Society / consumers / the community	☐	☐
• The economy	☐	☐
• Its future performance and likely impacts	☐	☐

b) How important is its to report on:

(Tick either very, moderate or little)

	Very,	Moderately,	Little
• The environment	☐	☐	☐
• Employees	☐	☐	☐
• Society / consumers / the community	☐	☐	☐
• The economy	☐	☐	☐
• Its future performance and likely impacts	☐	☐	☐

c) Generally do you think stakeholders (e.g. consumers / employees) have a right to know what corporate impacts are?

Yes	No
☐	☐

d) Do investors (direct and indirect) have a right to know the full details of the performance of companies they are investing in?

Yes	No
☐	☐

e) Do you think CSR should present separate data relevant to all major stakeholders?

Yes	No
☐	☐

Part 2:

What areas do you feel strongly should be reported on by companies?

Part 3:

What is the major reasons companies don't present better / more comprehensive CSR? *(Rank the possible reasons, 1 most likely / important; 2 less likely / important etc)*

- ☐ Its not technically feasible / possible
- ☐ There are no legal requirements
- ☐ There is no managerial interest
- ☐ It is considered of little importance
- ☐ It may be important, but is too difficult / time consuming
- ☐ It may be important, but it is too difficult and costly
- ☐ There is not enough pressure (market, industry, government)
- ☐ Other reasons
- ☐ No idea

Annexure 3

For CEO, MD, General Manager

Overall: Reporting (Code CEO)

1. Is your company part of a listed group? Y / N

1.b. No of Employees ☐

2. Does your company prepare any CSR? Y / N

3. To any guideline, standard N/A GRI ISO14001 Forestry Other

4. If yes to GRI,
Have you established scope, definitions,
Measure basis, and assurance. N/A Y / N

5. If your answer to (2) above was no, generally why not

☐ No idea / Reason ☐ No legal Requirement ☐ Too Difficult ☐ Difficult & expensive Costs .> benefits ☐ No Enforcement

6. Does your company subscribe to any other set of principles, EMS system, charter, guidelines or certification Y / N

7. Does your company's vision, mission, policies and / or objectives include:
   a. sustainable development Y / N
   b. identification of stakeholders Y / N
   c. social and environmental objectives / action plans Y / N

8. Within your company's corporate governance system, does it include committees, independent directors and processes to address social and environmental risks? Y / N
   b. Are there incentives for management on non-financial criteria Y / N

9.	Does your company have stakeholder engagement / consultation forums to address relevant issues including community, consumer and environmental issues?	Y / N
10.	Does your company record all donations to communities, including infrastructure?	Y/ N
11.	Does your company have policies to address grievances of local communities, and provide compensation when due?	Y / N
	Does your company address human rights issues through;	
12	Policies & guidelines	Y / N
13	investment decisions	Y / N
14	in your supply chain	Y / N
15	in employee training	Y / N
16	in security training	Y / N
17	with respect to no child and forced labour	Y / N
18	in disciplinary practices	Y / N
19	Does you company have policies in place against;	
	• bribery and corruption	Y / N
	• monopolies and anti-competitive	Y / N
20.	Identify all major suppliers and sources together with countries of origin?	Y / N
21.	Does your company have policies for managing upstream and downstream environmental and social effects	Y / N

Does your company have separate managers for the following key areas (and can we speak to them)?

	Name	Contact
Finance		
Marketing		
Production / Engineer		
Industrial Chemist		
Environmental		
Human Resources		

Section Manager Questions
General Areas: Measurement
Human Resources (Code HR)

(Manager: _____)

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	Not Applicable
1	Input of labour / expertise (hours / levels)				
2	Overall employment creation and staff turnover				
3	Value of training / experience gained by staff				
4	Extra staff benefits over and above direct remuneration				
5	Change in household well-being				
6	Change in purchasing power of households				
7	Change in labour power				
8	Change in employee motivation (buy-in)				
9	Change in staff capacity of work (health & age)				
10	Any idea about the above for suppliers / distributors				

11.

	If answers to previous question was less than complete									
	Not possible	Possible, but then why do you think it is not done?								
Area	(no tech-nology / method available	Legally required? Y/N/some Not sure	No interest (no value)	Little signific-ance (little benefits)	Signific-ant, but difficult (limited time)	Signific-ant, but difficult, costly (Cost> benefits)	Difficult & costly Not enough pressure	Other reasons	No idea	N / A
General										
Specific, list please										

General

12. Does your company have policies and programmes in place to support diversity, non-discrimination and management representation? Y / N

13. Are employees represented in corporate governance and restructuring decisions? Y / N

14. Do you know what percentage of employees, are represented by trade unions? Y / N

15. Do you your employees have freedom of association? Y / N

With respect to health and safety;

16. Are practices in line with the ILO / SA acts (e.g. occupation and safety)? Y / N
17. Do you have appropriate committees in place? Y / N
18. Do you have records of absenteeism and all injuries on duty? Y / N
19. Do you have policies and programmes in place for HIV/AIDS? Y / N
20. Do you have agreement with trade unions with respect to working conditions Y / N
21. Do you have systems in place to assess health and well being of workers? Y / N

Section Manager Questions
Marketing & Sales (Code MM) (Manager: _____)

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	Not applicable
1	Product need / change in consumer needs (numbers / levels), and cost of maintenance / change				
2	Value / level of customer loyalty				
3	Benefits to consumers (need / tension reduction, physical etc) through consumption of product				
4	Contribution to change in culture / lifestyle through marketing (e.g. numbers / degree / nature)				
5	Level of customer satisfaction with products / services				
6	Any idea on above for suppliers / distributors & retailers				

7.

	If answers to previous question was less than complete									
	Not possible	Possible, but then why do you think it is not done?								
Area	(no tech-nology / method available	Legally required? Y/N/some Not sure	No interest (no value)	Little significance (little benefits)	Significant, but difficult (limited time)	Significant, but difficult, costly (Cost> benefits)	Difficult & costly Not enough pressure	Other reasons	No idea	N / A
General										
Specific, list please										

8. Do you have policies in place to ensure consumer health and adequate product labelling? Y / N
9. Do you have records of compliance with legislation, and penalties / fines/ awards with respect to
   a. Product safety / labelling Y / N
   b. Advertising practices Y / N

10. Do you monitor / log customers complaints and follow-ups? Y / N

11. Do you have policies to ensure customer privacy? Y / N

Section Manager Questions
Finance & Accounting (code FM) (Manager: _____)

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	Not Applicable
1	Full input cost per product (resources, purchases, conversion)				
2	Value of Output per product				
3	Full cost of Marketing, sales, promotions				
4	Cost of developing new products, modifying existing products				
5	Credit / investment received				
6	Value of government support, stability, subsidies, infrastructure versus taxes paid				
7	Return on investment (to whom, how etc)				
8	Productivity and contribution to economy				
9	Environmental related expenditure per category				
10	Any idea of the above for suppliers / distributors / retailers				

11

	If answers to previous question was less than complete									
	Not possible	**Possible, but then why do you think it is not done?**								
Area	**(no tech-nology / method available**	**Legally required? Y/N/some Not sure**	**No interest (no value)**	**Little signific-ance (little benefits)**	**Signific-ant, but difficult (limited time)**	**Signific-ant, but difficult, costly (Cost> benefits)**	**Difficult & costly Not enough pressure**	**Other reasons**	**No idea**	**N / A**
General										
Specific, list please										

12 How far in advance yours your organisation prepare budgets

Not at all 6months 1 year 2 to 5 years 5 to 10 years

Section Manager Questions
Production & development

(Manager: _____)

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	N / A
1 (Code IC)	**Industrial Chemist:** Prepare and reconcile a mass balance?				
2	Account for distribution of output (air, water, land, controlled versus uncontrolled)				
3	Record outputs per category				
4	Identify all hazardous outputs				
5	Identify any inputs from other waste				
6	Know the above for suppliers & distributors				
7	Know the above for consumers (using the product)				

8.

	If answers to previous question was less than complete									
	Not possible	**Possible, but then why do you think it is not done?**								
Area	**(no tech-nology / method available**	**Legally required? Y/N/some Not sure**	**No interest (no value)**	**Little signific-ance (little benefits)**	**Signific-ant, but difficult (limited time)**	**Signific-ant, but difficult, costly (Cost> benefits)**	**Difficult & costly Not enough pressure**	**Other reasons**	**No idea**	**N / A**
General										
Specific, list please										

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	N / A
1 (Code EM)	**Environmental Manager** Account for impacts on immediate environment from production / conversion				
2	If yes, what indicators are measured, and how frequently				
3	Estimate impact, regionally, globally				
4	Estimate the full environmental impact of transport (total or per product)				
5	Know the above for suppliers & distributors				
6	Know the above for consumers (using the product)				
7	Specifically measure the use of water and impact on water resources				

8.

	If answers to previous question was less than complete									
	Not possible	**Possible, but then why do you think it is not done?**								
Area	**(no tech-nology / method available**	**Legally required? Y/N/some Not sure**	**No interest (no value)**	**Little signific-ance (little benefits)**	**Signific-ant, but difficult (limited time)**	**Signific-ant, but difficult, costly (Cost> benefits)**	**Difficult & costly Not enough pressure**	**Other reasons**	**No idea**	**N / A**
General										
Specific, list please										

9. Do you have (know of) operations in environmentally sensitive areas? Y / N
   If yes, do you know the impacts on such areas Y / N

10. Do you have programs to restore any degraded land? Y / N

11. Do you know the surface area of all land (you lease or own) that is impermeable? Y / N

12. Do you record all accidents and spills? Y / N

13. Do you take responsibility for products from the "cradle to the grave"? Y / N

14. Do you record compliance with national and international regulations? Y / N

Activity; Does your company measure / record the following:		Fully	Partially	Not at all	N / A
1	**Engineer: (Code ENG)** All sources & amounts of energy input				
2	Account for final state of energy i.e. reconcile				
3	Measure / compare labour / machine efficiency				
4	Know % product recyclable, from renewable sources and biodegradable				
5	Know the above for suppliers & distributors				
6	Know the above for products, including consumption and "energy footprint"				

7

	If answers to previous question was less than complete									
	Not possible	**Possible, but then why do you think it is not done?**								
Area	**(no tech-nology / method available**	**Legally required? Y/N/some Not sure**	**No interest (no value)**	**Little signific-ance (little benefits)**	**Signific-ant, but difficult (limited time)**	**Signific-ant, but difficult, costly (Cost> benefits)**	**Difficult & costly Not enough pressure**	**Other reasons**	**No idea**	**N / A**
General										
Specific, list please										

8. Do you have measures to improve efficiency, and or use renewable sources? Y / N

	Does your company measure these activities?				If answers to previous question was less than complete									
					Not possible	Possible, but then why not?								
Activity; Does your company measure / record the following:	Fully	Partially	Not at all	Not / Appicable	to measure	Legally required? Y/N/some Not sure	No interest (no value)	Little significance (little benefits)	Significant, but difficult (limited time)	Significant, but difficult, costly (Cost> benefits)	Difficult & costly Not enough pressure	Other reasons	Never thought of trying to measure	N / A
Research & Development (only) (R&D) Value of new products services created														
Agriculture (only) (AGR) Biomass created														
Energy Production (only) (EP) Limited organic sources converted														
Extraction (source i.e. mining only) (MIN) Proportion of non-renewable supply / world stocks														

Annexure 4

Order	Code	Name	Products / Services	Comments
1	AutL	FILPRO (PTY) LTD	automotive and industrial filters	Complete
2	AutL	RAMSAY ENGINEERING (PTY) LTD	automotive components/animal ear tags/security products	Complete
3	AutL	KAYMAC ROTOMOULDERS	plastic moulded products for industrial & automotive industry	Complete
1	BevL	TIGER MILLING PMB	maize & wheat	Complete
2	BevL	MEADOW FEEDS NATAL	animal feed	Complete
3	BevL	NESTLE (SA) (PTY) LTD	chocolate & confectionary products	Refered to HO, never responded
4	BevL	A.B.I	soft drinks	Various delays, beyond 12/01/06
5	BevL	SOUTH AFRICAN BREWERIES	liquor and fruit beverages	Data partially collected
1	CheL	BOEHME (AFRICA) (PTY) LTD	chemicals & supplies for textile, leather and paint	Complete
3	CheL	GLOBAL COMPOSITES	composites	Various delays, beyond 12/01/06
2	CheM	ANCHOR CHEMICALS (PTY) LTD	chemicals	Complete
1	ConL	P.G. BISON LTD	board - particle	Complete
2	ConL	COLLINS CONTRACTORS	building contractors	Various delays, beyond 12/01/06
3	ConL	HOLCIM (SOUTH AFRICA) (PTY) LTD	stones	Complete
4	ConL	LIBERTY MIDLANDS MALL	shopping mall	Complete
1	EduL	UNIVERSITY OF NATAL	educational institution	Complete
2	EduL	DURBAN INSTITUTE OF TECHNOLOGY	education - technikon	Various delays, beyond 12/01/06
3	EduL	EPWORTH SCHOOL	education - private school	Complete
1	EleL	SHURLOK	motor vehicle electronics	Denied access to company
2	EleL	TELKOM BUSINESS SALES	telecommunications	Complete
3	EleL	ABERDARE CABLES	manufacturer of electrical cables	Complete
4	EleL	NORTECH INTERNATIONAL	electronic components for parking/traffic industries	Complete
1	EngL	SOMTA TOOLS	steel cutting tools	Complete
2	EngL	WEBROY (PTY) LTD	springs & wire products for agricultural,automotive & engineering	Complete
3	EngL	HARDWARE ASSEMBLIES (PTY) LTD	transmission and distribution line equipment	Data partially collected
1	FinL	STANDARD BANK OF SA LTD	bank	Complete
2	FinL	ABSA BANK PIETERMARITZBURG	bank	Complete
3	FinL	NEDBANK CORPORATE	bank	Complete
1	ForL	MONDI FORESTS	timber/sugar cane	Complete
2	ForL	NCT FORESTRY CO-OPERATIVE LIMITED	timber co-operative	Complete
3	ForL	INTERPAK BOOKS	printers/packaging and bookbinding	Complete
1	HouL	Belgotex Carpets		Complete
2	HouL	PRILLA 2000 (PTY) LTD	yarn spinners	Complete
3	HouL	M.G. SHOES (PTY) LTD	footwear	Data partially collected
1	MedL	THE WITNESS	printers & publishers and news reporting	Complete
2	MedL	GOLDEN HORSE CASINO HOTEL	hotel	Complete
3	MedM	IMPERIAL PROTEA HOTEL	hotel	Complete
1	MinL	HULETT ALUMINIUM (PTY) LTD	aluminium foil / sheets/ extruded aluminium products	Complete
2	MinL	ASSMANG MANGANESE	smelters of manganese/high carbon ferro	Complete
3	MinL	PRESSURE DIE CASTINGS (PTY) LTD	pressure die cast products for building & automotive industry	Complete

1	OilL	ESKOM	electricity	Data partially collected
2	OilL	F.F.S. REFINERS (PTY) LTD	refiners of solvents & oils	Complete
3	OilL	SEALAKE INDUSTRIES	oils/soap/candles	Various delays, beyond 12/01/06
4	OilS	P. TRIMBORN AGENCY CC	fuel/oil and gas depot	o/s
1	PhaL	ST. ANNES HOSPITAL	hospital	Complete
2	PhaL	PIETERMARITZBURG MEDI-CLINIC	hospital	Complete
3	PhaL	INNOXA S.A.	cosmetics	Data partially collected
1	RetL	PICK n' PAY FAMILY STORE	supermarket	Complete
2	RetL	WOOLWORTHS	departmental store	Complete
3	RetL	THE HUB	departmental store	Complete
1	SerL	UMGENI WATER	bulk water supply	Complete
2	SerM	WASTEMAN	waste removal & disposal	Complete
3	SerM	RED ALERT SECURITY (PTY) LTD	security	Data partially collected
1	TraL	BAKERS TRANSPORT PTY LTD	transport operators	Complete
2	TraL	MANLINE TRANSPORT (PTY) LTD	transporters of goods	Complete
3	TraL	M.A.N. TRUCK & BUS S.A.	truck & buses	Complete

Annexure 5

Notes on Key interactions

The following is a summary of key interactions, identified in Figure 7.1, the conceptual framework of the interactions between social and physical systems / 'realities' and their subsystems

Physical / Social Split:

- Mattessich notes that there are potentially many possible layers of realities (1995: 43). He distinguishes between Physical/ Chemical and Biotic realities, which in this paper have been grouped in a physical reality, with subsystems distinguishing between these splits; a social reality, which he notes includes moral, economic and legalistic subsystems; and a Psychic reality, which this paper ignores.
- Corporations only exist in a social reality, however they operate in a physical reality, through people, specifically their employees. It is the impacts of these interactions caused by corporate activities, both in physical and social realities that is the focus of this paper.

Physical / Chemical environment (natural)

- The physical / chemical environment contains all matter and energy, however for the purpose of the paper, it is important to separately consider, and hence split out, subsystems of biotic matter, matter that has been converted / altered by humans ('artificial'), and naturally occurring matter / resources.
- The physical environment contains all resources, which are used by biotic systems to sustain life, as well as resources which are used by humankind to convert into artificial products to support or sustain their lives / lifestyles.
- All humans as well as other organisms and biotic systems, impact on the physical environment (for example extracting oxygen and carbon, and returning waste products)
- The conversion of natural resources into artificial resources / products has significant impacts, reducing resources available (in the case of non replenishing resources) as well as creating wastes, many of which do not readily degrade back to base substances, through natural or biotic processes.

Biotic environment

- The biotic environment includes all life systems, however human life has been specifically separated out, as humans form the interaction between physical and social realities
- Life systems, in order to continue on a self-replenishing system, that is to be sustainable, need to operate in balance with each other and with the physical environment. Where such a balance ceases to exist (as in the case of humankind), the system fails either leading to a new system, genetic modification of key species, or extinction of multiple species.

Artificial environment.

- This is of specific concern in this paper, as it consists of all natural (or previously modified products) which have been altered for human use / by

human use. Such modification processes create waste, and impacts on the availability and quality of natural resources remaining, as well as biotic systems by impacting on the natural resources upon which they depend.

Shareholders / Funders

- These persons indirectly control corporations and all their resultant activities.
- Their primary concern is the generation of wealth in the institutional (economic/ legal/ financial) system through the interaction between the company, its employees and the customers.

Companies / Organisations

- These exist in the social reality, in both institutional and socio-political subsystems, where they represent more that just the collection of people who work for them / represent them.

Employees

- These consist of workers and management, and represent the physical manifestation of the corporation
- Their activities are ultimately directed by the shareholders, and are further directed by their appointed positions / roles within the corporation.
- They cause resources to be converted into artificial products (creating value to society). Even in the case of those entities operating in the service sector, resources are used to provide such services.
- They cause the public to purchase and consume these products (through marketing campaigns), which are paid for by transferring funds / credit within the institutional system.
- Transfer of funds / credit within the institutional system in turn rewards them for their activities. They give their time, (part of their life) for this, however they also gain experience and skills, which has value to society.

Public and Consumers

- They are influenced by the activities of the employees of corporations, giving their time and funds / credit for goods and services that support their lives / lifestyles.
- Collectively they represent the physical manifestation of social and political systems (that is society), both being governed by the belief and value systems of society, and in turn influencing such systems. Their interaction with the employees of corporations, and exposure to and understanding of the activities of these corporations (which is where CSR plays a key role), determines their view of these corporations and ultimately their / society's support for such corporations.

Social and Political systems.

- These include the formal and informal rules, which determines how society operates and the public behave, as well as how institutional systems operate.
- These systems and their rules are influenced by feedback from public perception and responses to specific corporate activities, as well as by institutionalised (formal) systems.

Institutional systems (financial / economic / legal)

- These are a formal manifestation of specific operating systems of society.
- They formally record and account for funds / wealth distribution and movement.
- It is assumed that the goal of most persons is to maximise their wealth, within the framework of their personal values system, as well as the rules that society has developed, (the socio-political system).
- Shareholders / funders strive to achieve this through business activities undertaken through the vehicle of corporations. The activities of these corporations are reported, from an institutional (financial / economic / legal) perspective only, in traditional annual financial statements which provide accountability to shareholders / funders. If CSR were made public, this would provide limited accountability to a broader range of stakeholders / the public. Only in a few (mostly European) countries, is CSR determined by legal systems.
- CSR is largely influenced by socio-political systems (refer to earlier discussion on stakeholder theory). Hence it should not be reported solely from an institutional perspective, but rather needs to be viewed from a socio-political perspective, that is meaningful to the public, portraying impacts and interactions in:

  Social Realities, including
  - Socio-political systems
  - Public / consumers
  - Employees

  Physical realities, including
  - Physical and artificial
  - Biotic systems

Annexure 6.

Letter sent via e-mail to measurement experts

Dear Sir / Madam

As one of the worlds foremost / leading experts on Corporate Social Reporting (I cited your work several times during my PhD thesis so far), I would really appreciate it if you could assist by briefly reviewing the attached model (three pages only).

I am busy with my PhD on CSR in South Africa, which aims to identify improvements needed for CSR in a South African context. I started with an extensive survey of significant stakeholder needs and expectations as the basis for CSR, which has then been considered when developing the attached model. This model considers physical (including environmental) and socio-economic realities in parallel. The model takes a systems approach (functionalist), specifically utilising a systems framework for integrated economic and social theory (Parsons), which is then consistent with a positivist systems approach for the consideration of the environmental impacts (see framework). The second phase of my PhD will be to apply this to a multitude of different companies in different industries.

Its not the model as such that I will be testing rather, I will be trying to identify reasons for and challenges to, successful implementation of a comprehensive CSR system. Thus I'm not looking as a specific model such as the GRI, but rather the principles behind such a model and hence the implied reporting. Thus I has listed such implied reporting (principles of reporting) and suggested keynotes.

The validity of the work I will be doing will be dependent upon the validity of the proposed framework. It is in this regard, that I would really appreciate the opinion of one of the world's top experts such as you.

I appreciate that a person in your position will be incredibly busy, with hundreds of people constantly expecting things of you. However, a project such as this would have limited significance without expert review. I would thus appreciate any feedback you can give, be it a one-line e-mail, to notes scribbled while waiting for a meeting, to even a serious critique.

Thanking you

Yours faithfully

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Attached were:

- Figure 7.3 diagrammatic representation of the interactions between businesses and elements of social and physical realities (the framework upon which the model was based),
- Table 10.1 showing the required disclosure of the proposed model,
- Table 10.2 listing the suggested notes for the proposed model