Integrated reporting compliance with the Global Reporting Initiative framework: An analysis of the South African mining industry

Adorita Tertia Hindley

Hons BCom (CTA)

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Supervisor: Prof PW Buys

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ABSTRACT

TITLE: Integrated reporting compliance with the Global Reporting Initiative framework: An analysis of the South African mining industry

KEYWORDS: Corporate social responsibility, financial reporting, GRI framework, integrated reporting, sustainability, triple-bottom-line

In this day and age sustainability is gaining increasing importance seeing as this is of utmost importance to stakeholders. Yet, very few people are aware of the true meaning of sustainability. Stakeholders, also being the users of the annual report, need to be aware of the impact a company has on the environment and the society as well as their financial performance in order, among others, to make informed decisions regarding investments.

For all financial years ending on or after 1 March 2010, all companies listed on the JSE have to report on sustainability (this is a JSE listing requirement). Yet, no statutory requirement for adherence to reporting standards relating to sustainability exists. This creates the risk that sustainability reports will omit negative impacts or be otherwise misleading, yet the company is still seen as adhering to listing and thus statutory requirements.

The Global Reporting Initiative (GRI) developed their Sustainability Reporting Framework in order to serve as a benchmark for measuring sustainability. This Framework includes the Sustainability Reporting Guidelines (including basic principles and standard disclosures that need to be included in the report), Sector Supplements (including sector specific issues) as well as the Technical Protocol (which guides the entity in defining the content of the report). This is currently the only formal guideline available and is widely used around the world.

Given the importance of the mining industry in South Africa, this article considers the quality of integrated reporting of the South African mining industry. This is done by undertaking a quantitative, applied, descriptive methodology in order to answer the research questions. Thus compliance with the globally accepted GRI Sustainability Framework has been evaluated and analysed. Using a sample of 13 of the mining companies included in the JSE Top 40 companies, the results show that these companies use the GRI G3.1 Guidelines in producing their sustainability report and that adherence improves annually. Some companies,

however, do not apply the *Sector Supplements* which was designed to include industry-specific impacts.

OPSOMMING

TITEL: Geïntegreerde verslagdoening se nakoming van die "Global Reporting Initiative Framework": 'n Analise van die Suid-Afrikaanse mynbou-industrie.

SLEUTELTERME: Korporatiewe sosiale verantwoordelikheid, finansiële verslagdoening, GRI raamwerk, geïntegreerde verslagdoening, volhoubaarheid, "triple-bottom-line"

In vandag se tyd word volhoubaarheid al hoe meer belangrik as gevolg van die toenemende belangrikheid daarvan vir belanghebbendes. Tog is bitter min mense bewus van wat die ware betekenis van volhoubaarheid is. Belanghebbendes moet, as gebruikers van die jaarverslag, bewus wees van die impak wat 'n maatskappy op die omgewing en samelewing het, sowel as die maatskappy se finansiële prestasie. Dit is sodat hulle, afgesien van ander oorwegings, ingeligte besluite kan neem rakende beleggings.

Alle maatskappye wat op die JSE gelys is, moet oor volhoubaarheid rapporteer vir finansiële jare eindigend op of na 1 Maart 2010 (dis 'n JSE vereiste om gelys te word). Tog is daar geen statutêre vereistes vir hierdie maatskappye om aan enige rapporteringstandaarde in verband met volhoubaarheid te voldoen nie. Dit laat die risiko ontstaan dat volhoubaarheidsverslae negatiewe aspekte sal uitsluit of andersins misleidend sal wees, tog sal die maatskappy steeds gesien word as nakomend van die JSE regulasies en dus ook van statutêre vereistes.

Die *Global Reporting Initiative* (GRI) het hul *Sustainability Reporting Framework* ontwikkel om as 'n standaard te dien waarteen volhoubaarheid gemeet kan word. Hierdie raamwerk sluit die *Sustainability Reporting Guidelines* (wat die basiese beginsels en standaard openbaarmakings wat in die verslag ingesluit moet word insluit), *Sector Supplements* (wat sektor spesifieke aspekte aanspreek) sowel as die *Technical Protocol* (wat die maatskappy lei in die vasstelling van die omvang van die verslag) in. Hierdie is tans die enigste formele riglyne wat beskikbaar is en word reg oor die wêreld gebruik.

Gegewe die belangrikheid van die mynbousektor in Suid Afrika, oorweeg hierdie artikel die kwaliteit van geïntegreerde verslagdoening van die Suid-Afrikaanse mynbou-industrie. Dit word gedoen deur 'n kwantitatiewe, toegepaste en beskrywende metodologie te volg om die navorsingsvrae te beantwoord. Dus is voldoening aan die wêreldwye aanvaarde *GRI Sustainability Framework* ge-evalueer en geanaliseer. Deur 'n steekproef van 13 van die

mynboumaatskappye wat op die JSE gelys is te gebruik, het die resultate getoon dat hierdie maatskappye inderdaad die GRI G3.1 riglyne toegepas het in die produsering van hul volhoubaarheidsverslae. Die studie het ook getoon dat voldoening aan hierdie riglyne jaarliks verbeter. Tog pas sommige maatskappye nie die *Sector Supplements* toe wat ontwerp is om industrie-spesifieke impakte in te sluit nie.

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REMARKS

The reader is reminded of the following:

- This mini-dissertation is presented in the article format in accordance with the policies of the North-West University's faculty of Economic and Management Sciences' WorkWell Research Unit and consists of one research article.
- In the instance of an article format mini-dissertation, the faculty of Economic and Management Sciences' Regulation E.9.3 requires that the mini-dissertation consists of at least one (1) publishable article that has been submitted to a Department of Education approved peer-reviewed journal.

CHAPTER 1

1. INTRODUCTION

1.1 BACKGROUND

Data can be compared to oil – getting insufficient or bad data (or not understanding the data) is like running out of gas (Oberholzer, 2011:48). Achieving effective communication is essential to any company and reporting comes down to one fundamental principle: the ongoing search for effective communication.

According to the Oxford Dictionary (2012) reporting is defined as a verb describing the action of speaking, which can also relate to both direct and reported speech. Reporting can also be defined as the provision of information to others (Brockington, 2004:223). According to Eccles and Krzus (2010:30), reporting is of the utmost importance seeing as it communicates to the world a company's performance, both positive and negative, and its aims for the future.

Financial reporting can be described as financial statements or accounts prepared annually by most entities (Leadbetter, 2011:35). This is done to provide information, calculate taxation liabilities, for loan applications or statutory applications. The Dictionary of Accounting Terms (2012) defines financial reporting as the presenting of financial data of an organization's position, operating performance, and the flow of funds for an accounting period. It is added that the financial statements and related information can be presented in various forms for the use of external parties. Thus financial reporting aims to *report* or to *communicate*. Reporting is therefore essential to management functions like planning and control.

According to Ho and Taylor (2007:123) sustainability (in addition to financial and economic factors) is becoming more and more important as a basis for investment decisions, and consumers are growing more conscious of the social and environmental performance of the entities from whom they buy goods and/or services. Ho and Taylor (2007: 123) also stated that evaluating performance based on economic factors alone is not sufficient because stakeholders may be concerned about whether a company is being socially responsible and environmentally friendly (they may, for example, not want to invest in a company that uses child labour, have a poor human rights record or may contribute to ecological accidents).

Lev and Zarowin (1999) indicated that the usefulness of financial information to investors and stakeholders has been deteriorating due to the increasing demand from stakeholders for relevant information. Not too long ago, a company would have been considered an exemplary, well-performing organization if it could deliver its products, publish an annual report and distribute dividends, but no longer (Deloitte, 2011a). Today there are growing expectations for companies not to simply turn a profit.

1.2 THE EVOLUTION OF CSR REPORTING

1.2.1 Social Responsibility Reporting

In the mid-1990s, a tendency to incorporate more information about social, ethical and environmental aspects of the company's activities arose (Daub, 2007). This particularly applied to companies that – for whatever reason – decided not to publish a separate sustainability report. This was the start of what later would become known as integrated reporting.

In the light of the current social and economic climate, many entities are now voluntarily publishing corporate social responsibility reports together with their financials (Eccles & Krzus, 2010:29). Even though these entities may have the right intentions, there is mostly little or no linkage between the information published in the financial- and non-financial parts of the report which greatly limits either document's overall value.

The challenge of how to treat information of a non-financial nature with the same strictness and thoroughness that we treat financial information thus remains (Oberholzer, 2011:48). To accept, understand and fully embrace the perception of sustainability, guidance and principles are needed (Rogers & Ryan, 2001:282) and the Sustainability Reporting Framework (developed by the Global Reporting Initiative) gives the needed guidance for entities on how to report on their sustainability performance (GRI, 2011c).

According to the GRI (2011a), they are a network-based organization that produces and continuously improves an encompassing sustainability reporting framework and this framework is used all around the world. Thus the Global reporting Initiative (GRI) was founded to create an all-inclusive framework that gives guidance on how to properly report on sustainability issues. According to their mission statement they also strive to make

sustainability reporting standard practice (GRI, 2011b). The GRI used the principle of corporate social responsibility (CSR) and economic, social and environmental impacts in their approach to the creation of a framework for reporting on sustainability (GRI, 2011a).

1.2.2 Integrated Reporting

An integrated report serves as a way of reporting financial and non-financial information in a way that shows how they affect each other (Eccles & Krzus, 2010:30), meaning that it shows how non-financial performance contributes to financial performance, and vice versa. For the individuals who are responsible for the communication of an entity's performance, integrated reporting can be a very useful means of finding the way through an endless sea of data (Oberholzer, 2011:48).

An integrated report, however, is not a sustainability report added on to a financial report or vice-versa (Deloitte, 2011a). Oberholzer (2011:48) clearly supports this view by stating that integrated reporting is in no way merely adding a paragraph or two to an annual report. It requires an overall understanding of what will make a good integrated report for a specific company. According to the King Code of Governance for South Africa (2009:108) (also known as the King III), integrated reporting means an overall representation of the company's performance both financially and in terms of its sustainability and it can take the form of a single report or dual reports. Thus integration should not be reduced merely because of physical limitations of the document – the focus is on substance over form. If more than one document is used, it should be made available at the same time and presented as an integrated report (King Code of Governance for South Africa, 2009).

According to the Integrated Reporting Committee (IRC), an integrated report tells the holistic story of the company (IRC, 2011). It reports to stakeholders on the strategy, performance, and activities of the organization in such a way that it allows the stakeholders to assess the ability of the company to create, as well as to sustain the value created in the future. Oberholzer (2011:48) stated that a clear understanding of stakeholder expectations is required, as well as how those expectations can be met.

According to Deloitte (2012:10), integrated reporting refers to what can be called "integrated thinking". This can be seen as the application of the shared minds of those charged with governance as well as the ability of management to manage and communicate the full

complexity of the value-creation process (and the effect this has on the success of the business as a whole) (Deloitte, 2012). According to Eccles and Krzus (2010:30), an integrated report can significantly affect how companies operate and how they are viewed by their investors. It shifts the focus from meeting short-term goals to developing and following a long-term business strategy that involves a commitment to CSR and to a sustainable society.

1.2.3 The GRI Framework

The Sustainability Reporting Framework, as developed by the GRI, is made up of the Sustainability Reporting Guidelines, Sector Supplements and the Technical Protocol that applies the Report Content Principles as outlined in the Sustainability Reporting Guidelines (GRI, 2011c).

- The Sustainability Reporting Guidelines: The foundation and cornerstone of the Framework is the Sustainability Reporting Guidelines. They were initially published in 2006 and they are publicly available at no cost (GRI, 2011a).
- Sector Supplements: The Sector Supplements are available in every set of Sustainability Reporting guidelines and they cover specific sector issues for selected sectors (GRI, 2011d).
- Technical Protocol: The Technical Protocol – Applying the Report Content Principles, guides the reporting entity through the process of defining the contents of the sustainability report (a step required by the Sustainability Reporting Guidelines).

1.3 THE IMPORTANCE OF THE MINING INDUSTRY IN SOUTH AFRICA

According to the National Treasury (2010:17), apart from the electricity sector, the metals sector is responsible for the highest CO_2 emissions in South Africa– 22.2% of total emissions. Sasol, BHP Billiton, ArcelorMittal SA and Anglo-American are amongst the top 5 firms with the highest emissions in South Africa (National Treasury, 2010).

According to SouthAfrica.info (2012), South Africa is the world's largest platinum producer and one of the leading producers of base metals, coal, gold and diamonds. South Africa also holds the biggest natural reserves of chrome ore, manganese ore, gold and platinum-group metals. SouthAfrica.info (2012) states that the metals and minerals sector accounts for about

a third of the market capitalization of the JSE and is the main magnet for foreign investors to invest in South Africa. According to the annual report of The Chamber of Mines of South Africa (2011:16), the mining and minerals industry contributed 42% (or R1.9 trillion) of the market capitalization of the JSE.

According to the Chamber of Mines of South Africa (2011:16) the following was contributed by the mining and minerals sector in 2010:

- Eight comma six percent (8.6%) direct contribution to the GDP of South Africa with a further 19% indirect contribution;
- Over 50% of merchandise exports;
- Approximately 20% of gross investment;
- About 30% of the capital inflows into the economy; and
- Ninety-four percent (94%) of South Africa's electricity generating capacity.

The Chamber of Mines of South Africa (2011:16) also indicated that in 2010 the mining and metals industry of South Africa was the biggest contributor (measured in rand value) to black economic empowerment (BEE) in terms of BEE transactions completed.

The importance of the mining and minerals sector lies not only in the sector itself but also in the contribution it makes to other sectors. According to SouthAfrica.info (2012) this sector also supplies numerous associated industries with the mining products needed to keep the South African economy running. This is clear from the fact that 98% of South Africa's cement and over 90% of the steel is locally manufactured from locally produced minerals. The Chamber of Mines of South Africa (2011:16) estimated that around R200 billion in value is added to the South African economy through intermediate and final products produced by South African mines. Mineral exports accounted for 31.7% of the total merchandise exports of South Africa.

The Annual Economic Report, issued by the South African Reserve Bank, made the crucial point that 48% of the merchandise exports in the first half of 2007 could be attributed to gold-mining products (Steyn, 2007). Steyn (2007) also states that foreign investors view South Africa as driven by commodities and do their investments based on commodity prices.

In 2012, according to Datamonitor Plc. (2008), the South African mining and metals industry sector is forecast to have a value of $370.4 billion (which shows an increase of 51.6% since 2007) Thus clearly the mining and minerals sector is of key importance to the South African economy and the major draw card for foreign investors to invest in South Africa. The integrated reports of all mining and minerals companies would therefore have a major impact on the overall economy of South Africa, hence the research's focus on the Mining and Minerals sector.

1.4 MOTIVATION OF ACTUALITY OF TOPIC

In this day and age CSR reporting is becoming of increasing importance to commercial organizations, with many of them integrating CSR into their organization's strategic management in order to create a variety of benefits (Walters, 2009:1). According to Deloitte (2011b, 1), sustainability has been increasingly, over the last 40 years, demanding the attention of business executives in many regions of the world. In addition to stating that an increasing number of entities are implementing socially and environmentally friendly policies, they also mentioned that 4 000 companies now compile their sustainability reports using the framework developed by the GRI (including several large firms such as Walmart, Electrolux, P&G and Tesco). These policies are associated with an array of issues such as climate change, water consumption and usage, responsible investment, impartial labour relations and preserving resources and living standards for future generations. Thus sustainability reporting is becoming more and more common and important.

In the South African Institute of Chartered Accountants' (SAICA) report on Sustainability- and Integrated Reporting (SAICA, 2011) all companies listed on the JSE have to report on sustainability for all financial years ending on or after 1 March 2010. Thus all of the companies that are listed on the JSE will have to issue sustainability reports at the very least for their 2010 financial years. A problem arises seeing as reporting on sustainability is mandatory, but conforming to GRI requirements is voluntary. Just as financial reporting needs to adhere to standards (e.g. IFRS), integrated reporting needs a way to be measured as well. Without this, sustainability reports can turn out to be inadequate, misleading or even futile without the much needed guidance in this revolutionary area of reporting.

The World Commission on Environment and Development (WCED) described sustainable development as "development that meets the needs of the present without compromising the

ability of future generations to meet their own needs" (Deloitte, 2011b). Thus a risk arises that the mandatory reports may not serve the initial goal of reporting on sustainability which is to get companies to take the needs of future generations into consideration while pursuing their own.

Clearly mandatory reporting, along with voluntary adherence to guidelines on reporting, presents many modern companies with a conundrum.

1.5 PROBLEM STATEMENT AND RESEARCH OBJECTIVES

Considering the above, the question can be asked as to the extent to which the integrated reports of the South African mining companies – as submitted/provided to the JSE – have been prepared in compliance with, and consideration of, the GRI guidelines.

In answering the stated research question, three further questions can be formulated, namely:

- What are the key aspects that are reported on by the mining companies?
- What is the level of integration of the 'sustainability' reports with the 'conventional' annual financial statement?
- What rating (A, B or C) is given to the applicable reports by the GRI?

This study sets out to address the above-mentioned problem. Thus by comparing and analysing the sustainability reports of the mining companies listed on the JSE, with the G3.1 Guidelines and the Sector Supplements for Mining and Mineral companies, the primary objective is to determine the extent to which these companies' sustainability reports adhere to the G3.1 Guidelines and the Sector Supplement for Mining and Mineral companies.

Following from the primary objective as stated, the following secondary objectives of this study can be defined:

- To identify the key aspects that are reported on;
- To evaluate the level of integration of the sustainability aspects with the financial aspects included in the reports; and
- To identify and evaluate the rating given to the report by the GRI.

1.6 RESEARCH METHODOLOGY

1.6.1 Introduction

Before embarking on a research project it is necessary to understand the research methodology and research design to be followed in such a project. This is the purpose of this section. Basic definitions applicable to the research methodology are discussed along with the research design, method of sample selection and how the relevant data was obtained. The research design was developed to answer the research questions as stated above.

The main objective of this study is to evaluate the quality of integrated reports issued by JSE listed companies. This study may further serve to indicate whether these companies adhere to the GRI Reporting Framework and to what extent they do. In order for these objectives to be met, one first needs to clarify the research approach used in this study.

Research can be described as a cautious, methodical, patient study and investigation of a specific area of expertise which is conducted in order to establish evidences, realities or philosophies (Kumar, 2005). Kumar (2005:7) also states that research is a designed analysis that uses acceptable methodologies in order to find answers to questions and produce new knowledge. Williams (1998:3) defines research as a methodological process of investigation and enquiring in order to increase overall knowledge or in order to solve a specific problem. Thus one can summarize the concept of research as the collection and analysis of data in order to find the answers to previously identified research questions.

- Research methodology: According to Clarke (2005:23), a method or techniques can be used in order to prove the existence of or show relationships between aspects in a format from which a conclusion can be drawn. The purpose of a research methodology is therefore to define what initiated a research activity, to help establish what processes will be applied, how progress and results will be measured and it specifies how results can be interpreted and communicated (Clarke, 2005). The quality and validity of any findings resulting from research are directly dependent on the accountability of the research methodology that was implemented in the study (Mouton, 1996). This is the reason why the research methodology of any research needs to describe in detail the planning, structuring and way the research project was executed.

- Research design: The research design can be described as the strategy followed by a researcher to address the formulated research problem (Mouton, 1996). A structure (or *design*) is needed before data can be collected and analysis of the data can commence (De Vaus, 2001). The research design can be seen as the glue that holds the project together (Trochim, 2012) and it is used to structure the research and to show how all the different parts of the research (the sample, methods of research etc.) work together in order to address the formulated research question. According to De Vaus (2001), the research design is not just a work plan: the work plan, stating what needs to be done in order to complete the project, flows from the research design. The purpose of the research design is to ensure that evidence obtained during the research process will enable one to answer the formulated research question as clearly as possible. The research design is not related to any particular method of data collection or to any type of data. Thus any method of data collection can be used with either quantitative or qualitative data. The research design refers to the structure of an enquiry: it is thus a logical matter rather than a logistical one (De Vaus, 2011).

In the context of this study, therefore, the research was conducted by doing an in-depth analysis of the G3.1 Guidelines as well as the Sector Supplements for the sector Mining and Metals. These guidelines as well as other applicable information were obtained from the GRI website. In addition, related topics were researched by searching academic databases including but not limited to EBSCO Host and Google Scholar. Information was obtained from the JSE website. The sustainability reports of the Mining companies listed on the Main Board of the JSE were scrutinized and compared with the above-mentioned documents. The aim of all this was to address the problem statement by evaluating the level to which the mining companies listed on the main board of the JSE comply with the guidelines as set forth by the GRI. The population of the study therefore consists of the companies that are in the mining sector and that are listed on the Main Board of the JSE. A checklist was drawn up out of the G3.1 Guidelines and the Mining and Metals supplement and used to evaluate the sustainability reports of the companies in the population.

1.6.2 Research paradigms

According to the Business Dictionary (2012), a paradigm is the knowledgeable view or perception, which is accepted by a society or individual, as a model of how the world and the

things in it work. According to Williams (1988:3), the term paradigm in management or organizational research encompasses three levels namely i) philosophical-, ii) social- and iii) technical levels. According to Clarke (1998), research method can be classified at three different levels of which the most basic is the philosophical level. The philosophical level relates to one's basic belief about the world we live in (Williams, 1988). The *philosophical* level can be seen as being based on the most universal aspects of the world, including but not limited to the mind, matter, reality, truth and knowledge (Hughes, 1994). The *social* level refers to guidelines on how the researcher should conduct the research, while the *technical* level encompasses the methods and techniques that are ideally implemented when conducting research (Williams, 1988).

In the context of this research project the study reaches up through all three levels, from the technical and social levels to the very basic philosophical level seeing as sustainability is an issue that influences one's view of the world we live in.

1.6.3 Types of research

According to Kumar (2005:8), three perspectives can be used in order to classify research, namely the *application* of the research study, the *objectives* in undertaking the research and the *inquiry mode* employed. These three perspectives are briefly considered below

1.6.3.1 Application of research study

From an application point of view, there are two broad categories of research. Firstly, pure research is conducted in order to add to existing theories and hypotheses, but may or may not have current or future practical implications, and secondly applied research is conducted to solve specific problems, to formulate policies or to understand a certain phenomenon (Kumar, 2005). An applied study will thus have a direct application (Durrheim, 2006:45). According to Williams (1988:4), basic (or pure) research contributes to the base of knowledge whereas applied research resolves a particular problem.

In this study, the research can therefore be seen as applied research seeing that the results can assist in formulating policies and for understanding the phenomenon known as integrated reporting.

1.6.3.2 Objectives in undertaking the research

From the *objectives* point of view, research can be classified as correlational, exploratory, descriptive, and/or explanatory. Correlation research attempts to show or prove the existence of interdependence between two items. Exploratory research is conducted in order to gain knowledge on as aspect of which little is known or to explore the possibility (or feasibility) of conducting research on a certain aspect. There are often few or no earlier studies to refer to and the focus is on gaining insight and familiarity for later investigation or research (Williams, 1998). The purpose of descriptive research is to describe an issue or the attitude towards an issue. This type of study involves the obtaining of data and the investigation of the number of times a single characteristic is observed by the researcher (Blumberg, 2008:10). Data is often quantitative and statistics are applied (Williams, 1988). A further explanation of the descriptive research that has been done is given by doing an explanatory study (Blumberg, 2008:11). Explanatory research thus aims to provide clarity on a phenomenon.

Seeing that the integrated reports of companies will be analysed and described, one can say that a descriptive study has been performed during this research process. Thus a descriptive and explanatory study has been conducted in which the integrated reports of the companies included in the research sample is analyzed and described after which further explanation regarding the result is provided.

1.6.3.3 Inquiry mode employed

Two approaches arise from the process adopted in order to answer research questions namely the structured and unstructured approaches (Kumar, 2005). The structured approach is classified as quantitative research. Here everything that forms part of the research process is predetermined, for example, design, sample, questions to be asked, etc. By quantifying the variation, one can determine the extent of a problem/issue. An unstructured approach to enquiry is classified as qualitative research (Kumar, 2005). This approach allows for more flexibility in the different aspects of the research process. Here, it is more appropriate to determine the nature of a problem/issue without any quantification.

In this study a quantitative analysis was done seeing that the comparisons made between the integrated reports and the GRI guidelines are quantitative in nature. Furthermore the results

of analysing the integrated reports can be quantitatively measured which makes a structured approach more applicable.

1.6.4 The research sample

According to Yount (2006:7-2), all the subjects that you want to study are called the *population*. A population can consist of any well-defined set of elements or characteristics (Adams *et al*., 2009:96). For purposes of this study the population can therefore be seen as all the mining companies listed on the JSE seeing as they are all required to issue integrated reports. Sampling can be seen as the process of selection of items for a study in such a way that the whole population is represented (Yount, 2006). According to the Fairfax County Department of Systems management for Human Services (2003:2) (Fairfax County), methods of sampling can be classified in two general categories namely probability sampling and non-probability sampling. With probability sampling the researcher knows the exact chance that any item in the population has to be included in the sample whereas with non-probability sampling the chance of each item in the population to be included in the sample is unknown (Fairfax County, 2003). According to Kothari (1985, 15), a probability sample can be seen as a sample selected at random and each element has a known probability of being selected in the sample. A non-probability sample is selected in order to make the acquisition of the necessary data easier/ more convenient (Kothari, 1985).

In order to sample, and for the sample to be representative of the population, the biggest, most influential companies on the JSE need to be considered for sampling. This is because the integrated reports of these companies will have the most significant and very comprehensive impacts on sustainability (and they will thus need extensive and detailed integrated reports). The JSE top 40 listing (a listing compiled out of all the companies listed on the JSE according to their market capitalizations) indicates the largest and most influential companies listed on the JSE. The companies listed on the JSE (and thus also the companies on the JSE top 40 listing) are divided into three categories namely the financial sector, the industrial sector and the resources sector. Seeing that the sector supplements used are aimed specifically, at mining companies, only companies in the resource sector that are considered to be mining companies are included in the sample. This indicates a non-probability quota sample. The following table indicates the Top 40 listing as on 15 August 2011 and the sample taken:

Table 1.1: JSE Top 40 listing and companies included in the sample

Company	Sector	Mining company?	Selected
AFRICAN BANK INVESTMENTS	FINANCIAL		
ABSA	FINANCIAL		
FIRSTRAND	FINANCIAL		
INVESTEC LTD	FINANCIAL		
INVESTEC PLC	FINANCIAL		
NEDBANK	FINANCIAL		
OLD MUTUAL	FINANCIAL		
RMBH	FINANCIAL		
SANLAM	FINANCIAL		
STANDARD BANK	FINANCIAL		
ARCELORMITTAL	RESOURCES	√	√
ANGLO AMERICAN	RESOURCES	√	√
ANGLO PLATINUM	RESOURCES	√	√
ANGLO GOLD	RESOURCES	√	√
ARM - AFRICAN RAINBOW	RESOURCES	√	√
BHP BILLITON	RESOURCES	√	√
EXXARO RESOURCES LTD	RESOURCES	√	√
GOLDFIELDS LTD	RESOURCES	√	√
HARMONY GOLD	RESOURCES	√	√
IMPLATS	RESOURCES	√	√
KUMBA IRON ORE LTD	RESOURCES	√	√
LONMIN	RESOURCES	√	√
SASOL	RESOURCES	√	√
ASPEN PHARMACEUTICALS	INDUSTRIALS		
BIDVEST	INDUSTRIALS		
RICHEMONT	INDUSTRIALS		
CAPITAL SHOPPING CENTRES PLC	INDUSTRIALS		
GROWTHPOINT	INDUSTRIALS		

MONDI GROUP LTD	INDUSTRIALS		
MONDI GROUP PLC	INDUSTRIALS		
MASSMART	INDUSTRIALS		
MTN	INDUSTRIALS		
NASPERS	INDUSTRIALS		
PICK N PAY	INDUSTRIALS		
REINET INVESTMENTS SCA	INDUSTRIALS		
REMGRO	INDUSTRIALS		
SAB MILLER	INDUSTRIALS		
STEINHOFF	INDUSTRIALS		
SHOPRITE	INDUSTRIALS		
TIGERBRANDS	INDUSTRIALS		
TRUWORTHS	INDUSTRIALS		
VODACOM (PTY) LTD	INDUSTRIALS		
TOTAL SAMPLE			**13**

(Source: Anon, 2011)

All listed companies need to issue their annual reports within 6 months of the date of their year end. Furthermore, the requirement to issue integrated reports is for all financial years ending on or after 1 March 2010. Thus 2010 reports will be used in order to ensure that all the integrated reports have been issued.

1.6.5 Collection of data

Once the research problem has been formulated, the design developed and the sample selected, one needs to collect the data needed to solve the research problem (Kothari, 1985). Numerous methods of data collection exist but all of them can be classified as either qualitative or quantitative. The integrated reports of the selected companies need to be collected in order to analyse the quality and thus quantitative data collection is used. The collected data needs to be analysed in order to ensure that it is valid and reliable and that ethical issues have been considered.

1.6.6 Validity and reliability

Validity refers to the degree to which the data obtained from the sample can be applied to the relevant population (also known as external validity) and to the credibility of the research results (also known as internal validity) (Kallet, 2004). The credibility of the study is determined by the degree to which the facts that actually became known during the study are correctly described in conclusions drawn in the study. A study is considered to be reliable when the same conclusions can be drawn when a similar study is done at a later stage using the same measure instrument (Bryman & Bell, 2007:162).

In the context of this study, the data collection took place by acquiring the integrated reports of the companies identified during sampling. The data was analysed in order to achieve the objectives as previously stated. In this study the integrated reports were measured up to the list of requirements as drawn up out of the GRI guidelines. This ensured that the same outcome was experienced for each company included in the sample and this method can be applied to the whole population. Thus the data collection can be seen as valid and reliable.

1.7 KEY DEFINITIONS

Accountability: The Dictionary of Accounting and finance (1993:3) defines this concept as the responsibility to explain actions involving financial matters to others, while Webster's Dictionary and Thesaurus (2006:5) defines it as the liability to give account of, and the responsibility to fulfill, obligations.

Corporate Social Responsibility: Demiraq (2005:11), defines it as corporate attitudes and responsibilities in terms of society for social, ethical and environmental concern, which includes sustainable development, while Jones III and Jonas (2011:65) considers it as the actions a company initiates to promote some social good further than its own interests, going beyond compliance and further than legal obligations.

Environmental Reporting: White, Cleveland and White (2008:32) defines environmental reporting as providing information about a business' activities that affects the environment to both external and internal users. It may also be defined as the disclosing, by an entity, the advantages and costs of the entity's interaction with its operating environment (CIMA Official Terminology, 2005:67).

Integrated Reporting: Roberts (2012:11) consideres the concept as based on a underlying notion that strategy, risk, performance and sustainability have become indivisible, with the IoD (2009) being in agreement when stating that it is a holistic and integrated representation of a company's performance in terms of its finance and sustainability.

Sustainability Reporting: The GRI (2011a:3) defines this as the practice of measuring, disclosing and being accountable to internal together with external stakeholders for organizational performance towards the goal of sustainable development, and is recognized by White *et al* (2008:31) as a means for companies to communicate how they operate more responsibly within their physical and social environments while remaining profitable.

Sustainable Development: Both the GRI (2011a:2) and Jones III and Jonas (2011:65) defines such development as development that meets the needs of the present world without compromising the capability of future generations to meet their own needs.

1.8 OVERVIEW

The study is divided into four chapters as follows:

Chapter 1: Introduction

The first chapter serves as the introduction to the research paper and will contain the following:

- Background of reporting, financial reporting, social sustainability reporting and integrated reporting as well as a brief overview of the GRI Guidelines;
- A problem statement;
- Objectives of the research; and
- Methodology of the study.

Chapter 2: Fundamental principles of Integrated Reporting

This chapter encompasses the primary literary study, which includes a detailed discussion of the fundamental principles as outlined in the GRI Framework.

Chapter 3 (Research article): CSR reporting in South Africa and the Global Reporting Initiative (GRI) Framework: A comparative analysis

The third chapter is presented in the form of an article. This includes a discussion of CSR, TBL and sustainability as well as a detailed look at the GRI Framework (G3.1) and all of the documents it entails. A discussion of the requirements, guidance and protocols of the Framework is given along with a checklist drawn up out of the Framework for companies to be compared to. The above-mentioned problems are addressed in this article.

Chapter 4: Summary and conclusion

In chapter four, the results of the comparisons between the above mentioned checklist and the companies listed on the JSE's main board (under the sector Mining and Minerals) are shown and discussed.

In the last chapter a conclusion is reached on whether these companies adhere to the G3.1 Guidelines and the Sector Supplement for Mining and Mineral companies and possible conclusions that can be drawn from the results.

Annexures

Any and all applicable documentation will be added on to the study in the form of annexures in order to clarify and simplify the understanding of the study.

CHAPTER 2

2. FUNDAMENTAL PRINCIPLES OF INTEGRATED REPORTING

2.1 INTRODUCTION

The purpose of this chapter is to shed light on the literature that is to be used for this study. Seeing that the International Financial Reporting Standards as per the International Accounting Standards Board (IASB) (hereafter IFRS) outlines the requirements regarding financial reporting, only the literature covering the requirements for the sustainability reporting part of the integrated report will be discussed in this chapter.

The main literature applicable to this study is the GRI's Sustainability Reporting Framework (hereafter the Framework). In this chapter the Framework, together with the Mining and Minerals *Sector Supplement*, will be analysed and discussed in detail as this is the foundation on which this study is to be based. The Sustainability Reporting Guidelines and the *Sector Supplement* was obtained from the GRI website (GRI, 2011d).

Organizations of all sizes and all types and in any sector or geographical area will find this framework applicable. The Framework has been used by countless companies all over the world as the basis for preparing their sustainability reports.

2.2 OVERVIEW OF THE GRI FRAMEWORK

The Framework is divided into three different guidelines, all of which are supplementary to the other and they are not to be used interchangeably. These three sectors are as follows:

- The Sustainability Reporting Guidelines: The foundation and cornerstone of the Framework is the Sustainability Reporting Guidelines which are now in their third generation, called version G3.1. The GRI Guidelines were initially published in 2006 and they are available to one and all at no cost (a free public good) (GRI, 2011a). Herein Performance Indicators and Management Disclosures can be found as part of the requirements which will enable companies to be transparent in reporting on their sustainability performance. These Performance Indicators and Management Disclosures can be implemented amenably and incrementally. The implementation is voluntary from the point of view of the GRI. However, according to the listing requirements of Johannesburg's Securities Exchange (JSE), all companies listed on

the JSE are required to generate an integrated report for their financial years starting on or after 1 March 2010 (SAICA, 2011). This conclusion is reached on the basis of the fact that the JSE (2011:110) included in its listing requirements - as stated in paragraph 7.F.5 – compulsory adherence to the King Code of Governance which in turn requires the issuing of an integrated report. Of the third generation of GRI's Sustainability Guidelines the G3.1 Guidelines are the most up-to-date and most comprehensive edition of the guidelines. They are based on the G3 Guidelines (the original edition) but they include extended guidance on local society impacts, human rights and gender. Even though GRI still views the G3 Guidelines as valid, they recommend that the G3.1 Guidelines are used by reporting companies because G3.1 is the most inclusive guidelines that are available at the moment.

- Sector Supplements: *Sector Supplements* are available in every set of Sustainability Reporting guidelines and they cover specific sector issues for selected sectors. *Sector Supplements* are currently available for the following sectors: Airport Operators, Electric Utilities, Financial Services, Food Processing, Mining and Minerals and Non-Governmental Organizations (NGOs) (GRI, 2011d). The *Sector Supplements* are not a separate document indicating sector specific issues. The *Sector Supplements* entail the inclusion of sector-specific issues and requirements in the Sustainability Reporting Guidelines. Thus a separate set of Sustainability Reporting Guidelines exists for each sector as mentioned above which includes all the core requirements as per the original guidelines as well as sector specific issues (the sector specific guidelines are highlighted in these reports in order for the user to be able to identify sector specific guidelines from the core guidelines.
- Technical Protocol: The *Technical Protocol* – Applying the Report Content Principles, guides the reporting company through the process of defining the contents of the sustainability report (a step required by the Sustainability Reporting Guidelines). These protocols are to be used with the G3/G3.1 Guidelines or with the Guidelines that include *Sector Supplements*. This will help the company to generate the relevant reports with more ease.

The guidelines that include the *Sector Supplements* are only available in version G3. No guidelines including *Sector Supplements* were available for the updated G3.1 version at the time of this study and thus the *Sector Supplements* version 3 is to be used for the purposes of

this research. Seeing that the *Technical Protocol* is applicable whether *Sector Supplements* are used or not, the most recent version of the *Technical Protocol* is to be used.

The GRI have initiated the concept of including country specific issues via the creation of National Annexes (as a way to make the Framework more applicable to specific countries). This concept is, however, only in the testing phase with a national annex launched in Brazil as a pilot project (GRI, 2011e). The experiences from this project will in the future be used to guide the development of annexes around the world. There is thus currently no national annex available for South Africa.

2.3 CONTENT OF THE MINING AND METALS SECTOR SUPPLEMENT

The Mining and Metals *Sector Supplement* version of the Sustainability Reporting Guidelines (hereafter referred to as "the Guidelines") is divided into two parts. Part 1 gives guidance on defining the content, quality and the boundary of the report. Part 2 gives guidance on standard disclosures that needs to be included in the report. These disclosures were studied and used to compile a checklist to which the companies studied can be compared to for the purposes of this study.

2.3.1 Part 1: Defining the content, quality and boundary of the report

2.3.1.1 Content of the report

The content of the report is defined by the following factors:

- Materiality: Items are considered material if they, on their own or in aggregate, are expected to influence decisions made by the users of the annual report (ISA, 2012; IFRS, 2011). According to the GRI (2011f, 13), materiality is the threshold which indicates whether a topic is sufficiently important to be reported. An integrated report also needs to indicate the relative priority of the different material aspects in the report and the process followed to determine the priority should be explained. According to GRI (2011f:13), an item can be seen as material on the basis of its financial impact, but also because of its economic, environmental or social impact. Aspects that are considered important enough to require management by the company can likely be considered to be significant and thus material.

- Stakeholder inclusiveness: According to the King Report on Governance (2009:127), a stakeholder is defined as any group that is affected by or affects the company's operations. Meredith (2012:63) describes stakeholders as those individuals or entities that have an interest in the company, but do not necessarily own it (unless they are also shareholders). All the stakeholders of the company need to be identified and the report needs to explain how their different needs and expectations have been met (GRI, 2011f). It is also reasonable to include only those stakeholders that can reasonably be expected to use the report seeing as all stakeholders will not necessarily be using the report. For a report to be assurable the process of the identification of stakeholders that will be using the report needs to be documented. Failure to identify and engage with stakeholders will most likely result in unsuitable and therefore unreliable reports. According to King Code of Governance (2009:20), a stakeholder-inclusive approach needs to be promoted by the board of directors.
- Sustainability context: Sustainability reporting refers to how a company operates in terms of non-financial factors relating to environmental, social and governance issues (Borkowski *et al.*, 2010:30). The reporting of sustainability needs to be done in the wider context of sustainability (GRI, 2011f). By this is meant that sustainability does not only refer to the performance of the company, but to how the company contributed (or plans to contribute in the future) to the improvement or deterioration of the economy, social conditions, developments and trends at not only a local but also at a regional and global level. Thus the company will also need to distinguish between factors that have a global impact and those that have a more regional or local impact. The company's business strategy provides the context in which performance is to be discussed. Thus it is important to report on the relationship between the company's strategy and their sustainability as well as the context (local, regional or global) within which performance is reported.
- Completeness: Completeness can be interpreted as the scope, boundary and timing of the report (GRI, 2011f). It also refers to the way information is collected and to whether this information has been presented in a reasonable and appropriate manner. The scope of the integrated report refers to the range of topics covered in it. Completeness is defined by the ISA (2012:315-28) as a state of a report where all events that have occurred have been recorded. According to IFRS (2011, A26), a complete representation is one where all the information necessary for the user to

understand a phenomenon is represented. According to the GRI (2011f:17), in a holistic sense, the report needs to reflect all significant economic, environmental and social impacts and it should enable stakeholders to assess the performance of the reporting company. The boundary of the report refers to the range of companies whose performances are included in the report. Companies over which the reporting company has control or significant influence need to be considered. The reporting company will also need to consider whether it is able to influence entities upstream (e.g. suppliers) or downstream (e.g. distributors or customers). Timing of the report indicates that the information for the report needs to be complete for the time period as specified by the report. The reporting company also needs to include the nature and likelihood of activities that have a minimal short term impact but that may, cumulatively, have a significant effect that may be unavoidable or irreversible in the long term.

2.3.1.2 Quality of the report

The quality of the report will determine whether the report will enable stakeholders to make reasonable assessments of the performance and actions of the company. The quality of the report is determined by the following:

- Balance: According to Hudson (1996:286) balance can be defined as existing where two items have equal weight or are in harmonious proportion. A lot of interest in balance in information is driven by the efforts to help people make informed decisions (The Author, 2007). Balance indicates that reports need to include both positive and negative aspects of the company's performance thus creating an unbiased picture (GRI, 2011f). The company also needs to distinguish between factual information and the company's interpretation of information.
- Comparability: According to IFRS (2011:A28), comparability enables users to identify and understand similarities and differences between items. IFRS (2011, A28) also states that information is more useful if it can be compared to similar information of similar companies or the prior period information of the same company. Krisement (1997:466) agrees by stating that information is required to refer to facts of similar kind in order to be comparable. Krisement (1997:466) also states that information relating to similar events needs to be grouped in order to ensure the comparability of

presented information of specific transactions and events. The information included in the integrated report thus needs to be selected, analyzed and reported consistently in order to enable stakeholders to compare and analyze changes in the company over time (GRI, 2011f). Thus it must be possible to compare the current performance of the company to past performance, goals or objectives of the company as well as to the performance of other companies as far as possible. Seeing as all organizations are not comparable, the preparers of the report need to consider including information on the size, geographical influences and any other context that will enable stakeholders to understand factors that may contribute to differences between companies. An important aspect in compiling a comparable report is to consistently apply methods of analysing and grouping data as well as to be consistent in the layout of the report (GRI, 2011f). The inclusion of total numbers as well as ratio's will improve the ability of users of the report to compare information. If changes in the content, boundary and/or scope of the report should occur, the comparative information needs to be restated in order to enable comparison despite any changes.

- Accuracy: According to ISA (2012:315-28), accuracy entails that data and information relating to the disclosed item need to be recorded correctly. Abuhalimed (2011) states that accuracy can be seen as the quality of information both objective (measurable) and subjective (where the exact value cannot be computed). Information included in the report, whether qualitative or quantitative, needs to be detailed sufficiently and needs to be accurate (GRI, 2011f). The accuracy of qualitative and quantitative information is determined in different ways. For qualitative information, accuracy is often determined by the degree of clarity, detail and balance. The accuracy of quantitative information depends on the methods used to gather, compile and analyse data. According to the GRI (2011f:20), the degree of accuracy will depend on the intended use of the data.
- Timeliness: According to IFRS (2011:A29), timeliness means having all information needed available, to users of reports, in time for it to be capable of influencing their decisions. Reporting needs to occur on a scheduled and regular basis and the information needs to be available to stakeholders in time for them to make informed decisions, seeing that the usefulness of data is closely related to the timing of it (GRI, 2011f). Thus this means regular reporting is necessary as well as in a close proximity to the actual occurrence of the events disclosed. The organization needs to find a

balance between the timeliness of the information and the insurance of the reliability of data: if the company takes too long to ensure the reliability of the data, the data may by that time no longer be applicable. On the other hand timely reporting of unreliable data has no use.

- Clarity: Many individuals mistakenly believe that seeing more information will give readers a better understanding of a company (Clark, 2011). This, according to Clarke (2011:8), is not the case seeing as clarity is more important than volume when reviewing operations. Information needs to be accessible and understandable to stakeholders in order for it to be useful to them (GRI, 2011f). Thus stakeholders need to be able to find the desired information without unreasonable effort. The level of aggregation of the report also affects the usefulness of the report – either too much or too little detail can be confusing or meaningless to users of the report.
- Reliability: The way in which the information was gathered, compiled and analysed needs to be done and documented in such a way that that it could be subject to examination and in order to establish the quality and materiality of the information (GRI, 2011f). Stakeholders need to be confident that the report can be checked in order to determine the authenticity of the contents. Thus the information needs to be supported by internal controls or documentation that can be reviewed by others that the preparers of the report. According to the GRI (2011f:22), disclosures that cannot be supported by the necessary source documents should not appear in the report unless it represents material information that is supported by unambiguous explanations. In designing the report the preparers need to consider that the processes and information could be examined as part of an external assurance process.

2.3.1.3 Boundary of the report

The boundary of a report refers to the range of entities whose performance should be covered by the reporting company's integrated report (GRI, 2011f). Along with defining the content of the report, the reporting company needs to consider which entities (or in this case companies) need to be included in their integrated report. All companies that the reporting company has control of or influence over, as well as companies upstream or downstream that can be influenced by the reporting company need to be included in the boundary of the report (GRI, 2011f). Not all companies in the boundary need to be reported on in the same manner. The manner of reporting is dependent on the extent of control or influence over the company

as well as whether the disclosure relates to operational, managerial or narrative/descriptive information.

The reporting company may feel that it is necessary to extend the boundary to include upstream or downstream entities. The extension of a boundary (or whether to include it or not) depends on the scale of the sustainability impact of that particular company. The following diagram provides guidance on how to determine the boundary of the report:

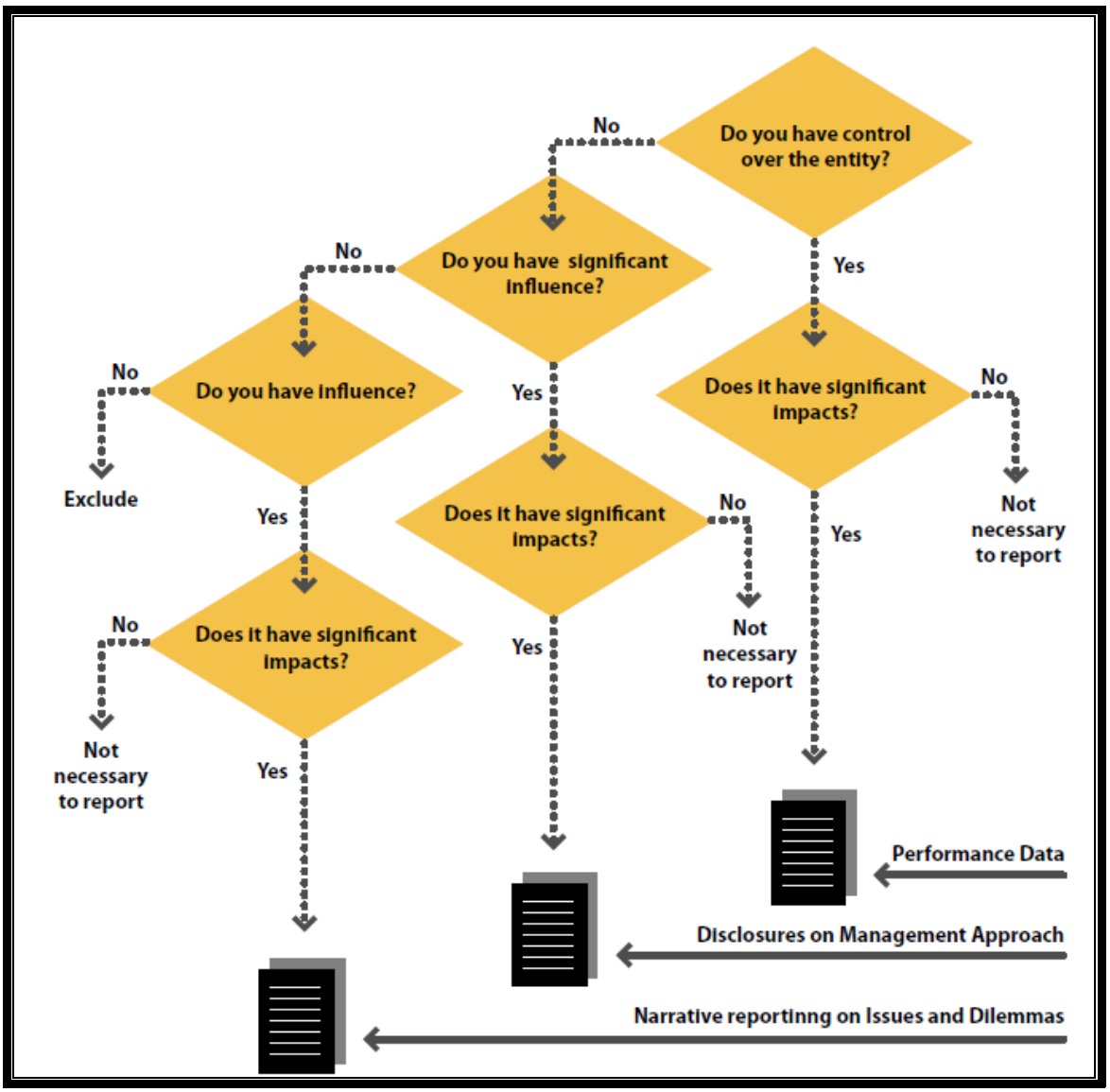

Figure 2.1: Diagram on the report boundary determination

(Source: GRI, 2011d)

Thus, as per Figure 2.1:

- all companies that the reporting company controls need to be included in full in the integrated report;
- for companies over which the reporting company has significant influence, the management approach to sustainability areas needs to be included in the integrated report; and
- narrative reporting on issues and dilemmas of companies over which the reporting company has an influence needs to be included in the integrated report.

If any of the above-mentioned companies have no significant impacts regarding sustainability, they may be omitted from the scope of the integrated report. Thus, a company may choose not to gather information on a specific company that falls within the aforementioned boundary as long as this decision does not substantially influence or change a specific disclosure.

2.3.2 Part 2: Standard disclosures

The standard disclosures as required by the Sustainability Reporting Guidelines & Mining and Metals *Sector Supplement* are compiled from the base content that should be included in any sustainability part of an integrated report. This section have been studied, analysed and compiled into one checklist to which the companies included in the sample will be compared to for the purposes of this study. Firstly a discussion on the different sections follows.

Three different types of disclosures are covered in this section. These types of disclosures are as identified and discussed by the GRI in the Sustainability Reporting Guidelines (GRI, 2011f):

2.3.2.1 Strategy and profile

This section sets a basis for understanding the performance of the organization for example its strategy, profile and governance. The strategy section should consist of the following:

- A statement by the most senior decision-maker of the organization stating the relevance of sustainability to the company and its strategy.

- A description of key risks, opportunities and impacts in two sections. Section one should focus on the key impacts that the company has on sustainability and stakeholders whereas the second section should focus on the impacts of sustainability on the performance of the company.
- The profile of the organization needs to be discussed, including the name, primary brands or services, number of countries they operate in, the location of the head office, legal form of the company, markets served, number of employees, significant changes during the reporting period etc.
- The reporting period, date of most recent previous report, process of defining report content, boundaries of the report, limitations of the report scope, data measurement techniques, the effect on any restatements and the reasons for them as well as any significant changes in the scope, boundary or measurement since the previous period.
- A GRI index needs to be included indicating the location of standard disclosures in the report and any policies or practice followed in order to seek external assurance for the report. If no such policies or procedures are indicated the company needs to explain the scope and basis of any external assurance as well as the relationship between the company and the assurance provider.
- The governance structure of the company needs to be indicated including any committees functioning under the highest governance body of the company. The report also needs to list stakeholders and the basis of identification of stakeholders.

2.3.2.2 Management approach

This refers to how the company addresses a set of issues/topics in order to provide the necessary context for understanding the company's performance in a specific area.

2.3.2.3 Performance indicators

This refers to indicators that produce comparable information on the economic, environmental and social performances of the company respectively.

The performance indicators section is organized into three sections namely economic, environment and social. Each category needs to include a section on the management approach followed (as indicated above) to address the specific performance indicators included in the section.

The GRI divided the performance indicators into “Core” indicators and “Additional” indicators. The “Core” indicators were compiled by the GRI in such a way that it is considered to be material for all entities whereas the “Additional” indicators may only be applicable in certain circumstances. In addition to the “Core” and “Additional indicators, indicators specifically aimed at mining companies are included in the Sustainability reporting Guidelines & Mining and Metals Sector Supplements. Thus, seeing that the “Core” and sector-specific performance indicators are likely be to applicable to all companies in the research sample, these performance indicators will be focused on.

The following guidance is given on data compilation for performance indicators:

- For trend reporting, at least two previous periods should be reported as well as future targets.
- Often ratios or normalized data is considered to be more useful but if normalized data is used, absolute data should be provided.
- The appropriate level of data aggregation should be determined by the reporting organization.
- Generally accepted international metrics such as kilograms, tons or litres should be used.

2.4 ECONOMIC, ENVIRONMENTAL AND SOCIAL IMPACTS

Here follows an explanation of the economic, environmental and social categories into which the performance indicators are organized. For each category a listing of core and sector specific indicators, as analysed in this study, are provided. For full descriptions of each indicator as well as for the descriptions of additional indicators not considered for the purpose of this study, refer to Annexure A on page - 77 -.

2.4.1 Economic

The economic section concerns the company's impact on the economic conditions of the stakeholders as well as the local, national and global economic systems. The reporting company thus also needs to indicate their contribution to the sustainability of the larger economic system. The core and sector-specific performance indicators are as follows:

Table 2.1: Economic performance indicators

Indicator Code	Description
EC1	Direct economic value generated and distributed
EC2	Risks, opportunities and financial implications due to climate change
EC3	Coverage of the organization's defined benefit plan obligations
EC4	Significant financial assistance received from government
EC6	Policy, practices, and proportion of spending on locally-based suppliers
EC7	Procedures for local hiring and proportion of senior management hired from the local community
EC8	Development and impact of investments and services provided for public benefit including pro bono engagements.

2.4.2 Environmental

The company's impact on living and non-living natural systems needs to be indicated by the environmental indicators included in the report. This needs to cover the company's performance related to both inputs (e.g. energy, materials and water) and outputs (e.g. emissions and waste). The core and sector specific performance indicators are as follows:

Table 2.2: Environmental performance indicators

Indicator Code	Description
EN1	Materials used by weight or volume
EN2	Percentage of materials used that are recycled input materials
EN3	Direct energy consumption by primary energy source
EN4	Indirect energy consumption by primary source
EN8	Total water withdrawal by source
EN11	Location and size of property close to protected areas
EN12	Significant impacts of activities, products, and services on biodiversity in protected areas
MM1	Amount of land disturbed or rehabilitated.
EN13	Habits protected or restored
EN14	Strategies, actions, and future plans for managing impacts on biodiversity
MM2	Total sites identified as requiring biodiversity management plans
EN16	Total direct and indirect greenhouse gas emissions
EN17	Other relevant indirect greenhouse gas emissions
EN19	Emissions of ozone-depleting substances
EN20	NO,SO, and other significant air emissions
EN21	Total water discharged
EN22	Total weight of waste
MM3	Total amount of over-burden, rock, tailings, and sludges and their associated risks
EN23	Total number and volume of significant spills
EN26	Initiatives, to mitigate environmental impacts of product and services
EN27	Percentage of products sold that are reclaimed
EN28	Monetary fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations

2.4.3 Social

The impact a company has on the social system within which it operates needs to be taken into account. The GRI identified performance aspects surrounding *labour practices, human rights, society and product responsibility* (all of which are classified as part of the social impact of the company and all of which have their own standard disclosures as recommended by the GRI).

Labour practices include reporting on the goals of the organization with regards to labour performance, labour policies, division of responsibilities among employees at senior level, training, monitoring of employees as well as corrective and preventative action taken. The core and sector-specific performance indicators are as follows:

Table 2.3: Labour practices performance indicators

Indicator Code	Description
LA1	Total workforce
LA2	Total number and rate of employee turnover
LA4	Percentage of employees covered by collective bargaining agreements
LA5	Minimum notice period (s) regarding operational changes
MM4	Number of strikes and lock-outs exceeding one week's duration
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities
LA8	Programmes and training in place to assist employees and the community regarding serious diseases
LA10	Average hours of training per year per employee
LA13	Composition of governance bodies and employees
LA14	Ratio of basic salary of men to women

A global consensus exists with regards to respecting one's *human rights*. Thus an organization's actions regarding human rights are considered very important and should thus be included in their integrated report. Reporting companies need to report on procedures implemented by them regarding incidents of violation of human rights as well as any changes

in the stakeholders' ability to exercise their human rights during the reporting periods. Organizations can affect a wide range of human rights thus, when assessing which human rights are relevant to reporting, all human rights need to be considered.

The reporting company needs to include goals, policies, risk assessments, organizational responsibility, training and raising of awareness, monitoring and following up on any matter relating to human rights in their integrated report. The core and sector-specific performance indicators are as follows:

Table 2.4: Human rights performance indicators

Indicator Code	Description
HR1	Number of significant investment agreements that include human rights
HR2	Percentage of significant suppliers that have undergone screening on human rights
HR4	Total number of incidents of discrimination
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk
HR6	Operations identified as having significant risk or incidents of child labour
HR7	Operations identified as having significant risk for incidents of forced or compulsory labour
MM5	Total number of operations taking place close to indigenous peoples' territories

Reporting on *society* relates to the impacts that organizations have on the local communities. To be more particular, information regarding risks associated with bribery and corruption, undue influence in public policy-making and monopoly practices are required. The core and sector-specific performance indicators are as follows:

Table 2.5: Societal performance indicators

Indicator Code	Description
SO1	Programmes that manage the impacts of operations on communities
MM6	Significant disputes relating to land use, customary rights of local communities and indigenous people.
MM7	The extent to which grievance mechanisms where used to resolve disputes relating to land use
MM8	Number of company operating sites where artisanal and small-scale mining (ASM) takes place and the associated risks and mitigating actions
MM9	Sites and number of resettlements and how livelihoods where affected in the process
MM10	Number and percentage of operations with closure plans
SO2	Number of business units analysed for risk related to corruption
SO3	Percentage of employees trained in organization's anti-corruption policies
SO4	Actions taken in response to incidents of corruption
SO5	Public policy positions and participation in public policy development and lobbying
SO7	Number of legal actions for anti-competitive behaviour the outcomes
SO8	Monetary fines and total number of non-monetary sanctions for non-compliance with laws and regulations

The company's reporting on *product responsibility* needs to address their products and services that directly affect their customers. These include the company's health and safety, information labelling, marketing and privacy policies and practices. The core and sector specific performance indicators are as follows:

Table 2.6: Product responsibility performance indicators

Indicator Code	Description
MM11	Programmes and progress relating to materials stewardship
PR1	Stages in which health and safety impacts of products and services are assessed for improvement
PR3	Type of product and service information required by procedures and products subject to such information requirements
PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications (including advertising)
PR9	Monetary fines for non-compliance with laws and regulations concerning the provision and use of products and services

Thus the above-mentioned core and specific indicators for the respective categories where used in order to compare and analyse the integrated reports of the companies included in the research sample (refer to "Annexure A: Standard disclosures" on page - 77 - for full descriptions of the above indicator codes).

2.5 GENERAL GUIDANCE

The GRI's sustainability guidelines also include general reporting notes which give guidance on gathering data, the form and frequency of reporting and assurance. Here it is important to note that obtaining external assurance for the sustainability report is considered to be the one way to add credibility to such a report. It is stated that groups or individuals who are not in any way influenced by their relationship with reporting company should provide this assurance. The assurance providers should thus be independent from the reporting company and thus an independent and impartial conclusion can be published on the report. The assurance provider needs to assess the extent to which the reporting company has applied the GRI Reporting Framework in the course of reaching conclusions.

The reporting company should include the approach used to obtain external insurance in the report in order to assist stakeholders in assessing the independence of the assurance providers and also the credibility of the report.

2.6 SUMMARY

In this chapter, an analysis of the GRI Sustainability framework was done and the key aspects that should be reported on as part of the integrated report were identified.

It was found that the reporting company needs, firstly, to define the content, quality and boundary of the integrated report. Then standard disclosures need to be considered being the basic disclosure required as per the GRI. These standard disclosures include disclosures on the strategy and profile of the company, the management approach taken to addressing issues and the performance indicators.

Of the performance indicators, the "core" indicators as well as the indicators per the Mining and Metals *Sector Supplement* was identified as being material to companies and thus chosen as the basis for the analysis of the integrated reports of the companies selected in the research sample.

Finally an overview was given of the meaning of the categories that the performance indicators have been organized into by the GRI (being the economic, environmental and social impacts of the reporting company).

The primary focus of the next chapter will be on the empirical analysis of the sampled companies. The discussion of the results of the empirical analysis, as set out in the next chapter, is presented in the form of an academic article and therefore also touches on the more basic principles included in Chapter 1 and Chapter 2.

CHAPTER 3 (RESEARCH ARTICLE)

Title: Integrated reporting compliance with the Global Reporting Initiative framework: An analysis of the South African mining industry

The reader is requested to take note of the following:

- The article has been published in the following IBSS indexed, peer-reviewed academic journal as follows:
    - Hindley, T. & Buys, P.W. 2012. Integrated Reporting Compliance With The Global Reporting Initiative Framework: An Analysis of The South African Mining Industry. *International Business and Economics Research Journal*, 11(11): 1249-1260.
- The article as published is included in "Annexure C: Article as published" on page- 92 -. The article was written in line with the journal's submission guidelines, which are included in "Annexure D: Journal submission guidelines" on page - 105 -.
- The article was researched and written by the first author as the candidate and primary author, while the second author fulfilled a reviewer function thereto as the research project's study leader.

Abstract

For all financial years ending on or after March 1st 2010, all companies listed on the Johannesburg Stock Exchange Ltd (JSE) have to provide an Integrated Report (as part of the JSE's listing requirements). This report is intended to supply sustainability information in addition to the conventional IFRS-based statements. Yet no statutory requirement for adherence to reporting standards relating to sustainability exists. This creates the risk that sustainability reports will omit negative impacts or be otherwise misleading, yet the company might still be seen as adhering to listing and thus statutory requirements.

This article considers the quality of integrated reporting of the South African mining industry by evaluating compliance with the globally accepted Sustainability Framework of the Global Reporting Initiative, which includes Sector-specific performance indicators, as well as GRI core indicators. Using a sample of the mining companies included in the JSE Top 40 companies, the results show that these companies used the GRI G3.1 version guidelines in producing their integrated reports and that adherence to the GRI guideline has improved over the two years under consideration.

Keywords

Corporate social responsibility, financial reporting, GRI framework, integrated reporting, sustainability, triple-bottom-line

3. INTRODUCTION

3.1 BACKGROUND

In the global business and economic contexts, long-term sustainability has become very important as a basis for investment decisions, and consumers are growing more conscious of the social and environmental performances of the entities from whom they buy goods and/or services (Ho & Taylor, 2007). Ho and Taylor (2007) also state that evaluating organizational performances based on economic factors alone is no longer sufficient because stakeholders are more and more concerned about whether a company is being socially responsible and environmentally friendly.

Not too long ago, a company would have been considered as an exemplary, well-performing organization if it could deliver its products and services, publish an annual report and distribute dividends, but no longer (Deloitte, 2011a). Lev and Zarowin (1999) also indicate that the usefulness of financial information to investors and other stakeholders has been deteriorating due to the increasing demand from stakeholders for relevant information. Eccles and Krzus (2010) stated that reporting is of much importance since it communicates to the outside world its performance and its plans and objectives for the future. Oberholzer (2011) even goes as far as comparing data to gasoline – getting insufficient or bad data (or not understanding the data) is like *running out of gas*. The effective reporting of company information is therefore not only essential to management functions like planning and control, but also to the external stakeholder decision-making processes. Today there are growing expectations for companies not to simply turn a profit. The reporting of stakeholder relevant company information therefore comes down to one fundamental principle: the on-going search for effective communication. What is required is a report that provides integrated and relevant information to the broader base of stakeholders.

The Global Reporting Initiative (GRI) used the principles of social responsibility and economic, social and environmental impacts in their approach to create a framework for reporting on sustainability. Integrated reports that are based on the GRI's Sustainability Framework will indicate a company's commitment to sustainable development and will enable users thereof to compare the performance of the company over time as well as to measure the company's adherence to applicable laws, standards, principles and voluntary

initiatives (GRI, 2011a). The GRI (2011a) states that it endorses standardized reporting of sustainability information which benefits both the reporting company as well as the users of the report. According to their mission statement the GRI also strives to make sustainability reporting standard practice (GRI, 2011b).

In response to the growing importance of sustainability reporting, the Johannesburg Stock Exchange Ltd (JSE) added as a listing requirement that all JSE listed companies have to adhere to the King III Code of Governance. This entails (among other things) the provision of an integrated report, consisting of a report on the company's sustainability in addition to its conventional International Financial Reporting Standards (IFRS) based reports for all financial years ending on or after 1 March 2010 (SAICA, 2011). Unfortunately, many executives do not know exactly what concepts such as sustainability, corporate social responsibility (CSR), and triple bottom-line (TBL) entail (Abouzeid & Weaver, 1978). In Abouzeid and Weaver's (1978) earlier survey entitled *The Most Important Corporate Goals Identified by Participating Companies*, the polled executives did not select CSR as an important business goal but they did, however, select customer satisfaction, employee welfare and safety as important goals. It is evident that this lack of clarity has remained a problem throughout the years seeing as, even with many great minds applied to the *science* of sustainability and integrated reporting, a full understanding of how to approach sustainability, while still ensuring growth, has still to be obtained (Pounder, 2011; Doane & MacGillivray, 2001). Doane and MacGillivray (2001) also stated that managers need to better understand what it is that makes a business survive, what finance directors need to be aware of regarding sustainability and other factors that need to be considered when a business appears to be struggling, that sustainability is not left behind in an attempt to save the company.

In the South African context, the mining and minerals industry includes the companies with the highest environmental impacts; Sasol, BHP Billiton, ArcelorMittal SA and Anglo American being among the top five companies with regards to high CO_2 emissions (National Treasury, 2010). South Africa is the world's largest platinum producer and one of the leading producers of base metals, coal, gold and diamonds, and also holds the largest natural reserves of chrome ore, manganese ore, gold and platinum-group metals (SouthAfrica.info, 2012). Furthermore, according to the Chamber of Mines of South Africa (2011) the following contributions can be attributed to the industry in 2010:

- 8.6% direct contribution to the GDP of South Africa with a further 19% indirect contribution;
- Over 50% of merchandise exports;
- Approximately 20% of gross investment;
- About 30% of the capital inflows into the economy, and
- 94% of South Africa's electricity generating capacity.

Considering the above, the mining and minerals industry is not only of importance to the broader Southern African economy (and the global economies), but it also has a significant impact on the environmental and the social development initiatives of the different regions.

3.2 RESEARCH OBJECTIVE

Considering the above, the question can be asked as to the extent to which the integrated reports of the South African mining and minerals companies, as submitted to the JSE, have been prepared in compliance with, and in consideration of, the GRI guidelines. In meeting this objective, the following aspects have to be considered. Firstly, the key aspects reported on by the companies have to be identified, secondly the level of integration of the sustainability reports with the conventional annual financial statement has to be evaluated, and thirdly the applicable rating ('A', 'B' or 'C') given to the applicable reports needs to considered.

By analysing and comparing the *Integrated Reports* provided by the mining and minerals companies listed on the JSE, together with the GRI's *Sector Supplements for Mining and Metals* companies, it should therefore be possible to determine the extent to which these companies' integrated reports adhere to the G3.1 Guidelines Sector Supplement for mining and metals companies.

3.3 RESEARCH METHODOLOGY

A quantitative, applied and descriptive research methodology will be followed in order to address the stated objectives. The reports of the mining and minerals companies listed on the Top 40 companies (2010 and 2011 financial years) of the JSE have been identified as the sample to be used in the report analysis based on the GRI G3.1 Sector Supplements for mining and metals companies. The relevant company reports were obtained from their

respective websites. All listed companies are required to issue their annual reports within six months of the date of their financial year end. Furthermore the requirement to issue integrated reports is for all financial years ending on or after 1 March 2010. Thus 2010 reports will be used as a basis to gauge whether integrated reports have been submitted. In addition to this, 2011 reports will also be used in order to be able to judge comparability and improvements in reporting on a per company basis.

In order to meets these objectives, the article is set out in the following manner. Firstly, an overview of the theoretical framework is provided, which includes overviews of corporate social responsibility, triple-bottom-line reporting, sustainability and integrated reporting. This is followed by a high level overview of the G3.1 Sustainability Framework as the literature component of the research conducted, which is in turn followed by the research results before the final conclusions and recommendations.

3.4 THEORETICAL FRAMEWORK

3.4.1 Corporate Social Responsibility

According to Two Tomorrows (2009) (previously known as the CSR Network), the concept of *Corporate Social Responsibility* is about how companies align their principles, values and actions with that which is expected of them by all their stakeholders (i.e. it is not just about shareholders but also about customers, suppliers, investors, employees, regulators, groups with special interests and anyone affected by the company in any significant manner). Adams *et al.* (1998) examined CSR practices of numerous European companies, and found that these companies typically categorize their disclosures into several key aspects including reporting on environmental aspects, on employee aspects and on ethical aspects. It thus indicates the commitment of a company to being accountable to all stakeholders.

According to Pounder (2011), Borkowski *et al*. (2010) and Swift *et al.* (2007), the terms *sustainability* (discussed in more detail below) and *CSR* are often used interchangeably. Sustainability, however, is described as a broader concept that seeks long-term economic, natural and social capital growth, whereas *CSR* is more focused on shorter-term tendencies, problems and activities (e.g. philanthropy, adherence to legalities and improvement in working conditions). Thus many companies may claim to be socially responsible, but there are few that are truly sustainable (Swift *et al*, 2007). Two Tomorrows (2009) also clearly

indicates that CSR demands that, in order to maximize benefits and keep downsides to minimum, companies have to manage the economic, social and environmental impacts of their operations.

3.4.2 Triple-Bottom-Line reporting

The term *triple-bottom-line* was originally coined by John Elkington, a management consultant (Rogers & Ryan, 2001), and is an attempt to acknowledge the interaction of three key interest areas in the continued existence of the company, which are, according to Elkington (1997), not only about pursuing *economic success*, but about simultaneously pursuing *environmental quality* and *social equity* as well, hence the concept of the *triple-bottom-line*.

While conventional financial statements primarily focus on profitability and financial indicators, TBL reporting attempts to present a broader view of the corporate economic interactions with all its stakeholders (Ho & Taylor, 2007). Therefore, companies that want to achieve sustainability cannot only measure their performance against a single financial bottom line, but against all the TBL components, i.e. the social bottom line (or the people aspect), the economic bottom line (or the profitability) and the environmental bottom line (or the planet aspect) (Elkington, 1997). Thus, in the context of the TBL, all three these concepts need to be considered equally in order to achieve long-term organizational sustainability.

3.4.3 Sustainability

According to Deloitte (2009), the King II Code on Governance in South Africa illuminated corporate citizenship and integrated sustainability, in terms of which a company needs to account for its environmental and social issues as well as economic performances. The King III Code on Governance in South Africa has expanded on this by emphasizing the concept of sustainability. Deloitte's interpretation of King III's focus is that directors are accountable to all stakeholders in order to ensure that the company's resources are utilized in such a way that it will be able to continue to be viable. This involves environmental sustainability, social responsibility, respect for human rights and the successful management of stakeholder relationships (Deloitte, 2009; King III, 2009).

If the growth in population, resource consumption and economies were to continue at its current rates, the resources of the world will be depleted to such an extent that it will no longer be able to support life (Swift *et al.*, 2007), and this makes sustainability relevant to all of us. According to Swift *et al.* (2007), a company or activity is considered unsustainable when its continued activity would result in the exhaustion of a given resource. Swift *et al.* (2007) also stated that sustainable development is of high political importance in many governments and that failure to adhere to sustainable development objectives can expose a company to strategic, business and reputational risks, which can result in the loss of stakeholders' trust, increases in cost of capital and in extreme cases even the loss of the ability to operate as a going concern.

King III (2009) specifically includes the principle of TBL reporting as a part of sustainability, but states that sustainability is more than just *reporting on sustainability* and that it is vital for companies to focus on *integrated reporting*. The King III Code of Governance (King III, 2009) thus supports the notion of sustainability reporting but acknowledges that in the past sustainability reporting was done in addition to financial statements, whereas the current position is that sustainability reporting must be *integrated* with the financial statements.

3.4.4 Integrated Reporting

According to Deloitte (2011b) integrated reporting attempts to incorporate everything from risk management through to strategy, and from financial reporting to the utilization of other capital resources. It therefore seeks to meet the needs of a broader group of stakeholders - thus everyone associated with the company is likely to be affected by it. Deloitte (2011b) also highlights that the integrated report is simply an output of extensive prior reporting initiatives and one should consider it as the enabler of a process which improves and preserves long-term sustainability in all aspects, without unduly leading to the sacrifice of short-term performance. At the very essence of integrated reporting lies the *Integrated Report* that in time will become the primary report of all companies (Deloitte, 2011b). The jury, however, is still out as to what exactly the format should be, and whether certain components of the conventional reports will be moved to online sources and what the actual information included in the report will be.

Even with numerous terms, definitions and explanations as indicated above, one can still be unsure as to *what* needs to be reported on, and *how* it needs to be reported on, in order for an

integrated report to be seen as sufficient. As mentioned earlier, the *Sustainability Reporting Framework*, as developed by the GRI, can be used to assist companies with their integrated reporting initiatives.

3.5 THE GRI'S SUSTAINABILITY REPORTING FRAMEWORK

3.5.1 Components of the Framework

The GRI's Sustainability Reporting Framework (hereafter the Framework) prescribes the minimum disclosures needed in order to produce comparable and complete sustainability reports. In essence, it may be argued that the integrated report is a combination of the sustainability reporting concepts as suggested by the GRI, and the conventional financial reporting aspects as required by IFRS. The Framework consists of several sections (GRI, 2011c), including:

- The **Sustainability Reporting Guidelines**. These Guidelines form the foundation and corner stone of the Framework, which are now in their third generation, called G3.1. The G3.1 Guidelines are available are freely available at no cost (GRI, 2011a).
- The **Sector Supplements**. For certain sectors, the abovementioned Guidelines have been expanded to address sector-specific aspects and issues. The currently available Supplements include the mining and minerals industry (GRI, 2011d).
- The **Technical Protocol**. The Protocol guides the reporting company through the process of defining the contents of the sustainability report (a requirement of the Sustainability Reporting Guidelines).

Expanding on the above, the Sustainability Reporting Guidelines (as listed above) also recommend certain Standard Disclosures, which are typically the minimum suggested disclosures of the economic, environmental and social impacts. Within each of these economic, environmental and social considerations, the company should highlight its *strategy*, *management's approach* and the *performance indicators* for each. The first two considerations (i.e. the strategy and the management approach) may typically be considered as generic, whereas the performance indicators are then more specific in their consideration and reporting of actual results. The various performance indicators are further classified in the *core indicators* and the *additional indicators* (GRI, 2011e). Firstly, the core indicators are those considered to be of key interest to most stakeholders and they are thus assumed to be

material unless deemed otherwise. Secondly, the additional indicators are those indicators that address topics that may be material to some companies and/or stakeholders but not generally for the majority of companies and/or stakeholders. These additional indicators may also be representative of emerging practices and are therefore not (yet) considered to be material (GRI, 2011e).

Therefore, in the analysis of the integrated reports of the South African mining and minerals industry, the *Sector Specific Performance* indicators (as per the above-mentioned Sector Supplements) and the *Core* indicators (as per the Sustainability Reporting Guidelines section on performance indicators) have been taken into account in consideration of the compliance and to the G3.1 Guidelines.

3.5.2 Application levels of the Framework

In order for a company to indicate that its *Sustainability Report* has been prepared on the basis of the GRI Guidelines as discussed above, the company should declare the level of such adherence using the GRI's application levels system (GRI, 2011f). There are currently three levels of application available named 'A', 'B' and 'C', (see Table 1 below), with 'A' indicating the highest level of compliance and adherence to the Framework, 'B' being the midway level and 'C' being the lowest level of adherence. In the case where external assurance was obtained with regards to the sustainability report, a '+' sign is added to the application level as indication of such assurance (GRI, 2011f, Borkowski *et al*.).

Table 3.1: GRI Sustainability Reporting Framework adherence levels

	C	C+	B	B+	A	A+
Profile disclosures	Report on indicators: 1.1, 2.1-2.10, 3.1-3.8, 3.10-3.12, 4.1-4.4 , 4.14-4.15	Externally Assured	In addition to 'C', also report on indicators: 1.2, 3.9, 3.13, 4.5-4.13, 4.16-4.17	Externally Assured	Same as for 'B'	Externally Assured
Disclosures on management approach	Not required		Management approach i.r.o. each indicator category		Management approach i.r.o. each indicator category	
Performance indicators & Sector Supplement Performance Indicators	Report on at least 10 performance indicators (at least one from each of: social, economic and environment).		Report on at least 20 performance indicators (at least one from each of: social, economic and environment).		Report on each core and sector supplement indicator or explain the reason for its omission.	

(Source: GRI, 2011f (adapted))

According to the GRI (2011f), companies are required to make a self-declaration of their level of adherence and compliance, which can then either be substantiated by having a third party express an opinion on the report or by requesting the GRI to check the self-declaration. For each company included in the research sample, the above table has been used in order to gauge adherence to the GRI Sustainability Framework.

3.6 RESEARCH RESULTS

3.6.1 Descriptive statistics

The selected sample consisted of 13 companies in the mining and minerals industry (per the JSE Top 40 listing as at 15 August 2011). All companies had published 2010 as well as 2011 reports by the end of July 2012, thus making both improvement and comparability analyses possible (see Table 2 below). Compliance with the *Core* as well as the *Sector Specific Indicators* was tested by an analysis of the respective reports. Based on the Framework, a total of up to 63 performance indicators may be reported on, of which 52 are Core and 11 are Sector Specific indicators.

Table 3.2: JSE listed mining and minerals companies' reporting indicators

Company	2010			2011		
	Core (n=52)	Sector Specific (n=11)	Total (n=63)	Core (n=52)	Sector Specific (n=11)	Total (n=63)
ARCELORMITTAL	32	0	32	31	3	34
ANGLO AMERICAN	52	11	63	52	11	63
ANGLO PLATINUM	52	10	62	52	10	62
ANGLO GOLD	50	11	61	50	11	61
ARM-AFRICAN RAINBOW	45	9	54	51	11	62
BHP BILLITON	52	11	63	51	11	62
EXXARO RESOURCES LTD	46	4	50	44	9	53
GLODFIELDS LTD	52	11	63	52	11	63
HARMONY GOLD	43	0	43	52	0	52
IMPLATS	31	0	31	37	0	37
KUMBA IRON ORE LTD	24	0	24	52	10	62
LONMIN	52	11	63	52	11	63
SASOL	52	11	63	52	11	63

The above results indicate that six companies reported on all 52 of the Core indicators in 2010, while seven companies did so in 2011. In respect of the Sector Specific indicators, six companies reported on all 11 indicators, with seven companies in 2011. Note that these are not necessarily the same companies in both years. A matter of concern was the fact that four companies did not provide **any** information on the Sector Specific indicators in 2010. There was, however, some improvement with two of these companies reporting on at least some of these indicators in 2011.

3.6.2 Key performance indicators reported on

In analysing the data to gauge the key indicators reported on, it became evident that certain indicators were reported on by all companies. These have thus been identified as the key indicators, being those that all companies considered of high enough materiality and importance to measure and report on.

Table 3.3: Key performance indicators reported on

Code	Description	2010	2011
EC 1	Direct economic value generated and distributed	Yes	Yes
EC 2	Financial implications and risks due to climate change		Yes
EC 6	Policies and proportion of spending on local suppliers	Yes	
EC 8	Investments and services provided for public benefit	Yes	Yes
EN 3	Direct energy consumption	Yes	Yes
EN 8	Total water withdrawal	Yes	Yes
EN 16	Total direct and indirect greenhouse gas emissions	Yes	Yes
EN 22	Total weight of waste		Yes
LA 1	Total workforce by employment type		Yes
LA 4	Percentage of employees covered by collective bargaining agreements	Yes	Yes
LA 7	Rates of occupational injuries, diseases and fatalities	Yes	Yes
LA 10	Average hours of training per employee	Yes	Yes
LA 13	Composition of governance bodies and employees according to indicators of diversity		Yes
HR 6	Operations having significant risk of child labour	Yes	Yes
HR 7	Operations having significant risk of forced and compulsory labour		Yes
SO 1	Effectiveness of practices that assess and manage impacts of operations on communities		Yes
SO 5	Position and participation in public policy development and lobbying		Yes

As per Table 3, these indicators include issues more widely known as sustainability concerns which indicate that public perception of what sustainability is, has a major impact on what is reported on by companies. It can be seen that of the top key performance indicators reported on, four were economic in nature (see the 'EC' indicators), four were environmental in nature (see the 'EN' indicators), five were labour-related (see the 'LA' indicators), two were human rights related (see the 'HR' indicators), and two were socially orientated (see the 'SO' indicators).

3.6.3 Level of Integration

The Integrated Reporting Committee (IIRC) stated that an *Integrated Report* is aimed at combining the different threads of reporting (e.g. financial, management, governance and sustainability reporting) into a comprehensible whole that can explain a company's ability to create and/or sustain value (Deloitte, 2012). It should also be seen as a process of improving and persevering with sustainability in the long term without sacrificing a company's short-term performance (Deloitte, 2012). This report should be an *all-inclusive integrated* annual report that illuminates the company's efforts towards long-term sustainability in all its dimensions. The *Integrated Report* should therefore contain both qualitative and quantitative information on how, and to which extent, the reporting company has managed to improve its economic, environmental and social effectiveness and efficiency (Daub, 2007), which need to be integrated in a sustainability management system.

The concept *integrated* does not simply indicate that all the relevant information be combined into a single report. As long as the holistic picture is disclosed, an integrated report can even be divided into multiple reports. However, if a company were to choose the multiple reports option, a reference to the other parts of the report, or to the more detailed separate report, needs to be made in order for users and stakeholders not to be misled in thinking that the reporting company issued only one report. During the analysis of the companies' reports, the physical compilation of the reports was taken into consideration. The following categories of integration were identified:

- Fully Integrated: This refers to a single integrated report that includes all necessary information needed to form a holistic view of the company's financial as well as its sustainability performances.
- Integrated and Separate: This refers to a single integrated report that serves the above-mentioned purpose, but with references to separate documents that include more detail on certain areas. The additional separate reports often include the detailed sustainability reports, corporate governance reports.
- Separate: This indicates that a company compiled separate reports for financial and non-financial disclosures. Thus a separate sustainability report was created in addition to the normal financials.

- Separate on Web: This indicates that non-financial information is disclosed but not as part of the annual report. This information is only available on the company's website.

After analysis of the applicable entities' reports the following categorization was made and reported in Table 4 below:

Table 3.4: Level of integration per company

Company	2010				2011			
	Fully Integrated	Integrated & Separate	Separate	Separate on Web	Fully Integrated	Integrated & Separate	Separate	Separate on Web
ARCELORMITTAL		Y				Y		
ANGLO AMERICAN			Y				Y	
ANGLO PLATINUM			Y			Y		
ANGLO GOLD			Y			Y		
ARM - AFRICAN RAINBOW		Y				Y		
BHP BILLITON		Y				Y		
EXXARO RESOURCES LTD	Y				Y			
GLODFIELDS LTD		Y			Y			
HARMONY GOLD				Y				Y
IMPLATS	Y					Y		
KUMBA IRON ORE LTD			Y			Y		
LONMIN			Y				Y	
SASOL		Y				Y		
Total	2	5	5	1	2	8	2	1

In terms of what regards high-quality reports, the *Fully Integrated* reports as well as *Integrated and Separate* reports are regarded as acceptable formats. When using only a *Separate* report, specific reference needs to be made to the other reports containing non-

financial information. This is also applicable when using *Separate on Web* reports with references needed to the sectional reports in the annual report to ensure that users are aware of all applicable reports. When considering the findings in the mining and minerals industry, seven of the companies submitted acceptable integrated reports in 2010, with an improvement of three additional companies moving towards Integrated and Separate reports in 2011, which are better, albeit still somewhat separate.

3.6.4 Self-declared ratings

The final analysis conducted in this study was aimed at analysing the adherence levels of the various reports. The integrated reports were evaluated based on the sustainability disclosure requirements as per the GRI, which were then compared against the companies' own assessment of adherence levels (see Table 5 below).

Table 3.5: Evaluation of declared ratings

Company/ Year		Rating based on analysis of disclosures:	Self-declared rating:	Difference in rating?
ARCELORMITTAL	2010	C+	C+	N
	2011	B+	B+	N
ANGLO-AMERICAN	2010	A+	A+	N
	2011	A+	A+	N
ANGLO PLATINUM	2010	B+	A+	Y
	2011	B+	A+	Y
ANGLO-GOLD	2010	B+	A+	Y
	2011	B+	A+	Y
ARM - AFRICAN RAINBOW	2010	B+	B+	N
	2011	B+	A+	Y
BHP BILLITON	2010	A+	A+	N
	2011	B+	A+	Y
EXXARO RESOURCES LTD	2010	B+	B+	N
	2011	B+	B+	N
GOLDFIELDS LTD	2010	A+	A+	Y
	2011	A+	A+	N
HARMONY GOLD	2010	B+	B+	N
	2011	B+	B+	N
IMPLATS	2010	B+	B+	N
	2011	B+	B+	N
KUMBA IRON ORE LTD	2010	C+	C+	N
	2011	B+	A+	Y
LONMIN	2010	A+	A+	N
	2011	A+	A+	N
SASOL	2010	A+	A+	N
	2011	A+	A+	N

It was found that in eight instances the companies were over-optimistic in giving themselves a higher rating than was justified. The differences in the self-declared ratings and the rating per this analysis were found exclusively on ratings where a company made a self-declared rating of 'A+', while only meeting the criteria for 'B+'. It must be noted that per the Application Guidance (GRI, 2011f), an 'A' can only be awarded if the company reports on all the indicators, or if not, the reason for omitting the indicators must be provided. Per analysis of the disclosures made, some disclosures were not made but no specific reason was given for the non-disclosure thus the 'A' rating was downgraded for purposes of this article.

Furthermore, several companies simply indicated that certain indicators have not been reported on, as it was considered to be *immaterial*, without explaining what measure of materiality was used. For the purposes of this article, such indicators were considered as *disclosed* seeing as a reason for non-disclosure was provided, but the question remains as to what this materiality actually means?

3.7 CONCLUDING DISCUSSION

3.7.1 In summary

Integrated reporting (on a global scale) is still very much in its infancy. The JSE, with *Integrated Reports* as a listing requirement, took a leading role in emphasizing the importance of the wider categories of stakeholders. There is, however, not much available in *standardized reporting templates* for these integrated reports, and the companies are very much left to their own devices in deciding what to report and what not to report. In the resource-based South African economy, the mining and minerals industry plays a key role in the broader regional and global economies. The key objective of this article was therefore to analyse and evaluate the integrated reports from this sector for the periods 2010 and 2011 in order to gauge their disclosures and adherences to the GRI's Framework in terms of social responsibility and sustainability.

In addressing the objective regarding the key indicators considered important and material enough to report on, it was found that the selected mining companies returned quite balanced reports including economic, environmental, labour, human rights and social indicators. It does; however, seem as if the *human aspect* is slightly more important with the seven of the top 16 indicators focussing on labour and human rights. When considering the level of

integration of the reports, a clear learning curve could be detected in how the level of integration has improved over the two years under consideration. Initially around half the companies submitted what can be considered adequately integrated reports in 2010 (seven out of 13). This improved in 2011, with ten out of the 13 companies submitting adequately integrated reports. With regards to the 'B' or 'C'-ratings given to reports, the companies proved generally quite accurate in their self-declarations of ratings. What is interesting (and perhaps of concern) is that several 'A'-rated companies rated themselves higher than they should have been when considering the GRI guidelines. What adds even more to the level of concern is the fact that these over-rated companies' reports were independently assured to validate an 'A+'-rating. This brings into question the external assurer's report/assessment reliability and trustworthiness into question.

Determining what an acceptable reason for non-disclosure is, is considered a judgemental or *grey* area. As with many guidelines that are not statutory in nature, a 'disclose or explain' approach is often followed, but companies tend to regard a specific disclosure as 'disclosed' without a reason for non-disclosure. They then simply state that the indicators have not been disclosed. The reason for non-disclosure that can be accepted in order to deem the indicators as disclosed, is thus subject to opinion and cannot be regarded as incorrect. This does however clearly indicate that companies need to take more care in explaining reasons for non-disclosure of items if they want to self-declare an 'A+' rating.

3.7.2 Final remarks

From a different but supportive perspective, the recent developments at the Lonmin Marikana platinum mine in South Africa raise questions about the measurement and disclosure of performance indicators. On August 16, 2012 disgruntled workers at the Marikana mine went on an unlawful and violent strike due to invidious living conditions at the mine (De Vos, 2012). The end-result of this strike became known as the Marikana Massacre; with numerous fatalities and widespread unease in the South African mining industry (De Vos, 2012). Yet, Lonmin issued an exemplary integrated report which received an 'A+' rating in both 2010 and 2011. This raises the question: why was there no mention, in any integrated report, of the living conditions of workers or of the discontent of the employees of the Marikana mine? It appears that, in the case of Lonmin, only their positive non-financial performances were disclosed and the negative ones omitted. In addition to this, the external assurance gained on the report is also questionable. One cannot but draw comparisons between Lonmin and the

Enron/Arthur Anderson fiasco of a few years back. Is the limited assurance given on the content of the sustainability report sufficient or shouldn't an analysis on the completeness of such a report be conducted? Is it possible that the true purpose of the Integrated Report is being misconstrued and abused for self-promotional purposes and *bragging rights*?

3.7.3 Recommendations

Regardless of the form that sustainability takes, it affects everybody. The future of our economies, societies and the natural environments will be determined by how it is dealt with (Swift *et al.*, 2007). Thus, clearly, there is much room for improvement in the context of integrated reporting relating to the adherence to the Framework, especially when considering the more basic principles, including the boundary and scope of the report and maintaining a balance between reporting on both positive and negative aspects, as indicated in the Sustainability Reporting Guidelines and the Technical Protocol. It should be considered whether more attention should be directed to the basis on which the reports are prepared, rather than putting too much emphasis on ensuring to report on all standard disclosures. It is thus recommended that companies re-consider the basis of preparation of their sustainability and ultimately their integrated reports. Stricter adherence to the principles as set out by the GRI is necessary especially regarding the completeness and accuracy of the report.

In conclusion, according to Deloitte (2011b), it is inevitable that the world will move to the adoption of integrated reporting just as the world has moved towards the adoption of IFRS. The timing of such adoption is, however, unclear and organizations that report on the complete range of issues may be seen more advanced than those which limit their reporting to mere financial information and limited sustainability disclosures.

3.7.4 Limitations of the study

The results of this study are limited by the fact that the sample focuses on South African mining companies. Thus, firstly, the focus on the mining industry limits the application of the results of this study to companies in other industries. For other industries the sector supplement used in this study will not be applicable.

Secondly the results may not be applicable to other countries especially since the issuing of an integrated report would not necessarily be a listing requirement of the relevant stock

exchange of such a country. Where the disclosure of sustainability information is voluntary, it is likely that only positive aspects will be disclosed and the scope of the report will be limited.

In addition to the above, this study focussed on the standard disclosures as prescribed by the GRI in their Framework. Yet, per analysis of the relevant reports and per the findings above, it was clear that the more basic principles of the Framework were lacking (for example the setting of the boundary, scope and contents of the report). This being outside the scope of the research undertaken, limits the application of the results.

3.7.5 Future research

Considering the above limitations, further research can attempt to replicate a similar study in other sectors of the JSE, from which cross-sector comparisons and best practices may be extrapolated.

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CHAPTER 4

4. CONCLUSION

4.1 BACKGROUND

The purpose of this chapter is to summarize the essence and principles of the research conducted. It also serves to shed light on the results of the empirical analysis of the integrated reports of the sampled companies. This study aimed to examine and analyse the integrated reports of mining companies listed as part of the Top 40 companies on the JSE.

The research indicated that the usefulness of financial information to investors and stakeholders has been deteriorating due to the increasing demand from stakeholders for relevant information. In this day and age reporting on sustainability has become inevitable. But what is sustainability and how do one report on it? To treat information of a *non-financial* kind with the same strictness and thoroughness that we treat *financial* information has now become the challenge.

In order to report on sustainability one needs to fully understand what it entails. Many different terms are used in practice including corporate social responsibility, triple bottom line reporting and integrated reporting, yet very few individuals know the meaning of these terms. The concept of *Corporate Social Responsibility* is about how companies align their principles, values and actions with that what is expected from them by all its stakeholders. The term *triple-bottom-line* (TBL) refers to the interaction between three key interest areas in the continued existence of a company, which are not only about pursuing *economic success*, but about simultaneously pursuing *environmental quality* and *social equity* as well. The principles of TBL reporting are specifically included as a part of sustainability, but states that sustainability is more than just *reporting on sustainability* and that it is vital for companies to focus on *integrated reporting.*

It was also shown that an integrated report tells the holistic story of the company and serves as a way of reporting financial and non-financial information in a way that shows how they affect each other, meaning that it shows how non-financial performance contribute to financial performance, and vice versa. Thus the word *integrated* in *integrated reporting* is of at most importance.

The field of study centred on the South African mining industry. It was indicated that South Africa is the world's largest platinum producer and one of the leading producers of base metals, coal, gold and diamonds. South Africa also holds the biggest natural reserves of chrome ore, manganese ore and gold. The mining industry is of utmost importance to South Africa seeing as the metals and minerals sector accounts for about a third of the market capitalization of the JSE and is a key magnet for foreign investors to invest in South Africa.

4.2 RESEARCH SUMMARY

Given the importance of the economic, environmental and social impacts of the companies in the mining sector of South Africa, it was reported that the integrated reports issued by these companies are of great importance. A problem arises seeing as reporting on sustainability is mandatory per the JSE listing requirements, but the conforming to any form of standards or requirements for these types of reports is voluntary.

Considering the above, the primary question (refer to the section "Problem statement and research objectives" on page - 8 -) inquired into the extent to which the integrated reports of the South African mining companies – as submitted/provided to the JSE – have been prepared in compliance with, and consideration of, the GRI guidelines. From this, further questions was formed including i) what the key aspects reported on are, ii) what the level of integration of the reports are as well as iii) what rating is given to the applicable reports (refer to the section "Problem statement and research objectives" on page - 8 -).

This study thus set out to address the above mentioned problems by analyzing the integrated reports of the mining companies listed on the JSE, with the G3.1 Guidelines and the Sector Supplements for Mining and Mineral companies.

4.2.1 Literary research synopsis

Firstly, in chapter one, the background to the study was set out being the complexity and uncertainty surrounding the concept of sustainability, corporate social responsibility, triple bottom line reporting and thus in essence integrated reporting as a whole. This led to the identification of the research problem being that all companies listed on the JSE is required to adhere to KING III which in turn requires the issue of an integrated report. Yet, no statutory standard or guidance is prescribed to be followed in producing an integrated report. Thus a

situation is created where integrated reporting is compulsory but no standards need to be adhered to. From this the research objective and research questions was created.

In chapter two an overview of the applicable literature was provided, being mainly the Sustainability reporting Framework as compiled by the GRI. The purpose of this Framework is to provide guidance on the compilation of an integrated report. The Framework entails that, amongst other things, certain disclosures on environmental, social as economical needs to be included in the integrated report in order for the report to be seen as complete and sufficient. Of these disclosures some are seen as important and thus core to the report. The GRI also compiled sector specific supplement to the Frameworks, including a supplement for the mining and metals industry. Thus these sector specific disclosures, along with the core disclosures as set out in the original Framework, was used to analyse the integrated reports of the sampled JSE listed mining companies.

4.2.2 Empirical research synopsis

The third chapter contains the results of the empirical analysis of the integrated reports of the sampled South African mining companies in the form of an academic article. The article summarizes the foundation of the study as set out in chapter one and two and also includes the results of the research undertaken including answering the stated research questions.

Through this study the following became apparent:

In answering the first research question as stated in Chapter 1 (refer to the section 1.5 on page - 8 -) the key aspects that these companies reported on include four key economic, four key environmental, five labour, two human resources and two social indicators. These are presented in more detail in the table below:

Table 4.1: Key reported performance indicators

Code	Descriptor
EC 1	Direct economic value generated and distributed
EC 2	Financial implications and risks due to climate change
EC 6	Policies and proportion of spending on local suppliers
EC 8	Investments and services provided for public benefit
EN 3	Direct energy consumption
EN 8	Total water withdrawal
EN 16	Total direct and indirect greenhouse gas emissions
EN 22	Total weight of waste
LA 1	Total workforce by employment type
LA 4	Percentage of employees covered by collective bargaining agreements
LA 7	Rates of occupational injuries, diseases and fatalities
LA 10	Average hours of training per employee
LA 13	Composition of governance bodies and employees according to indicators of diversity
HR 6	Operations having significant risk of child labour
HR 7	Operations having significant risk of forced and compulsory labour
SO 1	Effectiveness of practices that assess and manage impacts of operations on communities
SO 5	Position and participation in public policy development and lobbying

In answering the second research question as stated in Chapter 1 (refer to the section 1.5 on page - 8 -), the level of integration of the sustainability report of these companies with their financial improved from 2010 to 2011 with 10 out of the 13 sampled companies producing fully integrated reports in 2011.

The final research question as stated in Chapter 1 (refer to the section 1.5 on page - 8 -) speaks to the self-declared ratings given by companies to their integrated reports as per the GRI requirements. In analyzing these reports, it became apparent that companies' self-declared ratings are accurate and lacking only in areas of uncertainty or judgement.

4.2.3 Concluding discussion

An interesting, and yet concerning, observation made during the conduct of this study, is that several 'A'-rated companies rated themselves higher than they should have when considering the GRI guidelines. Even more concerning is the fact that these over-rated reports have been independently assured which thus awards these companies with an 'A+' rating. This raises questions around the reliability and trustworthiness of the external assurer's assessment as well as the report.

The cause of these over-rated reports appears to be a judgemental or grey area regarding the determination of what an acceptable reason for non-disclosure is. Not unlike other guidelines of a non-statutory nature, the GRI framework follows a 'disclose or explain' approach, but companies tend to simply state the fact that a certain standard disclosure is not disclosed without providing any reason as to why the disclosure have been omitted. The reason for non-disclosure that can be accepted in order to deem the indicators as disclosed, is thus subject to opinion and cannot be regarded as incorrect. This does however clearly indicate that companies need to take more care in explaining reasons for non-disclosure of items if they want to self-declare an 'A+' rating.

From a different point of view, recent developments at the Lonmin Marikana platinum mine in South Africa raises questions on the measurement and disclosure of performance indicators and standard disclosures. This is due to the fact that, on 16 August 2012, disgruntled workers at the Marikana mine went on an unlawful and violent strike (De Vos, 2012). The strike was brought on by questionable living conditions at the mine. With numerous fatalities and wide spread unease caused in the South African mining industry, this strike became known as the Marikana Massacre (De Vos, 2012). Yet, Lonmin issued an exemplary integrated report which received an 'A+' rating in both 2010 and 2011. The question is now: is the mere mention of possible unrest as a risk, and the stating of goals achieved or not achieved (relating to this risk) sufficient disclosure of such a serious situation as at Lonmin Marikana mine? And if not, what would be considered sufficient disclosure? It would appear that an entity can issue a so called "exemplary" report even when only disclosing half-truths.

Thus the external assurance gained on the report is also questionable. One cannot help but draw comparisons between Lonmin and the Enron/Arthur Anderson fiasco of a few years ago. Is the limited assurance given on the content of the sustainability report sufficient? Can

one simply verify the contents of the reports or shouldn't more attention be given to ensure the completeness of these reports? Is it possible that the true purpose of the Integrated Report is being misconstrued and abused for self-promotional purposes and *bragging rights*? This can only be countered by statutory requirement of adherence to standards and guidelines insuring not on accuracy of reports, but also completeness and occurrence.

Considering all of the above, the key contribution of this study can be summarized as follows:

- The JSE currently has no requirement for integrated reports to be produced according to any standards or guidelines. Thus this study set out to analyse and compare the integrated reports of mining companies listed on the JSE. This was done in order to assess the adherence of the applicable companies' integrated reports to a globally accepted guideline to integrated reporting being that of the GRI.

One can conclude that at the centre of sustainability, corporate social responsibility and triple bottom line lies responsibility - the responsibility of a company to the economy, environment and the people around it. Most of all the responsibility to truthfully and fully report on these responsibilities are key. It is inevitable that the world will move to the adoption of integrated reporting just as the world has moved towards the adoption of IFRS. The timing of adoption is however unclear. They also state that organizations that report on the complete range of issues may be seen more advanced than those which limit their reporting to mere financial information and restricted required disclosures.

Regardless of the form that sustainability takes, it affects everybody. The future of our economy, society and the natural environment will be determined by how it is dealt with (Swift *et al.*, 2007).

4.3 LIMITATIONS OF THE STUDY

The application of the results of this study is limited by the fact that the study focuses on the mining industry. Seeing as different sector supplements exist for certain sectors, the findings of this study may not be directly applicable to other industries. Furthermore, for some industries, no sector supplements exist to date.

In addition to the above, this study is focussed on mining companies listed on the JSE. The reason for focussing the study on JSE listed companies is that the JSE requires, as part of its listing requirements, adherence to KING III. This is what led to the JSE listed companies needing to produce integrated reports. In other companies listed on other stock exchanges the listing requirements will differ and the producing of an integrated report may not be required.

4.4 RECOMMENDATION FOR FURTHER RESEARCH

Integrated reporting is, to many people, an abstract and unknown concept. Thus numerous opportunities for further research exist. Further research can be conducted by applying this study to companies in different sectors on the JSE. Further research can also be conducted on companies listed on other exchanges in different countries including the assessment of whether these countries have a requirement for integrated reports to be issued as well as the advantages such a requirement can bring. An analysis can also be done of what different countries can learn from each other regarding policies and practices surrounding integrated reporting.

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6. ANNEXURE A: STANDARD DISCLOSURES

Legend:

EC = Standard disclosures on Economic impacts

EN = Standard disclosures on Environmental impacts

LA = Standard disclosures on Labour Practices and Decent work

HR = Standard disclosures on Human Rights

SO = Standard disclosures on Society impacts

PR = Standard disclosures on Product Responsibility

MM = Sector-specific standard disclosure in any of the above-mentioned categories (in this document this specifically indicates standard disclosures in relation to mining and metal companies).

Indicators specifically applicable to the mining and metals industry are marked in red boxes.

	Core indicators
	Indicators specific to the mining and metals industry
	Additional indicators

ECONOMIC

Economic performance

EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change
EC3	Coverage of the organization's defined benefit plan obligations
EC4	Significant financial assistance received from government

Market presence

EC5	Range of ratios of standard entry-level wage compared to local minimum wage at significant locations of operation
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation
EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation

Indirect economic impacts

EC8	Development and impact of infrastructure investments and services provided as a preliminary for public benefit through commercial, in-kind, or pro bono engagement.
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts

ENVIRONMENTAL

Materials

EN1	Materials used by weight or volume
EN 2	Percentage of materials used that are recycled input materials

Energy

EN 3	Direct energy consumption by primary energy source
EN4	Indirect energy consumption by primary source
EN5	Energy saved due to conservation and efficiency improvements
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives
EN7	Initiatives to reduce indirect energy consumption and reductions achieved

Water

EN 8	Total water withdrawal by source
EN9	Water sources significantly affected by withdrawal of water
EN10	Percentage and total volume of water recycled and reused

Biodiversity

EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas
EN 12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.
EN 13	Habits protected or restored
EN 14	Strategies, current actions and future plans for managing impacts on biodiversity
MM2	The number and percentage of total sites identified as requiring biodiversity

	management plans according to stated criteria, and the number (%) of those sites with plans in place
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

Emissions, effluents and waste

EN16	Total direct and indirect greenhouse gas emissions by weight
EN17	Other relevant indirect greenhouse gas emissions by weight
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved
EN19	Emissions of ozone-depleting substances by weight
EN20	NO,SO, and other significant air emissions by type and weight
EN21	Total water discharged by quality and destination
EN22	Total weight of waste by type and disposal method
MM3	Total amount of over burden, rock, tailings, and sludges and their associated risks
EN23	Total number and volume of significant spills
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and IV, and percentage of transported waste shipped internationally
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff

Products and services

EN26	Initiatives to mitigate environmental impacts of product and services, and extent of impact mitigation
EN27	Percentage of products sold and their packaging materials that are reclaimed by category

Compliance

EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations

Transport

EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce

Overall

EN30	Total environmental protection expenditures and investments by type

LABOUR PRACTICES AND DECENT WORK

Employment

LA1	Total workforce by employment type, employment contract, and region
LA2	Total number and rate of employee turnover by age group, gender, and region
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations

Labour/Management relations

LA4	Percentage of employees covered by collective bargaining agreements
LA5	Minimum notice period (s) regarding operational changes, including whether it is specified in collective agreements
MM4	Number of strikes and lock-outs exceeding one week's duration, by country

Occupational health and safety

LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region
LA8	Education, training, counselling , prevention, and risk control programmes in place to assist workforce members, their families, or community members regarding serious diseases
LA9	Health and safety topics covered in formal agreements with trade unions

Training and education

LA10	Average hours of training per year per employee by employee category
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career ending
LA12	Percentage of employees receiving regular performance and career development reviews

Diversity and equal opportunity

LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity
LA14	Ratio of basic salary of men to women by employee category

HUMAN RIGHTS

Investment and procurement practices

HR1	Percentage and total number of significant investment agreements that include human rights, clauses or that have undergone human right screening
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.

Non-discrimination

HR4	Total number of incidents of discrimination and actions taken

Freedom of association and collective bargaining

HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.

Child labour

HR6	Operations identified as having significant risk or incidents of child labour, and measures taken to contribute to the elimination of child labour

Forced and compulsory labour

HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination of forced or compulsory labour

Security practices

HR8	Percentage of security personnel trained in the organization's policies and procedures concerning aspects of human rights that are relevant to operations

Indigenous rights

MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken

SOCIETY

Community

SO1	Nature, scope and effectiveness of any programmes and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting
MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples.
MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes

Artisanal and small-scale mining

MM8	Number (and percentage) or company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks

Resettlement

MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process

Closure planning

MM10	Number and percentage of operations with closure plans

Corruption

SO2	Percentage and total number of business units analysed for risk related to corruption
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures
SO4	Actions taken in response to incidents or corruption

Public policy

SO5	Public policy positions and participation in public policy development and lobbying
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country

Anti-competitive behaviour

SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Compliance

SO8	Monetary value of significant finds and total number of non-monetary sanctions for non-compliance with laws and regulations

PRODUCT RESPONSIBILITY

Materials stewardship

MM11	Programmes and progress relating to materials stewardship

Customer health and safety

PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes

Product and service labelling

PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction

Marketing communications

PR6	Programmes for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship
PR7	Total number if incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes

Customer privacy

PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data

Compliance

PR9	Monetary value of significant finds for non-compliance with laws and regulations concerning the provision and use of products and services

7. ANNEXURE B: DATA ANALYSIS

7. Annexure B: Data analysis

	ARCELORMITTAL		ANGLO AMERICAN		ANGLO PLATINUM		ANGLO GOLD		ARM - AFRICAN RAINBOW		BHP BILLITON		EXXARO RESOURCES LTD		GLODFIELDS LTD		HARMONY GOLD		IMPLATS		KUMBA IRON ORE LTD		LONMIN		SASOL	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
ECONOMIC																										
EC1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EC2	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
EC3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
EC4	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
EC6	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EC7	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EC8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ENVIRONMENTAL																										
EN1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
EN 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
EN 3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EN4	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
EN 8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EN11	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓
EN 12	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
MM1	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
EN 13	✗	✗	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
EN 14	✗	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MM2	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
EN16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EN17	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓
EN19	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓	✓
EN20	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
EN21	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓
EN22	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MM3	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
EN23	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
EN26	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
EN27	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓	✓
EN28	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
LABOR PRACTICES AND DECENT WORK																										
Employment																										
LA1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
LA2	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
LA4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LA5	✓	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
MM4	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
LA7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LA8	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓
LA10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

LA13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
LA14	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
HUMAN RIGHTS																										
HR1	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓
HR2	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✓
HR4	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
HR5	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
HR6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HR7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MM5	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓
SOCIETY																										
SO1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MM6	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
MM7	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
MM8	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
MM9	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
MM10	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
SO2	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓
SO3	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓	✓
SO4	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
SO5	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓
SO7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓
SO8	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PRODUCT RESPONSIBILITY																										
MM11	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
PR1	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
PR3	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✗	✓	✓	✓	✓	✓
PR6	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✓
PR9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓
Total reported	32	34	63	63	62	62	61	61	54	62	63	62	50	53	63	63	43	52	31	37	24	62	63	63	63	63
Excluding MM reporting:	32	31	52	52	52	52	50	50	45	51	52	51	46	44	52	52	43	52	31	37	24	52	52	52	52	52
Potential rating	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
MM reporting?	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✓	✓	✓	✓	✓
Management approach?	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
Adjusted rating:	C	B	A	A	B	B	B	B	B	B	A	B	B	B	A	A	B	B	B	B	C	B	A	A	A	A
External assurance?	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Final Rating:	C+	B+	A+	A+	B+	B+	B+	B+	B+	B+	A+	B+	B+	B+	A+	A+	B+	B+	B+	B+	C+	B+	A+	A+	A+	A+
Self declared rating:	C+	B+	A+	A+	A+	A+	A+	A+	B+	A+	A+	A+	B+	B+	A+	A+	B+	B+	B+	B+	C+	A+	A+	A+	A+	A+


Agree with self declared?

8. ANNEXURE C: ARTICLE AS PUBLISHED

Integrated Reporting Compliance With The Global Reporting Initiative Framework: An Analysis Of The South African Mining Industry

Tertia Hindley, Deloitte, Johannesburg, South Africa
Pieter W Buys, Ph.D., North-West University, South Africa

ABSTRACT

For all financial years ending on or after March 1st 2010, all companies listed on the Johannesburg Stock Exchange Ltd (JSE) have to provide an Integrated Report (as part of the JSE's listing requirements). This report is to supply sustainability information in addition to the conventional IFRS-based statements. Yet, no statutory requirement for adherence to reporting standards relating to sustainability exists. This creates the risk that sustainability reports will omit negative impacts or be otherwise misleading, yet the company is still seen as adhering to listing and thus statutory requirements. This article considers the quality of integrated reporting of the South African mining industry by evaluating compliance to the globally accepted Sustainability Framework of the Global Reporting Initiative, which includes Sector specific performance indicators, as well as GRI core indicators. Using a sample of the mining companies included in the JSE Top 40 companies, the results show that these companies used the GRI G3.1 version guidelines in producing their integrated reports and that adherence to the GRI guideline has improved over the two years under consideration.

Keywords: Corporate Social Responsibility; Financial Reporting; GRI Framework; Integrated Reporting; Sustainability; Triple-Bottom-Line

INTRODUCTION

In the global business and economic contexts, long-term sustainability has become very important as a basis for investment decisions, and consumers are growing more conscious of the social and environmental performances of the entities from whom they buy goods and/or services (Ho & Taylor, 2007). Ho and Taylor (2007) also stated that evaluating organizational performances based on economic factors alone, are no longer sufficient because stakeholders are more and more concerned about whether a company is being socially responsible and environmentally friendly.

Not too long ago, a company would have been considered as an exemplary, well performing organization if it could deliver its products and services, publish an annual report and distribute dividends, but no longer (Deloitte, 2011a). Lev and Zarowin (1999) also indicated that the usefulness of financial information to investors and other stakeholders have been deteriorating due to the increasing demand from stakeholders for relevant information. Eccles and Krzus (2010) stated that reporting is of much importance since it communicates to the outside world its performance and its plans and objectives for the future. Oberholzer (2011) even goes as far as comparing data to gasoline – getting insufficient or bad data (or not understanding the data) is like *running out of gas*. The effective reporting of company information is therefore not only essential to management functions like planning and control, but also to the external stakeholder decision-making processes. Today there are growing expectations for companies not to simply turn a profit. The reporting of stakeholder relevant company information therefore comes down to one fundamental principle: the on-going search for effective communication. What is required is a report that provides integrated and relevant information to the broader base of stakeholders.

The Global Reporting Initiative (GRI) used the principles of social responsibility and economic, social and environmental impacts in their approach to create a framework for reporting on sustainability. Integrated reports that are based on the GRI's Sustainability Framework will indicate a company's commitment to sustainable development and will enable users thereof to compare the performance of the company over time as well as to measure the company's adherence to applicable laws, standards, principles and voluntary initiatives (GRI, 2011a). The GRI (2011a) stated that it endorses standardized reporting of sustainability information which benefits both the reporting company as well as the users of the report. According to their mission statement the GRI also strives to make sustainability reporting standard practice (GRI, 2011b).

In response to the growing importance of sustainability reporting, the Johannesburg Stock Exchange Ltd (JSE) added as a listing requirement that all JSE listed companies have to adhere to the King III Code of Governance. This entails (amongst other things) providing an integrated report, consisting of a report on the company's sustainability in addition to its conventional International Financial Reporting Standards (IFRS) based reports for all financial years ending on or after 1 March 2010 (SAICA, 2011). Unfortunately, many executives do not know exactly what concepts such as sustainability, corporate social responsibility (CSR), and triple bottom-line (TBL) entail (Abouzeid & Weaver, 1978). In Abouzeid and Weaver's (1978) earlier survey entitled *The Most Important Corporate Goals Identified by Participating Companies*, the polled executives did not select CSR as an important business goal but they did however, select customer satisfaction, employee welfare and safety as important goals. It is evident that this lack of clarity remained a problem throughout the years seeing as, even with many great minds applied to the *science* of sustainability and integrated reporting, a full understanding of how to approach sustainability, while still ensuring growth, has still to be obtained (Pounder, 2011; Doane & MacGillivray, 2001). Doane and MacGillivray (2001) also stated that managers need to better understand what it is that makes a business survive, what finance directors need to be aware of regarding sustainability and other factors that need to be considered when a business appears to be struggling, that sustainability is not left behind in an attempt to save the company.

In the South African context, the Mining and Minerals industry includes the companies with the highest environmental impacts; Sasol, BHP Billiton, ArcelorMittal SA and Anglo American being amongst the top 5 companies with regards to high CO_2 emissions (National Treasury, 2010). South Africa is the world's largest platinum producer and one of the leading producers of base metals, coal, gold and diamonds, and also holds the largest natural reserves of chrome ore, manganese ore, gold and platinum-group metals (SouthAfrica.info, 2012). Furthermore, according to the Chamber of Mines of South Africa (2011) the following contributions can be attributed to the industry in 2010:

- 8.6% direct contribution to the GDP of South Africa with a further 19% indirect contribution;
- Over 50% of merchandise exports;
- Approximately 20% of gross investment;
- About 30% of the capital inflows into the economy, and
- 94% of South Africa's electricity generating capacity.

Considering the above, the Mining and Minerals industry is not only of importance to the broader Southern African economy (and the global economies), but it also has a significant impact on the environmental and the social development initiatives of the region.

RESEARCH OBJECTIVE

Considering the above, the question can be asked as to the extent to which the integrated reports of the South African Mining and Minerals companies, as submitted to the JSE, have been prepared in compliance with, and in consideration of, the GRI guidelines. In meeting this objective, the following aspects have to be considered. Firstly, the key aspects reported on by the companies have to be identified, secondly the level of integration of the sustainability reports with the conventional annual financial statement has to be evaluated, and thirdly the applicable rating ('A', 'B' or 'C') given to the applicable reports, needs to considered.

By analysing and comparing the *Integrated Reports* provided by the Mining and Mineral companies listed on the JSE, together with the GRI's *Sector Supplements for Mining and Metals* companies, it should therefore be possible to determine the extent to which these companies' integrated reports adhere to the G3.1 Guidelines Sector Supplement for Mining and Metals companies.

RESEARCH METHODOLOGY

A quantitative, applied and descriptive research methodology will be followed in order to address the stated objectives. The reports of the Mining and Minerals companies listed on the Top 40 companies (2010 and 2011 financial years) of the JSE have been identified as the sample to be used in the report analysis based on the GRI G3.1 Sector Supplements for Mining and Metals companies. The relevant company reports were obtained from their respective websites. All listed companies are required to issue their annual reports within 6 months of the date of their financial year end. Furthermore the requirement to issue integrated reports is for all financial years ending on or after 1 March 2010. Thus 2010 reports will be used as basis to gauge whether integrated reports have been submitted. In addition to this, 2011 reports will also be used in order to be able to judge comparability and improvements in reporting on a per company basis.

In order to meet these objectives, the article is set out in the following manner. Firstly, an overview of the theoretical framework is provided, which includes overviews of corporate social responsibility, triple-bottom-line reporting, sustainability and integrated reporting. This is followed by a high level overview of the G3.1 Sustainability Framework as the literature component of the research conducted, which is in turn followed by the research results before the final conclusions and recommendations.

THEORETICAL FRAMEWORK

Corporate Social Responsibility

According to Two Tomorrows (2009) (previously known as the CSR Network), the concept of *Corporate Social Responsibility* is about how companies align their principles, values and actions with that what is expected from them by all its stakeholders (i.e. it is not just about shareholders but also about customers, suppliers, investors, employees, regulators, groups with special interests and anyone affected by the company in any significant manner). Adams *et al* (1998) examined CSR practices of numerous European companies, and found that these companies typically categorize their disclosures into several key aspects including reporting on environmental aspects, on employee aspects and on ethical aspects. It thus indicates the commitment of a company to be accountable to all stakeholders.

According to Pounder (2011), Borkowski *et al*. (2010) and Swift *et al.* (2007), the terms *sustainability* (discussed in more detail below) and *CSR* are often used interchangeable. Sustainability however, is described as a broader concept that seeks long-term economic, natural and social capital growth, whereas *CSR* is more focused on shorter-term tendencies, problems and activities (e.g. philanthropy, adherence to legalities and improvement in working conditions). Thus many companies may claim to be socially responsible, but there are few that are truly sustainable (Swift *et al.* (2007). Two Tomorrows (2009) also clearly indicate that CSR demands that, in order to maximize benefits and keep downsides to minimum, companies have to manage the economic, social and environmental impacts of their operations.

Triple-Bottom-Line reporting

The term *triple-bottom-line* was originally coined by John Elkington, a management consultant (Rogers & Ryan, 2001), and is an attempt to acknowledge the interaction of three key interest areas in the continued existence of the company, which are according to Elkington (1997) not only about pursuing *economic success*, but about simultaneously pursuing *environmental quality* and *social equity* as well, hence the concept of the *triple-bottom-line*.

While conventional financial statements primarily focus on profitability and financial indicators, TBL reporting attempts to present a broader view of the corporate economic interactions with all its stakeholders (Ho &

Taylor, 2007). Therefore, companies that want to achieve sustainability cannot only measure its performance against a single financial bottom line, but against all the TBL components, i.e. the social bottom line (or the people aspect), the economic bottom line (or the profitability) and the environmental bottom line (or the planet aspect) (Elkington, 1997). Thus, in the context of the TBL, all three these concepts need to be considered equally in order to achieve long-term organizational sustainability.

Sustainability

According to Deloitte (2009), the King II Code on Governance in South Africa illuminated corporate citizenship and integrated sustainability, in terms of which a company needs to account for its environmental and social issues as well as economic performances. The King III Code on Governance in South Africa expanded here upon by emphasizing the concept of sustainability. Deloitte's interpretation of King III's focus is that directors are accountable to all stakeholders in order to assure that the company's resources are utilized in such a way that it will be able to continue to be viable. This involves environmental sustainability, social responsibility, respect for human rights and the successful managing of stakeholder's relationships (Deloitte, 2009; King III, 2009).

If the growth in population, resource consumption and economies continue at its current rates, the resources of the world will be depleted to such an extent that it will no longer be able to support life (Swift *et al.*, 2007), and this makes sustainability relevant to all of us. According to Swift *et al.* (2007), a company or activity is considered unsustainable when its continued activity would result in the exhaustion of a given resource. Swift *et al.* (2007) also stated that sustainable development is of high political importance in many governments and that failure to adhere to sustainable development objectives can expose a company to strategic, business and reputational risks, which can result in the loss of stakeholders' trust, increases in cost of capital and in extreme cases even the loss of the ability to operate as a going concern.

King III (2009) specifically includes the principle of TBL reporting as a part of sustainability, but states that sustainability is more than just *reporting on sustainability* and that it is vital for companies to focus on *integrated reporting*. The King III Code of Governance (King III, 2009) thus supports the notion of sustainability reporting but acknowledges that in the past sustainability reporting was done in addition to financial statements, whereas the current position is that sustainability reporting must be *integrated* with the financial statements.

Integrated Reporting

According to Deloitte (2011b) integrated reporting attempts to incorporate everything from risk management through to strategy, and from financial reporting to the utilization of other capital sources. It therefore seeks to meet the needs of a broader group of stakeholders - thus everyone associated with the company is likely to be affected by it. Deloitte (2011b) also highlights that the integrated report is simply an output of extensive prior reporting initiatives and consider it as the enabler of a process which improves and preserves long-term sustainability in all aspects, without unduly leading to the sacrifice of short-term performance. At the very essence of integrated reporting lies the *Integrated Report* that in time will become the primary report of all companies (Deloitte, 2011b). The jury however, is still out as to what exactly the format hereof should be, and whether certain components of the conventional reports will be moved to online sources and what the actual information included in the report will be.

Even with numerous terms, definitions and explanations as indicated above, one can still be unsure as to *what* needs to be reported on, and *how* it needs to be reported on, in order for an integrated report to be seen as sufficient. As mentioned earlier, the *Sustainability Reporting Framework*, as developed by the GRI, can be used to assist companies with their integrated reporting initiatives.

THE GRI's SUSTAINABILITY REPORTING FRAMEWORK

Components of the Framework

The GRI's Sustainability Reporting Framework (hereafter the Framework) prescribes the minimum disclosures needed in order to produce comparable and complete sustainability reports. In its essence, it may be argued that the integrated report is a combination of the sustainability reporting concepts as suggested by the GRI, and the conventional financial reporting aspects as required by IFRS. The Framework consists of several sections (GRI, 2011c), including:

- The **Sustainability Reporting Guidelines**. These Guidelines form the foundation and corner stone of the Framework, which are now in their third generation, called G3.1. The G3.1 Guidelines are available are freely available at no cost (GRI, 2011a).
- The **Sector Supplements**. For certain sectors, the abovementioned Guidelines have been expanded to address sector specific aspects and issues. The currently available Supplements include the Mining and Metals industry (GRI, 2011d).
- The **Technical Protocol**. The Protocol guides the reporting company through the process of defining the contents of the sustainability report (a requirement of the Sustainability Reporting Guidelines).

Expanding on the above, the Sustainability Reporting Guidelines (as listed above) also recommend certain Standard Disclosures, which are typically the minimum suggested disclosures of the economic, environmental and social impacts. Within each of these economic, environmental and social considerations, the company should highlight its *strategy*, *management's approach* and the *performance indicators* for each. The first two considerations (i.e. the strategy and the management approach) may typically be considered as generic, whereas the performance indicators are then more specific in their consideration and reporting of actual results. The various performance indicators are further classified into the *core indicators* and the *additional indicators* (GRI, 2011e). Firstly, the core indicators are those considered being of key interest to most stakeholders and they are thus assumed to be material unless deemed otherwise. Secondly, the additional indicators are those indicators that address topics that may be material to some companies and/or stakeholders but not generally for the majority of companies and/or stakeholders. These additional indicators may also be representative of emerging practices and are therefore not (yet) considered to be material (GRI, 2011e).

Therefore, in the analysis of the integrated reports of the South African Mining and Minerals industry, the *Sector Specific Performance* indicators (as per the above mentioned Sector Supplements) and the *Core* indicators (as per the Sustainability Reporting Guidelines section on performance indicators) have been taken into account in consideration of the compliance to the G3.1 Guidelines.

Application levels of the Framework

In order for a company to indicate that its *Sustainability Report* have been prepared on the basis of the GRI Guidelines as discussed above, the company should declare the level of such adherence using the GRI's application levels system (GRI, 2011f). There are currently three levels of application available named 'A', 'B' and 'C', (see Table 1 below), with 'A' indicating the highest level of compliance and adherence to the Framework, 'B' being the midway level and 'C' being the lowest level of adherence. In the case where external assurance was obtained with regards to the sustainability report, a '+' sign is added to the application level as indication of such assurance (GRI, 2011f, Borkowski *et al*.).

Table 1: GRI Sustainability Reporting Framework adherence levels

	C	C+	B	B+	A	A+
Profile Disclosures	Report on indicators: 1.1, 2.1-2.10, 3.1-3.8, 3.10-3.12, 4.1-4.4 , 4.14-4.15	Externally Assured	In addition to 'C', also report on indicators: 1.2, 3.9, 3.13, 4.5-4.13, 4.16-4.17	Externally Assured	Same as for 'B'	Externally Assured
Disclosures on Management approach	Not Required		Management approach i.r.o. each indicator category		Management approach i.r.o. each indicator category	
Performance Indicators & Sector Supplement Performance Indicators	Report on at least 10 performance indicators (at least one from each of: social, economic and environment).		Report on at least 20 performance indicators (at least one from each of: social, economic and environment).		Report on each core and sector supplement indicator or explain the reason for its omission.	

Source: Adapted from GRI (2011f)

According to the GRI (2011f), companies are required to make a self-declaration of their level of adherence and compliance, which can then either be substantiated by having a third party express an opinion on the report or by requesting the GRI to check the self-declaration. For each company included in the research sample, the above table has been used in order to gauge adherence to the GRI Sustainability Framework:

RESEARCH RESULTS

Descriptive statistics

The selected sample consisted of 13 companies in the Mining and Minerals industry (per the JSE Top 40 listing as at 15 August 2011). All companies had issued 2010 as well as 2011 reports by the end of July 2012, thus making both improvement and comparability analyses possible (see Table 2 below). Compliance with the *Core* as well as the *Sector Specific Indicators* was tested by an analysis of the respective reports. Based on the Framework, a total of up to 63 performance indicators may be reported on, of which 52 are Core and 11 are Sector Specific indicators.

Table 2: JSE listed Mining and Minerals companies' reporting indicators

Company	2010			2011		
	Core (n=52)	Sector Specific (n=11)	Total (n=63)	Core (n=52)	Sector Specific (n=11)	Total (n=63)
Arcelormittal	32	0	32	31	3	34
Anglo American	52	11	63	52	11	63
Anglo Platinum	52	10	62	52	10	62
Anglo Gold	50	11	61	50	11	61
Arm-African Rainbow	45	9	54	51	11	62
Bhp Billiton	52	11	63	51	11	62
Exxaro Resources Ltd	46	4	50	44	9	53
Glodfields Ltd	52	11	63	52	11	63
Harmony Gold	43	0	43	52	0	52
Implats	31	0	31	37	0	37
Kumba Iron Ore Ltd	24	0	24	52	10	62
Lonmin	52	11	63	52	11	63
Sasol	52	11	63	52	11	63

The above results indicate that six companies reported on all 52 the Core indicators in 2010, while seven companies did so in 2011. In respect of the Sector Specific indicators, six companies reported on all 11 indicators, with seven companies in 2011. Note that these are not necessarily the same companies in both years. A little concerning was the fact that four companies did not provide **any** information on the Sector Specific indicators in

2010. There was however some improvement with two of these companies reporting on at least some of these indicators in 2011.

Key performance indicators reported on.

In analysing the data to gauge the key indicators reported on, it became evident that certain indicators have been reported on by all companies. These have thus been identified as the key indicators, being those that all companies considered of high enough materiality and importance to measure and report on.

Table 3: Key performance indicators reported on

Code	Description	2010	2011
EC 1	Direct economic value generated and distributed	Yes	Yes
EC 2	Financial implications and risks due to climate change		Yes
EC 6	Policies and proportion of spending on local suppliers	Yes	
EC 8	Investments and services provided for public benefit	Yes	Yes
EN 3	Direct energy consumption	Yes	Yes
EN 8	Total water withdrawal	Yes	Yes
EN 16	Total direct and indirect greenhouse gas emissions	Yes	Yes
EN 22	Total weight of waste		Yes
LA 1	Total workforce by employment type		Yes
LA 4	Percentage of employees covered by collective bargaining agreements	Yes	Yes
LA 7	Rates of occupational injuries, diseases and fatalities	Yes	Yes
LA 10	Average hours of training per employee	Yes	Yes
LA 13	Composition of governance bodies and employees according to indicators of diversity		Yes
HR 6	Operations having significant risk of child labour	Yes	Yes
HR 7	Operations having significant risk of forced and compulsory labour		Yes
SO 1	Effectiveness of practices that assess and manage impacts of operations on communities		Yes
SO 5	Position and participation in public policy development and lobbying		Yes

As per Table 3, these indicators include issues more widely known as sustainability concerns which indicate that public perception of what sustainability is, has a major impact on what is reported on by companies. It can be seen that of the top key performance indicators reported on, four were economic in nature (see the 'EC' indicators), four were environmental in nature (see the 'EN' indicators), five were labour related (see the 'LA' indicators), two were human rights related (see the 'HR' indicators), and two were socially orientated (see the 'SO' indicators).

Level of Integration

The Integrated Reporting Committee (IIRC) stated that an *Integrated Report* is aimed at combining the different threads of reporting (e.g. financial, management, governance and sustainability reporting) into a comprehensible whole that can explain a company's ability to create and/or sustain value (Deloitte, 2012). It should also be seen as a process of improving and persevering sustainability in the long term without the sacrificing of a company's short-term performance (Deloitte, 2012). This report should be an *all-inclusive integrated* annual report that illuminates the company's efforts towards long-term sustainability in all its dimensions. The *Integrated Report* should therefore contain both qualitative and quantitative information on how, and to which extent, the reporting company has managed to improve its economic, environmental and social effectiveness and efficiency (Daub, 2007), which need to be integrated in a sustainability management system.

The concept *integrated* does not simply indicate that all the relevant information be combined into a single report. As long as the holistic picture is disclosed, an integrated report can even be divided into multiple reports. However, if a company was to choose the multiple reports option, a reference to the other parts of the report, or to the more detailed separate report, needs to be made in order for users and stakeholders not to be misled in thinking that the reporting company issued only one report. During the analysis of the companies' reports, the physical compilation of the reports was taken into consideration. The following categories of integration were identified:

- Fully Integrated: This refers to a single integrated report that includes all necessary information needed to form a holistic view of the company's financial as well as its sustainability performances.
- Integrated and Separate: This refers to a single integrated report that serves the above mentioned purpose, but with references to separate documents that include more detail on certain areas. The additional separate reports often include the detailed sustainability reports, corporate governance reports.
- Separate: This indicates that a company compiled separate reports for financial and non-financial disclosures. Thus a separate sustainability report was created in addition to the normal financials.
- Separate on Web: This indicates that non-financial information is disclosed but not as part of the annual report. This information is only available on the company's website.

After analysis of the applicable entities' reports the following categorization was made and reported in Table 4 below:

Table 4: Level of integration per company

Company	2010				2011			
	Fully Integrated	Integrated & Separate	Separate	Separate on Web	Fully Integrated	Integrated & Separate	Separate	Separate on Web
Arcelormittal		Y				Y		
Anglo American			Y				Y	
Anglo Platinum			Y			Y		
Anglo Gold			Y			Y		
Arm - African Rainbow		Y				Y		
Bhp Billiton		Y				Y		
Exxaro Resources Ltd	Y				Y			
Glodfields Ltd		Y			Y			
Harmony Gold				Y				Y
Implats	Y					Y		
Kumba Iron Ore Ltd			Y			Y		
Lonmin			Y				Y	
Sasol		Y				Y		
Total	2	5	5	1	2	8	2	1

In terms of what is regarding high-quality reports, both the *Fully Integrated* reports as well as *Integrated and Separate* reports are regarded as acceptable reports. When using only a *Separate* report, specific reference needs to be made to the other reports containing non-financial information. This is also applicable when using *Separate on Web* reports with references needed to the sectional reports in the annual report to ensure that users are aware of all applicable reports. When considering the findings in the Mining and Minerals industry, seven of the companies submitted acceptable integrated reports in 2010, with an improvement of three additional companies moving towards Integrated and Separate reports in 2011, which are better, albeit still somewhat separate.

Self-declared ratings

The final analysis conducted in this study was to analyse the adherence levels of the various reports. The integrated reports were evaluated based on the sustainability disclosure requirements as per the GRI, which were then compared against the companies' own assessment of adherence levels (see Table 5 below).

Table 5: Evaluation of declared ratings

		Rating Based On Analysis Of Disclosures:	Self-Declared Rating:	Difference In Rating?
Arcelormittal	2010	C+	C+	N
	2011	B+	B+	N
Anglo American	2010	A+	A+	N
	2011	A+	A+	N
Anglo Platinum	2010	B+	A+	Y
	2011	B+	A+	Y
Anglo Gold	2010	B+	A+	Y
	2011	B+	A+	Y
Arm - African Rainbow	2010	B+	B+	N
	2011	B+	A+	Y
Bhp Billiton	2010	A+	A+	N
	2011	B+	A+	Y
Exxaro Resources Ltd	2010	B+	B+	N
	2011	B+	B+	N
Glodfields Ltd	2010	A+	A+	Y
	2011	A+	A+	N
Harmony Gold	2010	B+	B+	N
	2011	B+	B+	N
Implats	2010	B+	B+	N
	2011	B+	B+	N
Kumba Iron Ore Ltd	2010	C+	C+	N
	2011	B+	A+	Y
Lonmin	2010	A+	A+	N
	2011	A+	A+	N
Sasol	2010	A+	A+	N
	2011	A+	A+	N

It was found that in eight instances the companies were over-optimistic in giving themselves a higher rating than was justified. The differences in the self-declared ratings and the rating per this analysis were found exclusively on ratings where a company made a self-declared rating of 'A+', while only meeting the criteria for 'B+'. It must be noted that per the Application Guidance (GRI, 2011f), an 'A' can only be awarded if the company reports on all the indicators included, or if not, the reason for omitting the indicators must be provided. Per analysis of the disclosures made, some disclosures were not made but no specific reason was given for the non-disclosure thus the 'A' rating was downgraded for purposes of this article.

Furthermore, several companies simply indicated that certain indicators have not been reported on, as it was considered to be *immaterial*, without explaining what measure of materiality was used. For the purposes of this article, such indicators were considered as *disclosed* seeing as a reason for non-disclosure was provided, but the question remains as to how this materiality is determined?

CONCLUDING DISCUSSION

In summary

Integrated reporting (on a global scale) is still very much in its infancy. The JSE, with *Integrated Reports* as a listing requirement, took on a leading role in emphasizing the importance of the wider categories of stakeholders. There is however, not much available in *standardized reporting templates* for these integrated reports, and the companies are pretty much left to their own devices in deciding what to report and what not to report. In the resource-based South African economy, the Mining and Minerals industry plays a key role in the broader regional and global economies. The key objective of this article was therefore to analyse and evaluate the integrated reports from this sector for the periods 2010 and 2011 in order to gauge their disclosures and adherences to the GRI's Framework in terms of social responsibility and sustainability.

In addressing the objective regarding the key indicators considered important and material enough to report on, it was found that the selected mining companies returned quite balanced reports including economic, environmental, labour, human rights and social indicators. It does however; seem that the *human aspect* is slightly more important with the seven of the top 16 indicators focusing on labour and human rights. When considering the level of integration of the reports, a clear learning curve could be detected in how the level of integration has improved over the two years under consideration. Initially around half the companies submitted what can be considered adequately integrated reports in 2010 (seven out of 13). This has improved in 2011, with ten out of the 13 companies submitting adequately integrated reports. With regards to the 'A', 'B' or 'C'-ratings given to reports, the companies generally proved quite accurate in their self-declarations of ratings. What is interesting (and perhaps concerning) is that several 'A'-rated companies rated themselves higher than they should have been when considering the GRI guidelines. What makes this even more concerning is the fact that that these over-rated companies reports were independently assured to validate an 'A+'-rating. This brings the external assurer's report/assessment reliability and trustworthiness into question.

Determining what an acceptable reason for non-disclosure is, is considered a judgemental or *grey* area. As with many guidelines that are not statutory in nature, a 'disclose or explain' approach is often followed, but companies tend to regard a specific disclosure as 'disclosed' without a reason for non-disclosure. They then simply state that the indicator have not been disclosed. The reason for non-disclosure that can be accepted in order to deem the indicators as disclosed, is thus subject to opinion and cannot be regarded as incorrect. This does however clearly indicate that companies need to take more care in explaining reasons for non-disclosure of items if they want to self-declare an 'A+' rating.

Final remarks

From a different but supportive perspective, the recent developments at the Lonmin Marikana platinum mine in South Africa raises questions on the measurement and disclosure of performance indicators. On August 16, 2012 disgruntled workers at the Marikana mine went on an unlawful and violent strike due to questionable living conditions at the mine (De Vos, 2012). The end-result of this strike became known as the Marikana Massacre; with numerous fatalities and wide spread unease in the South African mining industry (De Vos, 2012). Yet, Lonmin issued an exemplary integrated report which received an 'A+' rating in both 2010 and 2011. This raises the question: why was there no mention, in any integrated report, of the living conditions of workers or of the discontent of the employees of the Marikana mine? It appears that, in the case of Lonmin, only their positive non-financial performances were disclosed and the negative ones omitted. In addition to this the external assurance gained on the report is also questionable. One cannot but draw comparisons between Lonmin and the Enron / Arthur Anderson fiasco of a few years back. Is the limited assurance given on the content of the sustainability report sufficient or shouldn't an analysis on the completeness of such a report be conducted? Is it possible that the true purpose of the Integrated Report is being misconstrued and abused for self-promotional purposes and *bragging rights*?

Recommendations

Regardless of the form that sustainability takes, it affects everybody. The future of our economies, societies and the natural environments will be determined by how it is dealt with (Swift *et al.*, 2007). Thus, clearly there is much room for improvement in the context of integrated reporting relating to the adherence to the Framework, especially when considering the more basic principles, including the boundary and scope of the report and maintaining a balance between reporting on both positive and negative aspects, as indicated in the Sustainability Reporting Guidelines and the Technical Protocol. It should be considered whether more attention should be placed on the basis on which the reports are prepared, rather than placing too much emphasis on ensuring to report on all standard disclosures. It is thus recommended that companies re-consider the basis of preparation of their sustainability and ultimately their integrated reports. Stricter adherence to the principles as set out by the GRI is necessary especially regarding the completeness and accuracy of the report.

In conclusion, according to Deloitte (2011b), it is inevitable that the world will move to the adoption of integrated reporting just as the world has moved towards the adoption of IFRS. The timing of adoption is however unclear, organizations that report on the complete range of issues may be seen more advanced than those which limit their reporting to mere financial information and limited sustainability disclosures.

Limitations of the study

The results of this study are limited by the fact that the sample focuses on South African mining companies. Thus, firstly, the focus on the mining industry limits the application of the results of this study to companies in other industries. For other industries the sector supplement used in this study will not be applicable.

Secondly the results may not be applicable to other countries especially since the issuing of an integrated report would not necessarily be a listing requirement of the relevant stock exchange of such a country. Where the disclosure of sustainability information is voluntary, it is likely that only positive aspects will be disclosed and the scope of the report will be limited.

In addition to the above, this study focused on the standard disclosures as prescribed by the GRI in their Framework. Yet, per analysis of the relevant reports and per the findings above, it was clear that the more basic principles of the Framework were lacking (for example the setting of the boundary, scope and contents of the report). This being outside the scope of the research undertaken, limits the application of the results.

Future research

Considering the above limitations, further research can attempt to replicate a similar study in other sector of the JSE, from which cross-sector comparisons and best practices may be extrapolated.

AUTHOR INFORMATION

Tertia Hindley is currently an auditor employed at the global 'Big Four' Accounting firm Deloitte's offices in Johannesburg, South Africa. This article is based on the research conducted for her Masters in Commerce (Management Accountancy) degree at the North-West University's Potchefstroom campus in South Africa.

Professor Pieter W Buys is currently the Research Program Leader at the North-West University (South Africa) and holds two PhDs (Accountancy and Management Accountancy), two Masters Degrees (MComm and MBA), and he is also a US Certified Management Accountant (CMA). He has worked in the ERP and business consulting industry in Canada, the USA and South Africa for more than 15 years. He has published more than 40 articles in peer-reviewed and professional publications. His current research revolves around corporate social responsibility and resilience. E-mail: Pieter.Buys@nwu.ac.za (Corresponding author)

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9. ANNEXURE D: JOURNAL SUBMISSION GUIDELINES

The Clute Institute

6901 South Pierce Street, Suite 239, Littleton, Colorado 80128-7206 USA
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Structure of the Paper

Title page
Title
Abstract
Keywords
Introduction
Body of paper
Tables, figures, etc. placed where they belong
Conclusion
Acknowledgments (if applicable)
References (American Psychological Association style)
Appendices (if applicable)

Cover Page

The cover page should contain the paper title and each author name, affiliation, mailing address, and email address with the contact author indicated. The cover page should also contain a short auto-biography of no more than 100 words for each author.

Title

The title should be concise, descriptive, and contain the keywords or key phrases. Search engines assume that the title contains all of the important words that describe the topic of the paper.

Acronyms

The use of acronyms should be avoided in the title and keywords unless widely recognized and understood.

Abstract

Abstracts should not exceed 250 words. The abstract should contain all the keywords and key phrases at least once and more than once if necessary. Search engines rank articles higher if the keyword or key phrase being searched appears more often in the abstract. However, pointless repetition may result in the page being rejected by a search engine. Since most researchers read an abstract before reading the paper, abstracts must be written very well.

Keywords

Select 3 or 4 keywords or key phrases that you would give a search engine if you were searching for your article. Avoid the use of general and plural terms, abbreviations, and non-descript words such as *and, of, or, the*, and so on.

When selecting keywords, please keep in mind how search engines operate. A search on the key phrase "*women's health*" does not yield the same result as separate searches on the words "*women's*" and "*health*". The ordering of keywords within a key phase is also important if quotation marks are used because you are searching for words in a particular order. For example, a search for "*women's health*" is not the same as "*health women's*".

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Four levels of headings are allowed. The first level should be **BOLD ALL CAPS**, second level **Bold**, third level *Italics*, and fourth Underlined.

Tables & Figures

Use the Microsoft Word table function to create tables, not spreadsheets. Tables and figures should be located in the text and numbered sequentially using Arabic numerals, i.e., Table 1 and Figure 1. We print our journals in black and white; please take this into consideration when using color.

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Abbreviations should be defined at first mention and used consistently thereafter.

Footnotes

Bottom of the page footnotes are preferred to end of the article endnotes.

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> Calfee, R.C. & Valencia, R.R. (1991). *APA guide to preparing manuscripts for journal publication*. Washington, DC: American Psychological Association.

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