Sustainbility Reporting in South Africa: A Comparative Study of the Mining and Manufacturing Industries

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Abstract

The objective of this paper is to determine the nature and extent of sustainability reporting in the mining and manufacturing industries in South Africa. The top ten mining and manufacturing companies by market capitalisation were used to represent the respective industries and the checklist of the Johannesburg Stock Exchange's (JSE) Socially Responsible Investment (SRI) Index was used to represent a measure of sustainability reporting. The paper compared the extent of disclosure both pre and post the implementation of the King Report III for the two industries. The research found that over the five years examined, companies in both industries increased their sustainability disclosures in the two categories of the JSE SRI Index, namely environmental and social indicators. However, overall, mining companies provided more information in their reporting. T-tests were performed to see if the extent of reporting was significantly different. Although the samples were small, the results of the t-tests showed that the sustainability reporting by the mining companies is significantly more than that of the manufacturing industry, and that the King Report III did have a significant impact on the sustainbaility disclosures provided by both industries. However, for the combined industries, there was no notable improvement in the reporting pre King Report III when compared to the reporting post King Report III.

Keywords: *Corporate social responsibility, Sustainability reporting, King Report III, South Africa*

1. Introduction

The need for a sustainability reporting framework was discussed firstly in the 1970s as a result of conferences held to discuss the sustainability of the world resources (Drexhage & Murphy, 2010). In 1987, the world's understanding of sustainable development was consolidated at a United Nations' conference where sustainable development was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 1987:1).

The terms 'sustainability' and 'corporate social responsibility' (CSR) are sometimes used interchangeably. Marrewijk (2003) argues that there should not be one definition for CSR, that is, a "one size fits all" as academics, communities and businesses view the critical issues for sustainability differently, but that they should come to a common understanding. Several definitions of CSR exist (Jones, Comfort & Hillier, 2007). Jones *et al*. (2007) point out that CSR is about the relationship between the business and its surroundings.

In an attempt to create common understanding and meaning of CSR, reporting guidelines have been issued and awards instituted internationally (de Villiers & Lubbe, 2001). In South Africa, the Johannesburg Stock Exchange (JSE) introduced the Socially Responsible Investment (SRI) Index in May 2004 (JSE, 2013). The SRI Index has three main objectives, namely: (a) to highlight those companies listed on the JSE which have an acceptable level of sustainability practices; (b) to create a foundation for the companies to use when they report about their sustainability; and (c) to provide a consistent basis for measuring the sustainability performance of the companies on the JSE. Also, the King Report III in South Africa emphasises sustainable business practices and the presentation of an integrated report (IoDSA, 2009).

Mining and manufacturing companies by their nature should provide sustainability information in their annual reports. However, the nature and extent of this disclosure has not recently been determined and the impact of the King

Report III on the sustainability disclosures of companies in these two industries is unknown. The paper thus aims to determine the nature and extent of sustainability reporting in the two industries and the impact of King Report III on sustainability disclosures in the mining and manufacturing industries using the JSE SRI index as a measure of sustainability reporting. Determining the King Report III's impact on critical sectors of the South African economy provides useful information to users and regulators of financial reporting.

The remainder of the paper is organized as follows. Section two outlines the theories that underlie sustainability reporting or CSR. Section three provides an overview of sustainability reporting standards and guidelines. Section four discusses prior research on CSR in South Africa. This is followed by section five which explains the research methodology. The paper then discusses the results in section six, followed by the conclusion in section seven.

2. Theories Underlying Sustainability Reporting or CSR

The main theories which have been put forward to explain why companies report on their CSR are legitimacy theory, stakeholder theory and ethical theory (Garriga and Mele, 2004).

Legitimacy theory is a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part and the generalised perception or assumption is that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Mobus, 2005). Legitimacy theory requires that the company's actions are in line with the community expectations and if not, this will cause problems for the company (Parker, 2005). As there is no generally "accepted" theory for CSR reporting explaining companies' disclosures relating to their CSR reporting, more reliance has been placed on the legitimacy theory than on other theories (Deegan, 2002). Cowan and Gadenne (2005) highlight that companies disclose issues relating to CSR in an attempt to mitigate any legal action which might be taken against them in the future and also to manage public relations with the users of the financial statements.

Stakeholder theory argues that for an entity to exist it needs continued support from its stakeholders (Yusoff & Lehman, 2007). They must approve its activities and the more influential they are, the more the entity adopts strategies to meet their expectations. Therefore, CSR disclosures are seen as a dialogue between itself and its stakeholders (Yusoff & Lehman, 2007). This is supported by Marrewijk (2003), who acknowledged that it is about the organisation creating an equitable balance between the stakeholders' interests and those of the organisation/shareholders, and of obtaining the best return on the investment as they operate with the community's approval. Stakeholder engagement (Gao & Zhang, 2006) is seen as critical in order to develop a good relationship between the company and the stakeholders. This should not be seen as an ordinary relationship but as a meaningful engagement which needs to be a productive dialogue and not a way of communication, which involves everyone in defining the terms of engagement, allows everyone to voice their opinions without fear and allows for an openness by the companies to the public and timeously feedback about their actions.

The ethical theory focuses mostly on the business ethics and environmental ethics the companies face, i.e., between consequentialist (focuses on the action if the result is positive then the action should be positive in order to get the positive result) and non-consequentialist (focuses on the fact that a wrong action might result in good result and vice versa) (de Villiers, 2004).

In summary, legitimacy theory provides a framework and explains why managers voluntarily disclose social and environmental information (Mobus, 2005). Even though stakeholder theory and legitimacy theory are different theories, their key principles overlap with each other whilst stakeholder theory further points out the importance of managing the interest of the influential stakeholders of a company (Deegan, 2002). Influential stakeholders are critical to the continued profitability of the company and the more influential the stakeholder is, the better treatment they receive even though the companies tend to be responsive to the government and financial institutions as they look for a better relationship (Deegan, 2002).

3. Sustainability Reporting Standards and Guidelines

As early as the 1970s, there was a movement advocating improved CSR. Gradually over the years, the need for transparency and accountability increased due to the global pressure for corporate accountability in order to meet the community demand for CSR as a form of reporting (Ackers, 2009). Drexhage and Murphy (2010) state that the global initialisation of sustainable development was as a result of the *Brundtland Report*; subsequent conferences which gave rise to CSR; and the three institutes which were established, i.e., the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD) and the Statement of Forest Principles. Subsequently,

international conferences have been held to determine the extent of progress that has taken place in relation to sustainable development (Drexhage & Murphy, 2010).

This move for improved sustainability reporting can be viewed and described as a revolution as companies are now forced by stakeholders who are environmentally conscious or sensitive to report on their impact on the environment (Ernst & Young, 2011a). As companies adopt sustainability reporting, they have to continue making profits (creating wealth for the company and at the same time benefiting the community) and be responsible for their actions. According to Wilmshurst and Frost (2000), as the community's interest in the activities of the company regarding the environment increases, the companies have responded to their expectations. Even though this has been achieved, on its own sustainability reporting is complex and will require careful management of the relationship taking into account the economic, environment and social needs without affecting the future (Gao & Zhang, 2006).

Ackers (2009) notes that as CSR reporting has developed, so have various frameworks for reporting. This has resulted in various levels of assurance, notably reasonable assurance and limited assurance. Ackers (2009) concluded that as companies aim to seek confidence in the users of their sustainability reporting, companies will use independent reviewers. By opening up their management systems to external review and getting a report on this review, confidence by the users in their reporting will be built.

There has been an emergence of internationally accepted assurance frameworks such as the AA1000As, ISAE 3000 and the GRI Guidelines (Ackers, 2009). As a result of this, the preparers of the assurance reports tend to refer to these frameworks. The guidelines aim to achieve the same thing which is the proper disclosure of the companies' activities which relate to CSR reporting. Ackers (2009) concluded that South African sustainability reports by the companies tend to refer to different frameworks and this could be because these reports are mainly done by audit firms some of whom are affiliated to international firms who tend to rely on certain frameworks rather than others. Ackers (2009) found that the field work is mostly done concurrently with the statutory audit which has had a great positive in the emergence of fully integrated annual and CSR reports being prepared providing a link between the financial and non-financial CSR information.

Deegan, Cooper and Shelly (2006) comment that in the 1990s companies were releasing environmental reports which were stand alone reports and that these had no third party opinion or reliance. Over a period of time this changed as the companies began to produce the CSR which had been prepared by independent consultants with the aim to add value to the reports and the CSRs were incorporated in the annual report. The private sector and major institutions like the World Bank have embraced environmental reports and this has led to the creation of voluntary initiatives like the World Business Council on Sustainable Development (WBCSD) and Friends of the Earth (Drexhage & Murphy, 2010).

The Social Investment Forum (2008) notes that expectations by prospective investors of a company are for the company to meet certain minimum requirements for disclosure of governance and that this has led companies to understand that sustainability reporting has an impact on the financial performance of the company as a whole.

Marx and van Dyk (2011a) found that as companies become aware of the financial effect of sustainability reporting, they followed the following guidelines or standards: *The United Nations Global Compact, the Global Reporting Initiative (GRI),* the *International Institute for Sustainable Development (IISD), the Organisation for Economic Co-Operation Development (OECD)*, *Account-Ability,The Prince's Accountability for Sustainability "A4S" Project, the Carbon Disclosure Project (CDP), the King Report on Corporate Governance (King), and the Socially Responsible Investment (SRI) Index.*

In addition to the above frameworks, Deloitte (2012) highlight the following frameworks: *Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol), Code of Responsible Investing in South Africa (CRISA), International Council for Mining and Metals (ICMM),* and the *Water Disclosure Project (WDP).*

Samkin (2012) reported that the institutionalisation of CSR in South Africa came to South Africa at the same time as democracy came to the country. At that time, the first King Report was published and at that time research in this area was minimal. Samkin (2012) further cites Popp (2009:3) in giving the African meaning to CSR as follows:

> *"… accountability of companies, to both shareholders and stakeholders, for their utilisation of resources, for their means of production, for their treatment of workers and consumers, for their impact on the social and ecological environment in which they operate, for the way in which they exercise their legislative and fiduciary duties. It is thus treated as a comprehensive concept referring to the way in which companies exercise responsibility and accountability for the economic, social and environmental impact of their business decisions and behaviours. Such awareness and responsiveness become evident in how companies, in addition to their economic rationale, launch relevant initiatives or invest in the advancement of certain socially and/or environmentally defined needs in the communities that they operate in."*

As companies move towards CSR reporting, the extent of disclosure differs, but internal stakeholders tend to

accept them more easily than the outside stakeholders because internal stakeholders are more conservative about CSR disclosures (Ackers, 2009). Ackers (2009) further highlights that the expectations are different amongst the internal stakeholders (employees/investors) and the external stakeholders as the reporting at times is used for community engagement.

4. Previous Studies on CSR

While internationally there have been a number of studies investigating the CSR disclosures companies make with respect to CSR, the following section only discusses those studies carried out in South Africa.

The de Villiers and Barnard (2000) study analysed the content of the annual reports of the listed mining companies on the JSE for the period 1994 to 1999. The study focussed on comparing the mining companies' disclosure against other industries in the *Financial MailTop 100* companies for the same period.

The findings of the research were that different industries disclose differently about their environmental impact. De Villiers and Barnard (2000) also mentioned that the size of the company might have an impact on the disclosure. They concluded that mining companies disclose more, in line with the legitimacy theory. As mining companies have a visible and adverse effect on the environment, they will be expected to legitimise their operations.

The de Villiers and Lubbe (2001) study was based on the top 100 companies listed on JSE as at 30 June 1998. Of the intended sample only 87 companies could be examined and the other 13 could not be included for various reasons. This sample of 87 was further divided into two samples: the energy group which had 20 companies and the non-energy group. The study showed that energy intensive using companies provided more information about their CSR compared to other companies. In the high energy-usage companies were mining companies and manufacturing companies.

Antonites and de Villiers (2003) compared the JSE listed mining companies versus the top industrial companies listed on the JSE. Their study showed that the mining companies provided and disclosed more information than the top industrial companies. They attributed this to the fact that the mining companies have more impact on the environment as a result of their operating activities.

De Villiers and Lubbe's 2001 findings were re-inforced by de Villiers (2004), who argued that as CSR is not compulsory for companies its disclosure depends mainly on the executive board of directors of the company and which information they want to give to the community. De Villiers (2004) established that it is up to their business morals, and that the disclosure by the company of CSR is driven by the guilt companies face on one hand and on the other, the ethical requirement companies need to meet in terms of the business morals of doing right and not having the wrong conduct (de Villiers, 2004).

The Ernst and Young (2011b) study used the top 100 companies listed on the JSE and the top ten state-owned entities based on the asset value. The companies were measured against a mark plan based on GRI. The survey aimed at determining the level and quality of sustainability reporting. The results indicated that since the SRI Index was introduced for the JSE listed companies their reporting on CSR has improved. This improvement was as a result of the JSE initiative to influence CSR through its function as a regulator. This change of attitude by the companies was also subject to other driving forces like the reduction in natural resources, changes in shareholder expectations and the reputation/trust from the stakeholders of a company.

The Marx and van Dyk (2011b) study was based on sixty companies listed on the JSE's SRI Index of 2009. The study found that even though the companies are including sustainable reports in their integrated reports, of the 60 sampled companies, 39 companies did not obtain any assurance on their sustainability report whilst those which obtained assurance, obtained this mostly from audit firms.The other findings of Marx and van Dyk (2011b) in relation to the companies which had the assurance reports are that: some companies did not indicate the standard they used for their reporting, that is for the assurance report on sustainability reporting; even though the companies provide assurance reports, they were disclosed separately in other reports; only one company out of the 21 companies that obtained assurance provided additional assurance which also covered the information it had on its website; and mining companies provided assurance reports more than any other industry. The Ernst and Young (2012) study used a sample of 100 companies listed on the JSE based on their market capitalisation on 30 December 2011. Their findings were that the manufacturing industry presented detailed sustainability reports. They noted however that companies rather provide a summary of critical issues than provide detailed information. The manufacturing companies sampled showed that they had an in-depth understanding of sustainability reports and they communicated well to the community.

The Deloitte (2012) study was carried out in South Africa based on the 2011 integrated reports. It found that the quality of the integrated reports was better in the second period (June 2011 to September 2011) than it was in the first period (March 2011 to May 2011) even though there were clear guidelines on the preparation of a perfect integrated

report. Trends in of reporting by the 100 companies sampled which are relevant to this current study are that there was a decrease in the number of companies which did not fully embrace the concept of integrated reporting in the second period compared to the first; the companies did not fully engage on sustainability issues including those which were sampled in the second period; and even though King Report III had been in place for some time, the research showed that the companies did not fully implement it.

The above studies show that the extent and nature of disclosure by the companies with regards to the CSR differed depending upon the industry in which the company operated. Mining companies tended to disclose more than other companies in other industries. Also, the size of the company had an effect on the extent of the reporting as larger entities tended to disclose more than the smaller entities. Not all companies obtained the independent assurance reports on their sustainability reporting. Those companies which had assurance reports obtained them from their external auditors.

5. Research Methodology

This research is based on selected listed companies in the mining and manufacturing industry as these companies, in view of their size and scale of operations, are more likely to have an impact on their environment. The population is all companies listed on the JSE in the mining and manufacturing sectors from 2008 to 2012. At 31 July 2013, there were 61 companies listed in the mining industry and 33 companies listed in the manufacturing industry. A sample of ten companies in each industry was chosen based on their market capitalisation at 31 July 2013, with the ones with the highest capitalisation selected.

The companies' disclosures on CSR in their annual reports, integrated reports and sustainability reports were read and evaluated and the content of these reports were compared to the JSE SRI checklist for five years. A period of five years was chosen as there have been major developments in sustainability disclosures such as the mandatory implementation of the King Report III for all companies listed on the JSE for financial years starting on or after 1 March 2010. Comparing years before 2010 with years after 2010 may highlight whether the King Report III has had any effect on the reporting practices of these companies. The JSE SRI checklist was chosen because it is a well-accepted measure of sustainability reporting in South Africa.

Each company's reports (annual report, integrated report and sustainability report as applicable) were analysed separately, to determine whether the JSE SRI checklist criteria were met or not. If the information in the report(s) met the indicator, a mark of one (1) was assigned. If the information was absent, a mark of zero (0) was assigned. Additional comments were supplied if necessary to assist in the analysis. The data was captured on an excel spreadsheet.

The JSE SRI checklist was completed per company on an annual basis, and then totalled for the ten companies in each industry for each year. The information was then compared per industry from the first year to the fifth year.

T-tests were used to compare the results of the reporting in the two industries. The t-test formulae was inputted into the excel spreadsheet and the values to be used for computation were captured into the respective groups. The results of the t-test (comparison of the means of the two samples) were used to determine if the reporting in the two samples were significantly different and whether there was a difference in the amount of disclosure pre King Report III when compared to post King Report III.

6. Results and Discussion

The results of mining companies are discussed (Table 1) followed by those of the manufacturing companies (Table 2). Thereafter, Table 3 shows the combined results for the two industries (Table 3). The results of the t-test calculations are shown in Tables 4 and 5.

6.1 Mining companies

Table 1 shows the trend in sustainability reporting in the mining industry over a period of five years.

Table 1: Mining Companies - Summary of Results 2008 to 2012

Category	2008	2009	2010	2011	2012	Total
Environmental indicators						
a) Policy	**87**	**89**	**90**	**90**	**90**	**90**
b) Management	**77**	**82**	**84**	**86**	**88**	**90**
c) Reporting	**93**	**93**	**95**	**96**	**99**	**100**
Subtotal	**257 91.8%**	**264 94.3%**	**269 96.1%**	**272 97.1%**	**277 98.9%**	**280**
Social indicators						
a) Training and development	**118**	**117**	**112**	**116**	**119**	**120**
b) Employee relations	**95**	**95**	**94**	**95**	**95**	**100**
c) Equal opportunities	**129**	**122**	**127**	**127**	**129**	**130**
d) Health and safety	**79**	**78**	**79**	**79**	**79**	**80**
e) Community relations	**79**	**78**	**80**	**80**	**80**	**80**
f) Stakeholder engagement	**50**	**50**	**50**	**50**	**50**	**50**
g) HIV/AIDS	**180**	**178**	**180**	**180**	**180**	**180**
h) General	**29**	**27**	**24**	**25**	**30**	**30**
Subtotal	**759 98.6%**	**745 96.8%**	**746 96.9%**	**752 97.7%**	**762 99%**	**770**
Total	**1016 96.8%**	**1009 96.1%**	**1015 96.7%**	**1024 97.5%**	**1039 99%**	**1050**

With regards to the environmental indicators, during the first two years not all mining companies met all the expectations on policy and it was only from 2010 that all companies met all these expectations. In the sub-indicator of management, the reporting by the mining companies gradually improved over the period although they did not meet all the expectations of the sub-indicator. In the sub-indicator of reporting, a similar trend of improvement was evident from 2010. This improvement from 2010 could be attributed to the fact that the King Report III was introduced in that year and listed companies were required to apply it in their reporting. This is also reflected by the percentage improvement over the five year period from 91.8% to 98.9%.

The social indicators showed an increasing trend in the amount of disclosure from 2009 to 2012 for the mining companies. In the sub-indicator of training and development, the reporting level dropped in 2010, as a result of BHP Billiton not meeting some of the requirements in this category. The level of reporting with respect to employee relations remained consistent over the five years. In 2008, more companies reported on their equal opportunities and while in 2009 there was a drop, subsequently there was an improvement. It must be noted that this drop could be considered immaterial. The reporting in the sub-indicators of health and safety, community relations, stakeholder engagement and HIV/AIDS remained high from 2008 to 2012 for the mining companies.

The overall results show that even though the reporting started at a high percentage (96.8%) as reflected in 2008, it dropped subsequently in 2010 and thenincreased to 99% in 2012.

6.2 Manufacturing Companies

Table 2 shows the trend of sustainability reporting in the manufacturing sector over the five years.

Table 2: Manufacturing Companies -Summary of Results 2008 to 2012

Category	2008	2009	2010	2011	2012	Total
Environmental indicators						
a) Policy	73	74	76	77	78	90
b) Management	76	78	80	81	82	90
c) Reporting	88	86	86	88	92	100
Subtotal	237 84.6%	238 85%	242 86.4%	246 87.9%	252 90%	280
Social indicators						
a) Training and development	117	115	117	117	117	120
b) Employee relations	77	75	84	90	90	100
c) Equal opportunities	124	127	123	125	127	130
d) Health and safety	69	77	74	73	77	80
e) Community relations	80	80	80	80	80	80
f) Stakeholder engagement	50	50	50	50	50	50
g) HIV/AIDS	162	162	180	180	180	180
h) General	15	15	16	12	15	30
Subtotal	694 90%	701 91%	724 94%	727 94.4%	736 95.6%	770
Total	931 88.6%	939 89.4%	966 92%	973 92.7%	988 94.1%	1050

Looking firstly at the environmental indicators, the reporting by the manufacturing companies in all three sub-indicators of policy, management and reporting improved in 2010. This improvement may be attributed to an improved understanding by the companies about sustainability reportingover time and the introduction of the King Report III. This improvement in the reporting by the companies is shown in the increase from 84.6% in 2008 to 90% in 2012.

The reporting by the manufacturing companies in the social indicators showed an overall improvement from 90% in 2008 to 95.6% in 2012. In the sub-indicator of training and development, the reporting level remained consistent for the period under review.There were significant increases in the employee relations indicator from 75 points in 2009 to 90 points in 2011 and it remained constant in 2012. Also in the HIV/AIDS indicator, there was a significant increase from 162 points in 2008/2009 to 180 points in 2010 and in the following years it remained constant.

Overall the reporting in manufacturing industry improved over the period of five years from 88.6% in 2008 to94.1% in 2012.

6.3 Comparison of Results -Mining and Manufacturing Companies

Table 3 shows the trend of the companies' reporting in both industries over 2008 to 2012.

Table 3: Summary of Results 2008 to 2012 for both Mining and Manufacturing Companies

Category	2008	2009	2010	2011	2012	Total
Environmental indicators						
Mining	257 91.8%	264 94.3%	269 96.1%	272 97.1%	277 98.9%	280
Manufacturing	237 84.6%	238 85%	242 86.4%	246 87.9%	252 90%	280
Social indicators						
Mining	759 98.6%	745 96.8%	746 96.9%	752 97.7%	762 99%	770
Manufacturing	694 90%	701 91%	724 94%	727 94.4%	736 95.6%	1770
Combined indicators						
Mining	1016 96.8%	1009 96.1%	1015 96.7%	1024 97.5%	1039 99%	1050
Manufacturing	931 88.6%	939 89.4%	966 92%	973 92.7%	988 94.1%	1050

With regards to the environmental indicators, the reporting by the mining companies improved over the period of the five-year period from 91.8% in 2008 to 98.9% in 2012. This improvement is in line with the improvement in the reporting by the manufacturing companies from 84.6% in 2008 to 90% in 2012.

The reporting in the mining industry over the five-year period was at a higher level than the manufacturing industry. Both industries showed gradual improvement on a yearly basis over the five year period.

The reporting in the social indicator category improved in both industries from 2008. The reporting in the mining industry started at a higher level, which was at 98.6% (2008) but dropped in 2009 and then picked up from 2010. The manufacturing industry reporting improved from 90% (2008) to 95.6% (2012). This improvement in the reporting was gradual.

In summary, the reporting in both industries improved over the five year period. The reporting in the mining industry was better over the five year period compared to the reporting in the manufacturing industry. The reporting in the mining industry was 96.8% (2008) and ended at 99% (2012) whilst that of manufacturing industry started at 88.6% (2008) and ended at 94.1% (2012).

This improvement by the companies in both industries, as from 2010 may be attributable to the King Report III, which came into effect in 2010.

6.4 T-test results

Table 4 shows the t-test results. The analysis of the results is divided into the two categories of environment and social, and then compared between the industries.

Table 4: Comparison of the Mining and Manufacturing Industries

Category	t-test value	Probability	Level of significance @ 1%	Level of significance @ 5%	Level of significance @ 10%	Commentary
Environment	5.65	0.0002	P <0.01	P<0.05	P <0.1	The reporting in the two industries is significantly different at all three levels of significance. The reporting in the mining industry is better than that of the manufacturing industry based on the means.
Social	4.16	0.0016	P <0.01	P<0.05	P <0.1	The reporting in the two industries is significantly different at the three levels of significance. The reporting in the mining industry is better than that of the manufacturing industry based on the means.
Industry	5.13	0.0004	P <0.01	P<0.05	P <0.1	The reporting in the two industries is significantly different at the three levels of significance. The reporting in the mining industry is better than that of the manufacturing industry based on the means.

Table 4 shows that the reporting by the mining companies is significantly better than the manufacturing industry at all three levels of significance.

Table 5 shows whether or not the impact of King Report III on the reporting by both industries was significant. The years 2008, 2009 and 2010 were selected as the years before the adoption of King Report III, whilst 2011 and 2012 were selected as the years after the adoption of King Report III.

Table 5: Impact of King Report III on Industries

Category	t-test value	Proba-bility	Level of significance @ 1%	Level of significance @ 5%	Level of significance @ 10%	Commentary
Mining companies	2.74	0.0356	P>0.01	P<0.05	P<0.1	For two levels of significance (5% and 10%) there was a significant improvement in the reporting after 2010 based on the means.
Manufac-turing companies	2.39	0.0485	P > 0.01	P < 0.05	P < 0.1	For two levels of significance (5% and 10%) there was a significant improvement in the reporting after 2010 based on the means.
Combined industries	1.14	0.1431	P > 0.01	P > 0.05	P > 0.1	There was no notable improvement in the reporting at all levels of significance.

Table 5 shows that King Report III did have a significant impact on the extent of sustainability reporting in the mining industry and manufacturing industries. However, for the combined industries there was no significant improvement in reporting.

7. Conclusion

The research has showed that the mining companies disclosed significantly more information in compliance with the JSE SRI checklist when compared to the manufacturing companies. This result corroborates the findings of Antonites and de Villiers (2003). Furthermore, the effect of King Report III can be seen in the increase in sustainability reporting as per the JSE SRI checklist post the issue of King Report III.

The mining companies' positive reporting, with regards to the JSE SRI checklist is possibly attributable to the fact that the mining companies are using independent assurance for their reports and they might therefore get assistance in the preparation of the reports, unlike the manufacturing companies. All the mining companies in the sample were using the GRI as a guide for their reporting whilst only six manufacturing companies were using it by the end of 2012.

A limitation of the research is that as sustainability reporting is not regulated or standardised, companies follow different approaches to their reporting. There is no standard measure to judge the adequacy of the information provided. As a result of this companies may aim to meet the requirements of the JSE SRI checklist but the checklist itself does not have any measurement yardstick to say what enough information is. For example, the JSE SRI checklist indicates that the company should be involved in the AIDS/HIV initiatives for the employees and the community but it does not put any monetary value to it nor any qualitative guidelines. As this is not standardised, some companies discuss their HIV/AIDS involvement in a paragraph whilst other companies discuss the same issue in up to five pages.

Another limitation of the research is that the sample is based only on manufacturing and mining companies listed on the JSE. However these companies might not be ones which have been socially responsible or socially irresponsible. Unlisted mining and manufacturing companies were excluded from the sample and these might be the ones with a greater impact on the environment and the community.

The sample was based on the companies with a high market capitalisation on the JSE and this is another limitation as the market capitalisation of the company may not have a bearing on whether it has been environmentally or socially responsible. A company with a low market capitalisation might have a greater impact on the environment and the community around it, than a company with a high market capitalisation.

There are various areas for future study. As this research was limited to only the top twenty listed companies that had a high market capitalization on a specific date for the two industries, future research could include all companies in the mining and manufacturing industries to get a more comprehensive view of the two industries.

Companies are acting responsibly when their disclosures are benchmarked to the JSE SRI checklist. However the many problems in the communities in which the companies operate may indicate that companies are not acting as responsibly as their disclosures indicate. Instead, companies may be using the sustainability reports for marketing purposes as the pictures in the sustainability reports did not show any negative effects that the companies may have on the community based on their actions. Future research should attempt to identify how communities benefit, quantitatively and qualitatively, from the companies that operate in and affect their communities.

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