

Corporate social responsibility reporting by South African mining companies: Evidence of legitimacy theory

S. Dube and W. Maroun*

University of the Witwatersrand, School of Accountancy, South Africa

*To whom all correspondence should be addressed
warren.maroun@wits.ac.za

This paper offers evidence on the relevance of legitimacy theory for explaining changes in the frequency of corporate social responsibility (CSR) disclosures by South African platinum mining companies following violent strike action during 2012 at Marikana. The results show that all of the South African platinum mining companies provide additional information dealing specifically with the strike taking place at Marikana. This is more pronounced for the company directly involved in the incident. The research also finds evidence of a reaction to the social event by other companies in the South African Platinum Industry which alter the nature and extent of general CSR disclosures to maintain legitimacy. In this way, the study offers evidence in support of the relevance of legitimacy theory for explaining changes in CSR reporting. The findings of this study complement existing research which has ignored the South African market. Although there has been some work on legitimacy theory in the context of environmental disclosure by South African companies, the study is the first to examine a significant social event using legitimacy theory as the frame of reference.

Introduction

South Africa is one of the top global mineral producers with the mining industry contributing significantly to the country's employment opportunities and gross domestic product (GDP) (De Villiers & Alexander, 2014; Chamber of Mines of South Africa, 2016). Although there are significant economic benefits from mining, these are often accompanied by adverse environmental and social effects which include depletion of non-renewable resources, land use, and health and safety concerns (ibid). Mining operations also go hand-in-hand with a number of social challenges, as highlighted by unprecedented strike action in the industry (Chinguno, 2013).

In particular, 16 August 2012 saw the killing of an estimated forty four mine workers and the injury of at least seventy others in a strike at the Lonmin Plc's (Lonmin) platinum mine in Marikana (Nkosi, 2012; Farlam, Hemraj & Tokota, 2015). This was the most violent labour demonstration witnessed since Apartheid (Bond & Mottiar, 2013). International and local media gave the event significant attention, while the investor community was uncertain about the implications of the industrial action, not just for Lonmin, but for the South African mining industry as a whole (Cavvadas & Mitchell, 2012). The concern was justified by the fact that, although Marikana was the most violent, it certainly was not the only strike action in the platinum mining industry that year. Marikana was preceded by industrial unrest, lasting several days, at Impala Platinum in January 2012 (Chinguno, 2013). In addition, the effects of the strike actions were not limited to mining operations. There were far reaching social and economic implications.

For example, the policy of "no work, no pay" resulted in mounting debt for striking employees and significant opportunity costs in the form of lost wages and retirement savings (Solomons, 2014). In addition to the material financial impact for Lonmin and, more broadly, the South African economy, the strike had serious consequences for mineworkers' dependents and the local businesses in areas surrounding Marikana (Mathews, 2012; Solomons, 2014; Hill & Maroun, 2015). Perhaps most important was the fact that industrial unrest at Marikana was widely regarded as an indication of growing social and economic inequality in South Africa and, possibly, the beginning of the end of the country's famous mining industry (Cavvadas & Mitchell, 2012; Frankel, 2012).

As a result, although the mining houses were contributing economically to the well-being of the surrounding communities, as reported in their integrated reports, their social licence was at stake because of the societal disapproval stemming from the violent protests of 2012 and the adverse implications for other industries and businesses dependent on the mining sector (King, 2012; Nkosi, 2012; Hill & Maroun, 2015). In order to avoid state or policy interventions, there was need for the mining houses, particularly Lonmin, to regain legitimacy and ensure their continued existence as a credible part of the South African economy.

In this context, this study investigates how mining companies use corporate social responsibility (CSR) disclosures in their integrated reports to preserve credibility in the eyes of constituents after violent strike action has posed threats to companies' legitimacy. The research extends the existing body of interpretive corporate governance research which

uses inductive thematic analysis to identify trends in CSR disclosures in the integrated reports of mining companies in South Africa (for examples see Hindley & Buys, 2012; Solomon & Maroun, 2012; Carels, Maroun & Padia, 2013). In addition, it contributes to the body of research which highlights the relationship between CSR reporting and legitimacy theory which, with the exception of studies by Loate, Padia and Maroun (2015), Constance, De Klerk and Ferreira (2014), de Villiers and Alexander (2014) and De Villiers and Van Staden (2006), have ignored the functioning of legitimacy theory in an African context. This study is also one of the first to consider specifically the potential impact of widely publicised violent labour unrest on CSR reporting by some of South Africa's leading mining institutions (see also Constance *et al.*, 2014; Maroun & Jonker, 2014; Hill & Maroun, 2015).

The findings of this study will be of interest to academics, policy-makers and other stakeholders interested in understanding how Marikana is being addressed in the integrated reports of the platinum mining companies. Furthermore, the research makes an important contribution by showing how integrated reporting is more than just a functional corporate governance development. It can also play an important role in according credibility to companies in the aftermath of a significant social event^a.

The remainder of this article is structured as follows: Section 2 provides a brief overview of legitimacy theory and its relevance in a CSR reporting context. It also discusses the Marikana incident and explains how this example of industrial unrest may have affected CSR reporting by South African platinum mining companies after the event. Sections 3 and 4 present the methodology and results. Section 5 provides an initial review of the findings and Section 6 concludes.

Literature review

Legitimacy is 'a generalised perception or assumption' that an organisation's actions resonate with a socially constructed value systems and are, as a result, regarded as desirable or appropriate (Suchman, 1995, p. 574). Legitimacy rests heavily on subjective and collective assessments of powerful stakeholders with the result that legitimacy is best understood as socially constructed (Ashforth & Gibbs, 1990; Suchman, 1995) and often described in terms of a social contract between companies and their stakeholders. This can include, for example, the communities where companies are operating, local regulators and, due to the effects of globalisation, international bodies of investors, non-governmental organisations and consumers (Guthrie & Parker, 1989; Deegan, 2002; Naser, Al-Hussaini, Al-Kwari & Nuseibeh, 2006). In essence, the aim is for companies to convince influential stakeholders that they do more good than harm to ensure continuity (O'donovan, 2002; Higgins & Walker, 2012; Tregidga, Milne & Kearins, 2014). This is

achieved by appealing to a sense of pragmatic, moral and cognitive legitimacy.

Pragmatic legitimacy

Pragmatic legitimacy is based on the self-interests of the public and is most often exchange or influential in nature (Suchman, 1995; O'dwyer, Owen & Unerman, 2011). Under exchange legitimacy, society supports a company's policy, based on the expected material benefits to the society such as technological improvements or employment opportunities (*ibid*). Influential legitimacy is attained through being responsive to stakeholders and incorporating society's wider interests in the company's decision-making process (Suchman, 1995).

In the context of the mining industry, this would include generating sound financial returns while introducing initiatives to tackle important environmental or social issues such as climate change or occupational health and safety risks (see PwC, 2014; Chamber of Mines of South Africa, 2016). Active stakeholder engagement, including stakeholder representation on decision-making bodies/committees can add to this by demonstrating that mining companies are cognisant of stakeholders' concerns and are attempting to address them (Carels *et al.*, 2013; Brennan & Merkl-Davies, 2014).

Moral legitimacy

Moral legitimacy hinges on whether or not a particular action is viewed as acceptable by a company's powerful stakeholders (Suchman, 1995; O'dwyer *et al.*, 2011). Moral legitimacy is made up of four aspects: consequential, procedural, personal and structural legitimacy. Consequential legitimacy is result-oriented and is based on visible achievements (Suchman, 1995) such as increased employment, reduced emissions and lower numbers of workplace injuries (Carels *et al.*, 2013). With procedural legitimacy, the focal point is not merely the results of an action; emphasis is placed on the morality surrounding the means to achieve a particular outcome (Suchman, 1995; O'dwyer *et al.*, 2011). Examples include the adoption of the latest technologies or processes or compliance with codes of best practice to demonstrate that the company is adhering to the most appropriate methods of production (de Villiers & Alexander, 2014). Structural legitimacy is based on the company's identity and whether or not it forms part of a 'morally favoured taxonomic category' (Suchman, 1995, p. 581) while personal legitimacy is dependent on the character of the companies' leaders (Suchman, 1995; O'Dwyer *et al.*, 2011). To this end, companies often present themselves as a key part of the local economy and go to great lengths to support different charities and to sponsor community investment projects. This is complemented by memberships of or collaboration with internationally respected organisations such as the World Wildlife Fund or agencies of

^a An important question is whether or not this credibility is deserved and, if so, the appropriate timeframe before companies can expect to regain lost legitimacy. This is a subjective issue and not within the scope of this research (special thanks to one of the anonymous reviewers for raising this point).

the United Nations as means of presenting the company as a good corporate citizen.

Cognitive legitimacy

Cognitive legitimacy can be split into two elements: comprehensibility and being taken for granted (Suchman, 1995). The former attempts to make society understand the company through providing logical, understandable explanations for its actions and plans, whereas the latter relies on the very existence of the company being taken for granted as an integral part of the social fabric (*ibid.*). In a mining context, claims to cognitive legitimacy are grounded in the significant contribution which the industry makes to the country's GDP, the important technological developments it is responsible for and the essential materials which it provides in a consumption-based economy (see, for example, PwC, 2012; Chamber of Mines of South Africa, 2016). The aim is not necessarily to appeal only to a sense of moral or pragmatic legitimacy but also to rely on the fact that the industry is such an integral part of the country's economy (and history) that its continued existence is automatically accepted.

Maintaining, gaining and repairing legitimacy

When a crisis occurs which undermines the reputation of a company, managers are compelled to react and repair damaged legitimacy (O'Donovan, 2002). The Exxon Valdez oil spill (Patten, 1992; 2002), Deepwater Horizon disaster and carbon emission scandal involving Volkswagen (Hotten, 2015) are well-known examples. Companies directly involved in a negative event often attempt to normalise operations by separating the adverse event from the normal business (Dowling & Pfeffer, 1975; Suchman, 1995). This can involve efforts to divert stakeholders' attention, manage and alter their expectations in order to limit criticism and, on occasion, denial of responsibility^b (for examples, see Solomon, Solomon, Joseph & Norton, 2013; Brennan & Merkl-Davies, 2014; Tregidga *et al.*, 2014). At the same time, there is a need for other industry players to manage their existing claims to legitimacy and defend their credibility from inferences being drawn by stakeholders on the basis of the delegitimising event which may not be directly linked to these companies (Higgins & Walker, 2012). The different strategies used to react to a threat to legitimacy are summarised in Table 1.

Table 1: Strategies for maintaining and repairing legitimacy

Strategy	Activities typically involved
1. Divert attention	<ul style="list-style-type: none"> Withhold negative information. Divert attention from the negative incident and rather disclose accomplishments.
2. Alter stakeholder expectations	<ul style="list-style-type: none"> Offer extensive explanations about the event to make society understand the company's circumstances and, if possible, condone its involvement in the adverse incident. Inform the public about risks inherent in the industry to gain a level of sympathy. Create an appreciation of the company and its outputs to reaffirm claims to pragmatic and cognitive legitimacy.
3. Manage blame	<ul style="list-style-type: none"> Defend the company's reputation through explaining that the company did not breach any rules leading up to the event. Question the moral responsibility of the company for the event in question. Protect past accomplishments. Shift the blame to individuals and distance the company from the incident.
4. Adhere to society's values	<ul style="list-style-type: none"> Create new policies and values to prevent recurrence of the negative incident. Selectively accept shortcomings in the system, leading to restructuring by (1) creating monitoring systems to identify causes of the incident and prevent reoccurrences or (2) replacing senior executives to signify change.
5. Defend existing position	<ul style="list-style-type: none"> Be proactive by dealing with negative events by either explaining how they are not relevant for the company or how steps have already been taken to reduce their risk of re-occurrence. Protect past accomplishments and buttress existing legitimacy reserves. Emphasise the value of the business to create a legitimacy reserve which can be used in the event of a future threat to credibility.
6. Denial	<ul style="list-style-type: none"> Deny the existence of the problem or reject responsibility for the problem. Argue that the problem is beyond the company's jurisdiction and that it has no moral responsibility.

Source: Adapted from O'Donovan (2002) and Suchman (1995)

Irrespective of the specific strategy (or combination of strategies) chosen by management when faced with a threat to legitimacy, the company will rely on some form of stakeholder engagement to demonstrate that it remains a credible part of society (O'Donovan, 2002). This often

involves changing the nature and extent of information being communicated to stakeholders, including CSR disclosures found in annual or integrated reports (Patten, 2002; De Villiers & Van Staden, 2006; Watson, 2011; Higgins & Walker, 2012; Tregidga *et al.*, 2014).

^b Even with the advent of global interconnectivity and rapid dissemination of information, these strategies can continue to be used as a means of responding to threats to an organisation's legitimacy (see, for example, Tregidga *et al.*, 2014)

Corporate social responsibility reporting in South Africa

'CSR' is not consistently defined and there have been many terms used to describe reporting of CSR-related information (together with other so-called non-financial metrics) including, for example, 'satiability reporting', 'triple-bottom reporting' and, most recently, 'integrated reporting' (Institute of Directors in Southern Africa [IOD], 2002; International Integrated Reporting Council [IIRC], 2013; Kansal, Joshi & Batra, 2014; Patten & Zhao, 2014). For the purpose of this study, 'CSR' can be summarised as the entity's actions and policies which display a level of concern for the wellbeing of society as a whole. It includes, for example, policies encouraging affirmative action, equal employment opportunities, community involvement and producing safe, environmentally friendly goods (IOD, 2009).

CSR reporting has been increasing steadily over the last twenty years (Solomon, 2010; Mutti, Yakovleva, Vazquez-Brust & Di Marco, 2012). In South Africa, the issuing of the King Codes in 1994 and 2002 highlighted the importance of non-financial reporting and, in particular, introduced the concept of 'triple-bottom-line reporting' to ensure that Directors consider the impact of the corporate decisions on the surrounding communities and environment (IOD, 2002). The relevance of reporting on these non-financial sustainability indicators was reiterated in King III (IOD, 2009) and the IIRC's (2013) framework on integrated reporting^c.

Presently, CSR disclosures by mining (and other) companies are largely informed by the recommendations of King III (2009), the Global Reporting Initiative (GRI) and the IIRC's framework on integrated reporting (Carels *et al.*, 2013). The use of these guidelines/frameworks is in keeping with the fact that, from 2010, the JSE introduced a listing requirement for companies either to comply with King III and prepare an integrated report or to explain the reasons for not doing so (Solomon & Moroun, 2012; Johannesburg Securities Exchange, 2013). These integrated reports are expected to communicate a company's plans, governance, performance (social, economic and environmental) and forecasts to relevant stakeholders in a manner which correctly provides the holistic context of business operations^d (IIRC, 2013; 2011).

The move to more holistic reporting on both financial and non-financial capital is especially relevant in the mining industry (Jenkins & Yakovleva, 2006; King, 2012; Carels *et al.*, 2013). The industry is often the focus of pressure groups, journalists and environmentalists due to the adverse social and environmental effects with which it is associated. Among these are land degradation, worker health and safety issues,

pollution, the living conditions of mine workers and the importance of human rights (De Villiers & Barnard, 2000; Carels *et al.*, 2013, de Villiers and Alexander, 2014). To ensure their continued existence, mining houses are under pressure to convince stakeholders of the valuable role which they play in the South African capital market and the positive social contribution which they offer (*ibid*). To this end, they devote considerable attention to the nature and extent of CSR information being included in their reports to stakeholders^e (De Villiers & Van Staden, 2006; Hindley & Buys, 2012; Carels *et al.*, 2013).

Link between legitimacy theory and CSR

Historically, companies were considered legitimate if they achieved a reasonable financial return relative to the level of invested financial capital (Patten, 1992). As more stakeholder-centric models of corporate performance take hold, however, the relevance of social and environmental performance indicators is becoming more apparent (Solomon, 2010; IIRC, 2013).

De Klerk and de Villiers (2012), for example, find that CSR information is value relevant with companies providing more information on their CSR initiatives often enjoying higher returns (measured in terms of market capitalisation) than their peers. This is consistent with the arguments presented by the IIRC (2013) and Atkins and Maroun (2015) that so-called non-financial measures are important for understanding how organisations generate financial returns in the long-term (see also Marcia, Maroun and Callaghan, 2014; Cahan *et al.*, 2016). In other words, sustainability goes hand-in-hand with financial performance to provide a complete measure of corporate success. For companies to signal to stakeholders that they are capable of producing and sustaining value in the short-, medium- and long-run, it is essential for financial information to be complemented by non-financial metrics.

At the same time, CSR reporting is important for demonstrating that the company is not just an economic entity but is also a good corporate citizen (Guthrie & Parker, 1989; O'donovan, 2002; Naser *et al.*, 2006; Tregidga *et al.*, 2014). Detailed non-financial reporting shows conformance with the generally accepted position that long-term sustainability is interconnected with effective CSR (IOD, 2009; Integrated Reporting Committee of South Africa, 2011). With this type of reporting being codified in, *inter alia*, King III (IOD, 2009), the framework on integrated reporting (IIRC, 2013) and the G4 Sustainability Reporting Guidelines (Global Reporting Initiative, 2013), detailed CSR disclosures are an important means of securing legitimacy (Naser *et al.*, 2006). To paraphrase Suchman (1995), reporting on CSR issues, generally accepted as being important for the relevant industry or reporting framework, signals adherence with

^c King III was replaced by King IV during 2016. As this occurred after the data for this study was collected, King-IV is not dealt with.

^d For details on the extent of reporting per King III, the GRI and integrated reporting framework, please see Hindley and Buys (2012), Solomon and Maroun (2012), Carels *et al.* (2013) and de Villiers and van Staden (2014)

^e The annual or integrated report is not the only means by which these companies disseminate information in order to gain, maintain or repair legitimacy. These documents are, however, the most formal sources of information produced by listed organisations and, as a result, are the focal point for this research. Examining non-financial disclosure in other sources (such as webpages and media releases) is deferred for future research.

societal norms which place a high value on CSR information (Higgins & Walker, 2012; Tregidga *et al.*, 2014).

O'Donovan (2002), for example, conducted interviews in Australia with managers in the mining, chemical and paper and pulp industries, widely regarded as having a material negative environmental impact. The researcher showed that CSR disclosures are mobilised as part of a complex legitimacy strategy which relies on information in annual reports to respond to stakeholders' concerns and expectations. The study also showed how CSR disclosures can be used by managers to align their values with those of important stakeholders, giving them a chance to lead debates and secure societal approval.

Similarly, Patten (1992; 2002) established a relationship between legitimacy theory and social disclosures through comparison of the Exxon annual report before and after the Alaskan oil spill. The research showed a significant increase in environmental-related disclosure after the accident. This is consistent with the strategies of repairing legitimacy noted by Suchman (1995), as the increase in disclosures shows that the company attempted to explain the environmental incident in greater detail in order to regain favour with important stakeholders. Interestingly, the majority of companies in the petroleum industry also increased their social and environmental disclosures after the event, probably due to a perceived need to manage expectations, respond to a significant environmental disaster and to maintain legitimacy.

From an African perspective, the need to meet the expectations of important stakeholders by adjusting or modifying the type of information being communicated is also relevant. For example, legislation championing Black Economic Empowerment has been enacted in direct response to Apartheid's economic exclusion of large sections of the population from mainstream economic activity (Department of Mineral Resources, 2010; Chamber of Mines of South Africa, 2016). This is complemented by the emergence of codes of best practice for reporting on social and economic transformation, in part response to growing demands from stakeholders to demonstrate how companies (particularly those in the mining industry) are working to address the effects of past practices (King, 2012; Carels *et al.*, 2013).

Examining environmental (rather than social) disclosures, de Villiers and van Staden (2006) report similar findings. These researchers investigated the environmental disclosures of 140 South African companies over a nine-year period. They discover that disclosures initially increased in response to a perceived crisis of legitimacy followed by a gradual reduction in the frequency of environmental disclosures. This is not an invalidation of legitimacy theory. Instead, the findings show how companies increase disclosures to address an issue and, once it is resolved to the satisfaction of the relevant regulator (or other stakeholder), use less specific disclosures to avoid drawing unnecessary attention to past negative incidents (de

Villiers and van Staden, 2006). The same logic may apply to reporting of CSR-related information by platinum mining companies in the context of the events unfolding at Marikana.

South Africa, Marikana and CSR disclosure as an instrument of legitimisation

South Africa has more than 80 percent of the world's platinum reserves which indicates the global significance of the industry (Bond & Mottiar, 2013). During the 2002-2008 period, the platinum price increased by 350 percent, leaving the platinum houses in the black but this wealth was not necessarily shared with the general workforce who were surviving on a monthly take-home pay of roughly \$511 and a housing allowance of \$204 (Bond & Mottiar, 2013). Safety concerns and the poor quality and limited availability of housing further angered the workforce, leading to several strikes across the industry in 2012 (Alexander, 2013; Bond & Mottiar, 2013; Chinguno, 2013).

In January 2012 when the Impala platinum mine workers went on an unprotected strike, demanding a 200 percent increase in wages (Chinguno, 2013). In addition to this, workers were unhappy about their living conditions, safety, working hours, dusty air, the prevalence of illness and allegations racism at the workplace (Alexander, 2013). Later that year, on 10 August 2012, mineworkers at Lonmin's operations at Marikana embarked on a wildcat strike (Marinovich, 2012). On 16 August 2012, police units were deployed to move striking miners from a hill where they had been protesting for several days. As the workers descended from their position, the police opened fire and an estimated 44 Lonmin miners were shot dead and over 70 others were injured (Bond & Mottiar, 2013; Farlam *et al.*, 2015).

To many, the events unfolding at Marikana were reminiscent of violent police action at Sharpeville and Soweto during Apartheid^f (Nkosi, 2012) leading to significant criticism from local and international stakeholders. In addition to the significant financial losses incurred by Lonmin, the strike had adverse economic implications for mineworkers and their families. Small and medium enterprises, dependent on business from the mines and their employees, were also hard hit (Mathews, 2012; Solomons, 2014; Hill & Maroun, 2015). From a social perspective, the strike action highlighted the growing challenge posed by working and living conditions in the sector and called into question the effectiveness of the mining companies' CSR initiatives (Frankel, 2012; Nkosi, 2012; Alexander, 2013).

Following significant negative publicity, it is understandable that Lonmin, and others in the industry, would need to respond to the threat to legitimacy to regain favour with important stakeholders and avoid public policy intervention. With the integrated report being the primary platform for communicating with stakeholders in South Africa (see IIRC, 2011; Johannesburg Securities Exchange, 2013), it is

^f During the Sharpeville incident, 69 people were shot dead for burning their passbooks which had been implemented by the apartheid regime. The Soweto uprising saw more than 1000 students killed by police and the army

for protesting against learning Afrikaans in schools Bond, P. & Mottiar, S., 2013. Movements, protests and a massacre in South Africa. *Journal of Contemporary African Studies*, 3131, 283-302.

expected that there should be an increase in the extent of CSR disclosures found in the integrated reports of the mining companies in the first financial year ending after Marikana. As per de Villiers and van Staden (2006), heightened public awareness of the events occurring at Marikana should be followed by a decrease in specific disclosure on the strike action and a reduction in total CSR reporting. Alternately, mining companies, responding to stakeholder expectations, might have increased disclosure dealing directly or indirectly with the strike action.

Method

This study used thematic analysis to review CSR disclosures in the integrated reports of the South African platinum mines listed on the JSE. The technique is a common qualitative method for analysing material which involves identifying themes in textual data and for coding and interpreting those themes (Guest, Namey & Mitchell, 2013). In thematic analysis, the researchers are the measurement instrument which contributes to the subjectivity but also to the detail of the analysis (Merkel-Davis, Brennan & Vourvachis, 2011).

The approach used in this paper is in keeping with the objective of highlighting the relevance of legitimacy theory in a corporate reporting context, in line with comparable prior research (Milne, Tregidga & Walton, 2009; Tregidga *et al.*, 2014). The interpretive style is also consistent with the fact that the aim of the study is not to test hypotheses, quantify results or produce generalizable findings in a positivist sense. Instead, the research is exploratory in nature, examining in detail a small sample of annual and integrated reports to shed light on the operation of legitimacy theory in a South African reporting context (Broadbent & Unerman, 2011; Maroun & Jonker, 2014).

Sample selection

The JSE-listed platinum mining companies were purposefully selected for the study. If any response to the unrest was present, it was expected to be readily identifiable from the selected companies' integrated reports.

Twelve companies were listed on the JSE Platinum and Precious Metals mining sector at the time of carrying out the research in February 2015. Three of the twelve companies only had financial statements with no accompanying integrated reports and were excluded from the research. An additional company was excluded from the sample because only the 2011 and 2012 reports were found which was not suitable for evaluating the effect of Marikana on CSR reporting. In total, eight companies were included in the final sample.

The small sample size is in line with comparable interpretive studies (Solomon & Maroun, 2012; Guest *et al.*, 2013). The integrated reports were either collected from INET BFA or from the respective companies' websites (adapted from Makiwane & Padia, 2012). In the results and analysis, company names have not been used to avoid creating the

impression that the purpose of this research is to ascribe blame for the events unfolding at Marikana.

Data collection and analysis

An initial content analysis was carried out to gain a sense of the content and structure of the 2011, 2012 and 2013 integrated reports (Leedy & Ormrod, 2010). The objective was to analyse the reports to identify the CSR information included. This was done through recording patterns and characteristics found in the data, as opposed to the specific information to cater for differences in reporting styles across the companies (De Villiers & Alexander, 2014). As Marikana happened during 2012, this study compared the integrated reports before and after the incident, captured by the 2011-2013 financial years, to identify any fluctuations in the quantity of CSR disclosure.

The researchers analysed each integrated report and recorded, in tabular form, the number of times a specific theme was mentioned (adapted from Solomon and Maroun, 2012). These themes (content categories or codes) were derived from the prior literature (specifically Makiwane and Padia, 2012; Solomon and Maroun, 2012; Carels *et al.*, 2013). The content codes were complemented by recommended disclosures per King III and the GRI to ensure completeness (Carels *et al.*, 2013). Examples of themes include: broad based economic empowerment initiatives, carbon footprint, worker safety, corporate transparency and GRI compliance. (The theme register used to record data is presented in Appendix 1).

A frequency table was generated to record the number of times a content code was referred to in each report. The frequency was counted in terms of sections where the disclosure theme was discussed. A sliding scale of similar nature to the one in Makiwane and Padia (2012) was used. A score of 'nil' was awarded when no disclosure pertaining to a theme was found. When descriptive disclosure regarding the theme (qualitative) was present, a score of 'one' was awarded. Where narrative and figures were used to explain a theme (combination of qualitative and quantitative disclosures), a score of 'two' was awarded.

Constant comparison of segments of the text was carried out systematically to ensure consistency and accuracy (Guest *et al.*, 2013). Due to the exploratory nature of the study, a scientific text analysis approach, which involves counting specific words or terms, was not used (Merkel-Davis *et al.*, 2011). Instead, the cumulative change in CSR disclosure over time (CCOT) was calculated for each content code. The CSR disclosure scores were totalled per company and content theme to determine whether there was decrease change in total CSR disclosure post-Marikana.

Results from the content analysis are presented below and provide evidence on the applicability of legitimacy theory in a South African context.

Results and discussion

Changes in the total CSR disclosures over the three years under review are shown in Table 2. There are mixed results with increases and decreases reported across the companies from 2011 to 2013 although the industry as a whole steadily increased the frequency of CSR disclosures.

Table 2: Percentage changes in CSR disclosures per company

	2011-2012	2012-2013	2011-2013
Company 1	1.48%	-7.02%	-5.64%
Company 2	-3.97%	24.14%	19.21%
Company 3	11.59%	-5.19%	5.80%
Company 4	20.68%	11.52%	34.58%
Company 5	1.36%	3.02%	4.42%
Company 6	-2.82%	-7.88%	-10.48%
Company 7	-1.57%	20.32%	18.43%
Company 8	18.71%	-32.61%	-20.00%
Grand Total	4.99%	1.53%	6.60%

To understand better the effects of Marikana, the researchers considered changes in the total CSR disclosures dealing specifically with labour unrest. Figure 1 shows changes from 2011 (the year preceding Marikana) and the disclosures in the first sets of integrated reports prepared after the incident (mostly in 2012). Four of the companies increased the extent of their CSR reporting while the remaining four mining houses reported less CSR information.

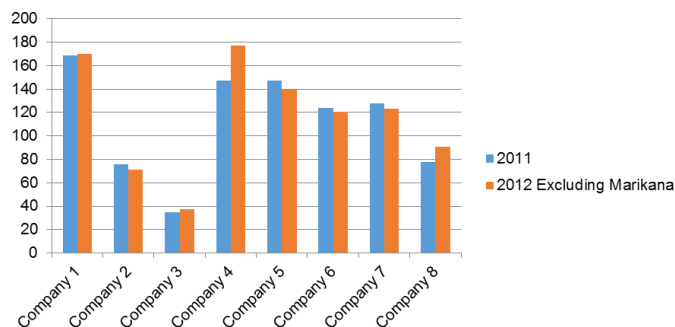


Figure 1: Disclosures excluding Marikana-specific information

Table 3 summarises the changes in general CSR and Marikana-specific disclosures from 2011 to 2012.

The company with workers directly involved in the Marikana incident increased the extent of CSR reporting in the integrated report prepared immediately after the strike action. This is consistent with legitimacy theory predicting that, in response to a significant social event, the company provides additional information to its stakeholders to explain the impact of the strike on its operations, outline plans of action and, to a certain extent, deflect blame (see Brown & Deegan, 1998; O'donovan, 2002). The intention is not entirely to

manage impressions but to alter stakeholder expectations by rationalising the event and reassure them that management is aware of the problem and is taking steps to address the relevant issues (see Suchman, 1995). At the same time, the company needs to avoid creating the expectation of wide-scale reform which might impact the entire business.

Table 3: Analysis of disclosure focus

Extent of disclosure	Focus of CSR disclosure	
	General CSR	Marikana Specific
Above average decrease	Company 5	
Marginal decrease	Company 2, 6 and 7	
No change		Company 6
Marginal increase	Company 1 and 3	Company 1, 2, 3, 4, 7, 8
Above average increase	Company 4 and 8	Company 5

Not only will this reporting strategy involve additional costs, it runs the risk of tacitly accepting that the strike action is indicative of poor management of the company's social and human capital as a whole[§]. Consequently, the company reduced the extent of other CSR disclosures. This is not necessarily to withhold information from stakeholders, but to ensure focus on the most significant event and suggest subtly that the event is extraordinary and not indicative of underlying problems at other operations or with the business model in general.

As found by Patten (2002; 1992), companies not directly involved in a crisis (such as Marikana) also increased the extent of CSR reporting. Although not specific to their operations, the strike action raises a number of questions about issues such as wages, safety and the living conditions of South African mineworkers in general, necessitating what Suchman (1995) describes as a pre-emptive strategy to address any inferences being drawn about the relationship between these companies and their labour force. What is also interesting is that none of the companies ignored the events at Marikana in their integrated reports. They also avoid explicit statements denying responsibility and recognise the need to, at least, consider the potential impact of labour relations for their businesses. Even smaller operations and those in the start-up phase had some commentary on the strike action, probably in order to meet the expectations of stakeholders and avoid appearing to be unresponsive to the worst strike action post-Apartheid.

The companies took a slightly different approach which it came to other CSR information being included in their integrated reports. Companies 1 and 3 increased their general CSR disclosures (those being not referring specifically to Marikana) marginally while Companies 4 and 8 reported an above-average increase in CSR disclosure unrelated to

[§] This raises questions about the extent to which management assumes responsibility for the outcome of strike action and whether or not there is a sense of complacency. Exploring this in more detail is deferred for future

research and is not the focal point of this paper. (Special thanks to one of the anonymous reviewers for this observation.)

Marikana. Changes in disclosure frequencies can be interpreted as part of a general strategy to defend the companies' existing operations by offering stakeholders additional information to show that the necessary actions are being taken and that there is nothing to hide. In contrast, Companies 2 and 7 reported a below average decrease in CSR disclosure, suggesting more focus on Marikana to avoid additional scrutiny and signal that existing operations and

practices are sound. The same strategy may be evident at Company 6 which, not being involved in the strike action, may be using steady disclosure frequencies to signal that it is 'business as usual' to its stakeholders. The different legitimisation strategies used by the sample of companies are summarised in Table 6.

Table 6 Marikana-Legitimacy matrix

		Legitimisation strategy			
		Denial and avoidance of responsibility	Defend existing positions – Emphasis on additional disclosure	Defend existing positions – Emphasis on Marikana to focus attention	Alter stakeholder expectations and manage blame
Perceived impact of Marikana	High – company directly involved				Company 5
	Medium – company is a large producer and could be impacted significantly by future strike action		Company 1 Company 4 Company 6	Company 2 Company 7	
	Low – company is a smaller operation with no reported strike action and/or is in a start-up phase		Company 3 Company 8		

Conclusions and recommendations for future research

This research provides initial evidence in support of the applicability of legitimacy theory in the reporting strategies being used by some listed South African platinum mining companies. The article expands on an earlier body of international research which shows how companies often respond to CSR challenges by increasing the extent of their non-financial disclosures in their annual or integrated reports (Patten, 1992; O'Donovan, 2002; Patten, 2002). It also complements fairly recent South African studies which show how local mining companies have varied their environmental reporting in response to changing societal expectations, (De Villiers & Van Staden, 2006; Loate *et al.*, 2015) although how these changes in disclosure should be interpreted from the perspective of different stakeholders has not been dealt with.

As predicted by Patten (1992; 2002), the research finds evidence of an increase in CSR reporting in the first set of integrated reports prepared in the aftermath of a significant strike action in the local mining industry. The reporting strategy was not applied only by the company most affected by Marikana; all of the South African platinum mining companies provided additional information on the impact and relevance of the events taking place at Marikana for their

businesses. There were no instances where the companies explicitly denied the importance of Marikana or argued that it was too far removed to be of any consequence for their operations. This is largely consistent with the significant attention accorded to the events taking place at Marikana by the local and international press. The findings also suggest that the local mining companies are aware of the need to address important social issues in their integrated reports, even if they are not directly involved in the event in question.

When it came to general CSR disclosures, the researchers were able to discern at least two legitimisation strategies. Some companies chose to provide consistent information on CSR issues unrelated to Marikana. This was interpreted as signalling how Marikana is an exceptional event and, not being directly involved in the strike action, is not indicative of the normal operations at these companies. In contrast, other industry members chose to provide additional CSR information on issues such as worker safety, employee health and housing. This was seen as an effort to reassure stakeholders that their business practices remain sound, that management is aware of the broader implications of Marikana and that, when it comes to non-financial capital, the companies have nothing to hide. There was no indication that the size of the company (by market capitalisation or number of operations) or the nature of its mining operations (fully operational or in development) were relevant factors for choosing any one strategy^h.

^h It should, however, be borne in mind that small sample sizes preclude the use of inferential statistical analysis to support these conclusions

Needless to say, these conclusions are subjective and based only on changes in the frequency of CSR disclosures. Additional research is needed to understand better how the mining companies react to social events in their integrated report. For example, considering how the companies have dealt with other strike actions or events which have been widely publicised could be helpful for identifying trends in their disclosure practices. It would also be useful to compare how the reaction to significant social events in terms of the nature and extent CSR reporting varies among developing and developed economies. To reach more definitive conclusions, future researchers should also consider engaging with preparers and users of South African miners' integrated reports. Non-financial reporting is not just a technical disclosure exercise but one which reflects the application and internalisation of codes of best practice by practitioners and stakeholders. Fieldwork studies which engage with those concluding on what information to include in integrated reports will provide a very interesting avenue of research for those interested in understanding the interconnection between CSR reporting and legitimacy theory.

References

- Alexander, P. 2013. 'Marikana, turning point in South African history', *Review of African Political Economy*, **40**(138): 605-619.
- Ashforth, B.E. & Gibbs, B.W. 1990. 'The double-edge of organisational legitimisation', *Organization Science*, **1**(2): 177-194.
- Atkins, J. & Maroun, W. 2015. 'Integrated reporting in South Africa in 2012: Perspectives from South African institutional investors', *Meditari Accountancy Research*, **23**(2): 197-221
- Bond, P. & Mottiar, S. 2013. 'Movements, protests and a massacre in South Africa', *Journal of Contemporary African Studies*, **31**(2): 283-302.
- Brennan, N. & Merkl-Davies, D. 2014. 'Rhetoric and argument in social and environmental reporting: The dirty laundry case', *Accounting, Auditing and Accountability Journal*, **27**(4): 602-633.
- Broadbent, J. & Unerman, J. 2011. 'Developing the relevance of the accounting academy: The importance of drawing from the diversity of research approaches', *Meditari Accountancy Research*, **19**(1/2): 7-21.
- Brown, N. & Deegan, C. 1998. 'The public disclosure of environmental performance information—a dual test of media agenda setting theory and legitimacy theory', *Accounting and Business Research*, **29**(1): 21-41.
- Campbell, D., Craven, B. & Shrives, P. 2003. 'Voluntary social reporting in three FTSE sectors: A comment on perception and legitimacy', *Accounting, Auditing & Accountability Journal*, **16**(4): 558-581.
- Cahan, S. F., De Villiers, C., Jeter, D. C., Naiker, V. & Van Staden, C. J. 2016. Are CSR Disclosures Value Relevant? Cross-Country Evidence. *European Accounting Review*, **25** (3): 579-611.
- Carels, C., Maroun, W. & Padia, N. 2013. 'Integrated reporting in the South African mining sector', *Corporate Ownership and Control*, **11** (1): 957-971.
- Cavvadas, D. & Mitchell, A. 2012. Marikana-the causes and wider implications and lessons for the mining industry in Africa. [online] URL: <http://www.fasken.com/marikana-causes-implications-mining-africa/>.
- Chamber of Mines of South Africa. 2016. Chamber at Work. [online] URL: <http://www.chamberofmines.org.za/about>.
- Chinguno, C. 2013. 'Marikana massacre and strike violence post-apartheid', *Global Labour Journal*, **4**(2): 160-166.
- Constance, M., De Klerk, M. & Ferreira, P. 2014. 'Corporate social responsibility disclosures by South African mining companies: The Marikana massacre', *Corporate Ownership and Control*, **11**(1): 15-21.
- De Klerk, M. & de Villiers, C. 2012. 'The value relevance of corporate responsibility reporting: South African evidence', *Meditari Accountancy Research*. **20**(1): 21-38.
- De Villiers, C. & Alexander, D. 2014. 'The institutionalisation of corporate social responsibility reporting', *The British Accounting Review*, **46**(2): 198-212.
- De Villiers, C. & van Staden, C.J. 2006. 'Can less environmental disclosure have a legitimising effect? Evidence from Africa', *Accounting, Organizations and Society*, **31**(8): 763-781.
- De Villiers, C. J. & Barnard, P. 2000. 'Environmental reporting in South Africa from 1994 to 1999: A research note', *Meditari Accountancy Research*, **88**(1): 15-23.
- Deegan, C. 2002. 'Introduction - The legitimising effect of social and environmental disclosures - a theoretical foundation', *Accounting, Auditing and Accountability Journal*, **15**(3): 282-311.
- Deegan, C., Rankin, M. & Tobin, J. 2002. 'An examination of the corporate social and environmental disclosures of BHP from 1983-1997: A test of legitimacy theory', *Accounting, Auditing and Accountability Journal*, **15**(3): 312-343.
- Department of Mineral Resources. 2010. Amendment of the Broad-Based Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry. [online] URL: http://www.sadpmr.co.za/upload/Mining_Charter.pdf.
- Dowling, J. & Pfeffer, J. 1975. 'Organizational legitimacy: Social values and organizational behavior', *The Pacific Sociological Review*, **18**(1): 122-136.
- Elsbach, K.D. 1994. 'Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts', *Administrative Science Quarterly*, **39**(1): 57-88.
- Farlam, I., Hemraj, P. & Tokota, B. 2015. *Marikana commission of inquiry: Report on matters of public, national and international concern arising out of the tragic incidents at the Lonmin mine in Marikana, in the North West Province*. Marikana Commission of Inquiry Pretoria: Government Printers.
- Frankel, P. 2012. Marikana: 20 years in the making. Business Report [Online] URL: <http://www.iol.co.za/business/opinion/marikana-20-years-in-the-making-1.1407448>.
- Global Reporting Initiative (GRI). 2013. G4 Sustainability Reporting Guidelines. [online] URL:

<https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>.

Guest, G., Namey, E.E. & Mitchell, M.L. 2013. *Collecting qualitative data: A field manual for applied research*. California: Sage.

Guthrie, J. & Parker, L.D. 1989. 'Corporate social reporting: A rebuttal of legitimacy theory', *Accounting and Business Research*, **19**(76): 343-352.

Higgins, C. & Walker, R. 2012. 'Ethos, logos, pathos: Strategies of persuasion in social/environmental reports', *Accounting Forum*, **36**(36): 194-208.

Hill, N. & Maroun, W. 2015. 'Assessing the potential impact of the Marikana incident on South African mining companies: An event method study', *South African Journal of Economic and Management Sciences*, **18**(18): 586-607.

Hindley, T. & Buys, P. 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.

Hotten, R. 2015. Volkswagen: The scandal explained. BBC News. [online] URL: <http://www.bbc.com/news/business-34324772>.

Institute of Directors in Southern African [IOD]. 1994. The King report on corporate governance (King-I). Johannesburg: Lexis Nexus South Africa.

Institute of Directors in Southern Africa [IOD]. 2002. The King report on corporate governance in South Africa – 2002 (King II). Johannesburg. Lexis Nexus South Africa

Institute of Directors in Southern African [IOD]. 2009. King Code of Governance for South Africa – 2009 (King III). Johannesburg: Lexis Nexus South Africa

Intergovernmental Panel on Climate Change. 2013. Climate change 2013: The physical science basis. [online] URL: <http://www.ipcc.ch/report/ar5/wg1/>.

International Integrated Reporting Council. 2011. Towards Integrated reporting- communicating value in the 21st century [online] URL: http://theiirc.org/wp-content/uploads/2011/09/ir-discussion-paper-2011_spreads.pdf [accessed: 5 september 2014].

International Integrated Reporting Council. 2013. The international IR framework [online] URL: <http://www.theiirc.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>.

Jenkins, H. & Yakovleva, N. 2006. 'Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure', *Journal of Cleaner Production*, **14**: 271-284.

Johannesburg Securities Exchange. 2013. JSE listing requirements. [online] URL: <https://www.jse.co.za/content/JSEEducationItems/Service%20Issue%2017.pdf>.

Kansal, M., Joshi, M. & Batra, G.S. 2014. 'Determinants of corporate social responsibility disclosures: Evidence from India', *Advances in Accounting, incorporating Advances in International Accounting*, **30**(1): 1-13.

King, M. 2012. Comments on: Integrated reporting and the integrated report. Public lecture. International corporate governance conference, Johannesburg, South Africa. 23 October 2012.

Leedy, P.D. & Ormrod, J.E. 2010. *Practical research: Planning and design*. 4th Ed. London: Pearson Education Inc.

Loate, B., Padia, N. & Maroun, W. 2015. 'Acid mine drainage in South Africa: A test of legitimacy theory', *Journal of Governance and Regulation*, **4**(2): 26-40.

Makiwane, T.S. & Padia, N. 2012. 'Evaluation of corporate integrated reporting in South Africa post King III release South Africa - An exploratory enquiry', *Journal of Economic and Financial Sciences*, **6**(2): 421-438.

Marcia, A., Maroun, W. & Callaghan, C. 2015. Value relevance and corporate responsibility in the South African context: An alternate view post King-III. *South African Journal of Economic and Management Sciences*, **18** (4): 500-519

Maroun, W. & Jonker, C. 2014. 'Critical and interpretive accounting, auditing and governance research in South Africa', *Southern African Journal of Accountability and Auditing Research*, **16**: 51-62.

Maroun, W. & Solomon, J. 2014. 'Whistle-blowing by external auditors: Seeking legitimacy for the South African audit profession?', *Accounting Forum*, **38**(2): 109-121.

Mathews, C. 2012. Marikana fall-out. Financial Mail [online] URL: <http://www.financialmail.co.za/economy/2012/09/27/marikana-fall-out>.

Merkel-Davis, D.M., Brennan, N.M. & Vourvachis, P. 2011. Text analysis methodologies in corporate narrative reporting research. 23rd CSEAR International Colloquium, St Andrews, September

Meyer, J.W. & Rowan, B. 1977. 'Institutionalized organizations: Formal structure as myth and ceremony', *American Journal of Sociology*, **83**(2): 340-363.

Milne, M., Tregidga, H. & Walton, S. 2009. 'Words not actions! The ideological role of sustainable development reporting', *Accounting, Auditing and Accountability Journal*, **22**(8): 1211-1257

Mutti, D., Yakovleva, N., Vazquez-Brust, D. & Di Marco, M.n.H. 2012. 'Corporate social responsibility in the mining industry: Perspectives from stakeholder groups in Argentina', *Resources Policy*, **37**(2): 212-222.

Naser, K., Al-Hussaini, A., Al-Kwari, D. & Nuseibeh, R. 2006. 'Determinants of corporate social disclosure in developing countries: The case of Qatar', *Advances in International Accounting*, **19**: 1-23.

Nkosi, M. 2012. South Africa's Lonmin Marikana mine clashes killed 34. BBC News. [online] URL: <http://www.bbc.com/news/world-africa-19292909>.

O'Donovan, G. 2002. 'Environmental disclosures in the annual report-extending the applicability and predictive power of legitimacy theory', *Accounting, Auditing and Accountability Journal*, **15**(3): 344-371.

O'Dwyer, B., Owen, D. & Unerman, J. 2011. 'Seeking legitimacy for new assurance forms: The case of assurance on sustainability reporting', *Accounting, Organisation and Society*, **36**(1): 31-52.

Patten, D.M. 1992. 'Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory', *Accounting, Organizations and Society*, **17**(5): 471-475.

Patten, D.M. 2002. 'The relation between environmental performance and environmental disclosure: A research note', *Accounting, Organizations and Society*, **27**(8): 763-773.

Patten, D.M. & Zhao, N. 2014. 'Standalone CSR reporting by U.S. retail companies', *Accounting Forum*, **38**(2): 132-144.

PwC. 2012. SA mine: Highlighting trends in the South African mining industry. PwC Publications. [online] URL: http://www.pwc.co.za/en_ZA/za/assets/pdf/sa-mine-nov-2012.pdf.

Roberts, R.W. 1992. 'Determinants of corporate social responsibility disclosure: An application of stakeholder theory', *Accounting Organizations and Society*, **17**(6): 595-612.

Solomon, J. 2010. *Corporate governance and accountability*. Third edition. Hoboken, New Jersey, John Wiley & Sons.

Solomon, J. & Maroun, W. 2012. 'Integrated reporting: The influence of King III on social, ethical and environmental reporting', *The Association of Chartered Certified Accountants*, 1-56.

Solomon, J.F., Solomon, A., Joseph, N.L. & Norton, S.D. 2013. 'Impression management, myth creation and fabrication in private social and environmental reporting: Insights from Erving Goffman', *Accounting, Organizations and Society*, **38**(3): 195-213.

Solomons, I. 2014. Platinum strike consequences starting to take shape. Mining Weekly [online] URL: <http://www.miningweekly.com/article/platinum-strike-consequences-starting-to-take-shape-2014-08-22>.

Steurer, R., Langer, M.E., Konrad, A. & Martinuzzi, A. 2005. 'Corporations, stakeholders and sustainable development I: A theoretical exploration of business-society relations', *Journal of Business Ethics*, **61**(3): 263-281.

Suchman, M.C. 1995. 'Managing legitimacy: Strategic and institutional approaches', *Academy of Management Review*, **20**(3): 571-610.

Tinker, T. & Niemark, M. 1987. 'The role of annual reports in gender and class contradictions at General Motors: 1917-1976', *Accounting, Organizations and Society*, **12**(1): 65-88.

Tregidga, H., Milne, M. & Kearins, K. 2014. '(Re)presenting 'sustainable organizations'', *Accounting, Organizations and Society*, **39**(6): 477-494.

Watson, S. 2011. Conflict diamonds, legitimacy and media agenda: an examination of annual report disclosures. *Meditari Accountancy Research*, 19 (1/2): 94-111

Appendix 1: Theme register

THEME	2011	2012	2013	C C O T
SOCIAL				
Absenteeism				
Black economic empowerment, broad-based black economic empowerment (BBBEE), construction charter, ownership				
Board diversity, gender equity, women in engineering				
Collective bargaining (GRI)/ Labour unions				
Community development				
Directors' remuneration				
Disability and invalidity coverage (GRI)				
Disability injury frequency rate				
Disciplinary action				
Employee health care/Life insurance (GRI)				
Employee remuneration				
Employee retention rate/talent retention				
Employee satisfaction/rating				
Employee stock ownership (GRI)				
Employee training/education/skills/ skills development/ maths, science/ skills shortages				
Employee turnover				
Employees trained per annum				
Fatalities				
HIV/AIDS				
Housing				
Human rights training, activism and reported incidents(GRI)				
Labour grievances filed and resolved (GRI)				
Labour unrest				
Lost-time injury rate				
Malaria				
Noise induced hearing loss				

New employee hires (GRI)				
Occupational health programmes, awareness, testing and counselling				
Parental leave (GRI)				
Procurement				
Safety performance				
Stakeholder engagement				
TB				
ENVIRONMENTAL				
Carbon footprint				
Carbon/ fossil fuel tax				
Climate change				
Control/management of radioactive devices/radioactive nuclear gauges				
Environmental compliance				
Environmental rehabilitation				
GRI GR3 guidelines, GRI application level				
Integrated resource plan				
Recycling				
Reduction in energy usage, renewable energy				
Waste/ waste management/ waste minimisation				
Water/energy consumption				
ETHICS, ACCOUNTABILITY, TRANSPARENCY				
Accountability				
Anti-corruption				
Ethical standards/values/Code/good corporate citizen				
Fraud and ethics-related transgressions/ unethical behaviour/theft				
Integrity/ business integrity				
Responsibility/responsible employer				
Transparency/openness				
MARIKANA-SPECIFIC				
Factual summary of events				
Statements of remorse/shock/ sympathy/ support for families and workers				
Statements on compliance/monitoring/ review/enquiries				
Labour negotiations (including remuneration)				
Planned changes to operations – cost savings, efficiency, production & capital and financial management				
Planned changes to operations – social and governance specific				
Need for country-wide reflection and a collective response				

Adapted from Solomon & Maroun, 2012; Carels *et al.*, 2013; Global Reporting Initiative, 2013