CSR disclosures in mining companies: Repairing and maintaining legitimacy?

A research report submitted by

Sindisiwe Dube

In partial fulfilment of the Degree: Master of Commerce

Ethics clearance number: CACCN/1067

Student number: 461660

Tel: 0739169400

Email: sindisiwe7.dube@gmail.com

Supervisor: Warren Maroun

University of the Witwatersrand

School of Accountancy

2015

Declaration

I hereby declare that this research report is my own unaided work. It is submitted in partial fulfilment of the degree of Master of Commerce by Coursework and Research Report at the University of the Witwatersrand, Johannesburg. It has not been submitted elsewhere for the purpose of being awarded another degree or for examination purposes at any other university.

Sindisiwe Dube

10 September 2015

Table of Contents

I List of Abbreviations

Abbreviation	Description
CSR	Corporate Social Responsibility
JSE	Johannesburg Stock Exchange
GRI	Global Reporting Initiative
King III	The King III Code of Corporate Governance
BHP	Broken Hill Proprietary Company Limited
CCOT	Cumulative change over time
ANC	African National Congress

II List of tables and figures

III Abstract

This report analyses the use of legitimacy strategies by the platinum mining companies listed on the Johannesburg Stock Exchange (JSE) post the Marikana incident. Content analysis is employed to study the CSR disclosures in the integrated reports of the companies from 2011 to 2013, using pre-determined content themes and integrated report sections. The results provide evidence in support of the legitimacy theory, as the quantity of CSR disclosures mainly focused on social related issues generally increases in the sector during the period under review. Although some companies do not increase their disclosure, their response is still in line with the predictions of legitimacy theory which envisages a change in the reporting pattern, not necessarily always an increase in disclosure. The study also analyses the reports for specific legitimacy strategies in action, and examples of these are provided and scrutinised.

1 Introduction

1.1: Purpose and context of the study

South Africa is one of the top global mineral producers with the result that the mining industry provides a significant portion of the country's employment opportunities and Gross Domestic Product (GDP), employing approximately 460 000 employees and an additional 400 000 employed by the industry's suppliers (de Villiers & Alexander, 2014). 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, as well as health and safety concerns (Azapagic, 2004). Mining operations can also go hand-in-hand with a number of social challenges, as highlighted by unprecedented strike action in the sector during 2012 (Chinguno, 2013).

In particular, 16 August 2012 saw the killing of thirty-four mine workers and the injury of seventy-eight others in a strike at the Lonmin Plc's (Lonmin) platinum mine in Marikana (Nkosi, 2012). This was the most violent demonstration witnessed after 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 sector that year, being preceded by the Impala Platinum strike in January 2012 (Chinguno, 2013). This incident which had some of its roots in the failure of Lonmin to resolve labour disputes left the local and international community disturbed (Bond & Mottiar, 2013). Although the mining houses were contributing economically to the social wellbeing of the surrounding communities as reported in their integrated reports, their social licence was at stake because of the societal disapproval stemming from the widespread protests that struck the industry in 2012 (cf. Patten, 1992). In order to avoid public policy intervention which could have been the expected result of the societal pressures (Patten, 1992), there was need for the mining houses, particularly Lonmin, to regain legitimacy so as to continue sustainably.

In this context, this study aims to investigate how mining companies use CSR disclosures in their integrated reports to preserve credibility in the eyes of constituents after widespread strike action posed threats to organisational legitimacy. The research extends on a prior body of interpretive corporate governance research (Denis, 2001; Solomon & Maroun, 2012), using inductive thematic analysis to identify trends in CSR disclosures in the integrated reports of platinum mining houses in South Africa and to reveal possible strategies for maintaining or repairing corporate legitimacy (see Suchman, 1995) in the aftermath of strike action at Marikana.

1.2 Research question

Is there evidence of strategies to use CSR disclosures in integrated reports to *repair* or *maintain* organisational legitimacy of the South African platinum mining houses after the Marikana incident?

1.3 Significance of the study

There have been mixed results relating to the value relevance of CSR disclosures across the globe (de Klerk & de Villiers, 2012; Hassel, Nilsson, & Nyquist, 2005; Schadewitz & Niskala, 2010). Some have shown a correlation between CSR disclosures and share price movements, as well as company cost of capital (Dhaliwal, Li, Tsang, & Yang, 2014), while others have reported insignificant relationships between the level of CSR disclosure and the value attached to a company (Moneva & Ortas, 2008; Murray, Sinclair, Power, & Gray, 2006). Nevertheless, there has been a marked increase in the extent of CSR information being included in annual or integrated reports (Makiwane & Padia, 2012; Solomon & Maroun, 2012), especially following the release of King-III and the discussion papers on the framework for integrated reporting (Integrated Reporting Committee of South Africa, 2011; International Integrated Reporting Council, 2011 ; 2013).

A paradox between demand for comprehensive CSR reporting, on the one hand (Solomon & Moroun, 2012), and the failure to confirm consistently the value relevance of CSR disclosures across all companies (Moneva & Ortas, 2008; Murray et al., 2006), on the other, suggests that there may be other reasons for companies engaging in CSR disclosure (Solomon, Solomon, Joseph, & Norton, 2013). One of the possible explanations is that accounting can be seen as a social construct, meaning that it seeks to do more than just communicate financial information (Hopwood, 1987). Prior literature has asserted that companies use disclosures, particularly CSR disclosures, more as an image enhancement tool than as a means of providing performance information (Patten & Zhao, 2014). This could be a possible explanation for companies to strive for impression management through disclosures to stakeholders, in order to retain their confidence (Solomon et al., 2013). For example, Patten and Zhao (2014) observed that companies focused more on disclosing CSR initiatives and programs than on actual CSR performance during the period.

It is for this reason that this study investigates whether CSR disclosures are possibly being used to advance a social position in financial reporting in South Africa, looking particularly at legitimising business institutions. Similar studies have been performed by Patten (1992), Hogner (1982) as well as Guthrie and Parker (1989) but to the researcher's knowledge, there is no South African research on the link between CSR disclosure and organisational legitimacy. For this purpose, the Marikana incident has been chosen as, similar to the events studied in the above-mentioned examples, it attracted negative publicity and left companies exposed to disapproval and possible public policy intervention. The unions demanded a legal inquiry into the matter (Nkosi, 2012), pressuring the mining houses to regain legitimacy to avoid adverse consequences.

This study will, therefore, contribute to a pool of existing literature, adding a unique South African context and showing that corporate reporting is more than just an economic reality. It will also be of interest to corporate governance academics and practitioners wanting to understand better the relevance of CSR disclosures in South African integrated reports.

1.4 Limitations and delimitations

Firstly, the research makes use of integrated reports as the only source of data because management have control over this communication medium as opposed to data obtained from the press which is often open to journalistic interpretations and possible misrepresentations (Guthrie & Parker, 1989). In addition, the integrated report is intended to be the primary means of public interaction with stakeholders (International Integrated Reporting Council, 2011; Johannesburg Securities Exchange, 2013), with the result that the integrated report is expected to provide high quality direct insight into the strategies being used by Platinum companies to manage corporate legitimacy (cf. Guthrie & Parker, 1989). It is for this reason that the websites and the separate sustainability reports will not be analysed as they are expected already to be condensed into the integrated report, as per the King III recommendation (Institute of Directors, 2009).

Secondly, due to the qualitative nature of the research, this report will not determine causality (Leedy & Ormrod, 2010) as it will not reach a definitive conclusion on whether CSR disclosure is used primarily as a means to legitimise South African mining companies. Instead, the study aims to assess if there is evidence of legitimacy strategies in the reports. In addition, the results cannot be generalised to the whole population due to the limited sample size. Nevertheless, the interpretive style of the study will highlight a number of concepts or principles which are expected to be relevant to a broad group of stakeholders (Carels, Maroun, & Padia, 2013).

Thirdly, evaluating legitimacy is a subjective exercise as it is a concept informed by multiple dynamic sources in a socially constructed setting (Tilling & Tilt, 2010). This means that an element of research bias is an inherent limitation of the study (Tilling & Tilt, 2010). In addition, this can present an obstacle for accurate replication of the study by different researchers. Nevertheless, by grounding the study in a well-described theoretical framework, coupled with detailed disclosure of the processes used to collect and analyse the data, as well as the findings, this threat to validity and reliability is mitigated (Creswell & Clarke, 2007; Leedy & Ormrod, 2010).

Finally, the study examines only the use of CSR disclosure in the context of the Platinum Industry's possible reaction to the industrial unrest at Marikana. No attempt is made to analyse whether the mining industry responded to threats in other areas or to other events (cf. Patten, 1992).

2 Theoretical framework

Section 2 discusses the theoretical framework on which the research is grounded. Section 2.1 expands on the Legitimacy theory, while 2.2 introduces CSR. Section 2.3 then links the theory with CSR, and Section 2.4 connects everything to the Marikana incident.

2.1 Legitimacy theory

Legitimisation involves a process by which an organisation justifies its right of existence, either outright or through conformity to the societal norms (Suchman, 1995). Legitimacy theory rests heavily on perceptions of the relevant, influential people, which makes it subjective. It does not depend on individual assessments or events but rather is a blanket term of the general perception from society at large, based on the history of the organisation (Suchman, 1995).The entity's actions need to be appropriate or generally acceptable if measured according to a system of beliefs or values (Suchman, 1995).

The theory is based on the social contract that exists between firms and society where firms are allowed to continue operations on condition that they offer direct or indirect benefit to constituents (Deegan, 2002; Guthrie & Parker, 1989; Naser, Al-Hussaini, Al-Kwari, & Nuseibeh, 2006). Firms, therefore, seek to convince society that their existence brings more good than harm in both economic and social terms so as to ensure continuity (Guthrie & Parker, 1989; Suchman, 1995).

2.1.1 Types of legitimacy

Legitimacy exists in three forms: pragmatic, moral and cognitive legitimacy.

Pragmatic legitimacy depends on self-interests of the public and can be exchange, influence or dispositional in nature (O'Dwyer, Owen, & Unerman, 2011; Suchman, 1995). Under exchange legitimacy, society supports an organisation's policy based on the expected material benefits to the society (Suchman, 1995). Influence legitimacy is attained through being responsive to stakeholders and incorporating society's larger interests in the firm's decision-making process (Suchman, 1995). One effective way of achieving this is through having community representatives at the firm, whose main mandate is to ensure that community interests are considered when the firm makes policy decisions. Dispositional legitimacy ascribes a personality to the organisation and uses that to convince the public that it shares the same values with them (Suchman, 1995). This, however, is not dealt with in the report as the focus is on integrated reports.

Moral legitimacy shies away from the self-interest that underlies pragmatic legitimacy. It hinges on whether a certain action is viewed as the right thing to do (O'Dwyer et al., 2011; Suchman, 1995). Moral legitimacy is made up of four aspects: consequential, procedural, personal and structural legitimacy (Suchman, 1995). Consequential legitimacy is result-oriented and is granted to an entity based on its visible achievements (Suchman, 1995). With procedural legitimacy the focal point is not merely the results. Emphasis is placed on the morality surrounding the means to that end (O'Dwyer et al., 2011; Suchman, 1995). When the consequences of an action are invisible and not easily measurable, procedural legitimacy becomes superior to consequential legitimacy (O'Dwyer et al., 2011). Structural legitimacy is based on the appropriate symbols for the organisation's identity, while personal legitimacy is dependent on the personal aura surrounding the individual leaders of the entity (O'Dwyer et al., 2011; Suchman, 1995).

Cognitive legitimacy is the most powerful but most rarely attained form of legitimacy (O'Dwyer et al., 2011; Suchman, 1995). It is split into two: comprehensibility and being taken for granted (Suchman, 1995). The comprehensibility approach attempts to make society understand the organisation through providing logical, understandable explanations for its actions and plans, whereas the taken-for-granted legitimacy convinces the public that they need the organisation, and make the alternative unthinkable (Suchman, 1995).

2.1.2 Legitimacy strategies

Suchman (1995) identified three stages of legitimacy, namely, gaining, maintaining and repairing legitimacy. Gaining legitimacy involves winning public acceptance for a new activity which an organisation seeks to undertake (O'Donovan, 2002; Suchman, 1995). Organisations seeking to gain legitimacy may choose to do so in one of three main ways: firstly, the organisation may seek to adapt the expectations of the existing society. Another option is to sift through several environments and find onlookers that support the organisation's practices. The last strategy is to form new public with new beliefs that will be in support of the entity's actions (Suchman, 1995).

Due to the fact that legitimacy is a relationship rather than a possession (Suchman, 1995) , maintaining legitimacy, which is considered simpler than gaining or repairing it (O'Donovan, 2002), is necessary as the business progresses. Unforeseen events, innovations and even external shocks occur, which are bound to shake even the strongest legitimacy foundation, resulting in the need to constantly reassure society that the corporation still deserves to exist (Suchman, 1995). In order to maintain legitimacy, the entity can improve its ability to identify public reactions and predict upcoming hurdles so as to be better prepared to deal with them and maintain legitimacy (Suchman, 1995). In addition, an organisation may focus on protecting its past achievements through stock-piling the good deeds done in the past to keep society focused on those while diverting attention from anything that might attract negative publicity (Suchman, 1995).

When a crisis occurs undermining the reputation of an organisation, managers are compelled to react and repair damaged legitimacy (O'Donovan, 2002). The Exxon Valdez oil spill is an example of one such incident that led to a need to repair legitimacy of the industry (O'Donovan, 2002). The first thing companies tend to do is normalise operations by separating the adverse event from the rest of the usual business (Suchman, 1995). Companies then select one of the four strategies below:

Table 1: Strategies for maintaining and repairing legitimacy[1]

Strategy	Activities involved
1. Diverting attention	• Withhold any negative information • Divert attention from the negative incident and rather disclose any good CSR work that has been accomplished in that period.
2. Alter stakeholder expectations	• Offer extensive explanations about the event to make the society understand the organisation's circumstances and maybe even 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 organisation and its produce, thus re-igniting a level of cognitive legitimacy where the society feels a need of the organisation to exist as it brings more benefits than harm and the alternative is unimaginable.
3. Managing blame	• Defend the company's reputation through explaining that the company did not breach any rules leading up to the adverse event. Question the moral responsibility of the organisation, given the circumstances. • Protect past accomplishments so that the negative event does not demine every good thing that the company has accomplished thus far.

[1] Adapted from O'Donovan (2002) and Suchman (1995)

	• Shift the blame to individuals and distance the company from the incident.
4. Adhering to society's values	• Creation of new policies and values to prevent recurrence of the negative incident • Selective confession of what was wrong with the system, leading to strategic restructuring through one of the following: • Create "monitors and watchdogs" that will investigate the root causes of the incident and ensure that nothing similar happens in future, or, • Replacement of senior executives to signify change going forward.

During the legitimacy process, the company acts as though it is human, attempting to fit into the norms and values of the society in which it operates. Usually this is achieved by actively engaging in and reporting on CSR initiatives and, with legitimacy being dependent on communication (Elsbach, 1994), analysis of the CSR information becomes relevant to assessing whether companies are using the disclosures as a legitimacy tool.

2.2 Corporate social responsibility reporting in South Africa

Corporate social responsibility (CSR) is not consistently defined in past literature as different individuals have varying opinions and interpretations of the term (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 (Roberts, 1992). The social responsibility activities include policies encouraging affirmative action, equal employment opportunities, community involvement and producing safe, environmentally friendly goods (Roberts, 1992).

Over time, there has been a growing interest in companies' ability to create and sustain value in the short-, medium- and long-term (International Integrated Reporting Council, 2011). The emphasis is on organisations striving to meet the needs of the present generation without disadvantaging future generations (Steurer, Langer, Konrad, & Martinuzzi, 2005). Society has evolved from seeing organisations as mere profit generators to expecting them to be responsible, corporate citizens (Institute of Directors, 2009). This has, in turn, attached some level of moral responsibility to organisations (Institute of Directors, 2009; International Integrated Reporting Council, 2011; Solomon, 2010).

CSR reporting has been swiftly increasing since the 1992 Earth Summit, which compelled businesses to be socially responsible and act in a sustainable way (Mutti, Yakovleva, Vazquez-Brust, & Di Marco, 2012). The issuing of the King-II Report of Corporate Governance in 2002 attracted worldwide attention to the issue of corporate governance, as Directors were compelled to consider the impact of the corporate decisions on the surrounding communities and environment (Institute of Directors, 2009). (This is especially relevant in the mining industry because it is regarded as one of the most environmentally and socially disruptive industries (Jenkins & Yakovleva, 2006)).

The mining industry is one of those most targeted by pressure groups, media critics and environmentalists due to the adverse social and environmental effects with which it is associated (de Villiers & Alexander, 2014). Among these are land degradation, worker health and safety issues, as well as pollution, which have left the industry as one of the least favourites in a world that is consistently praising environmental awareness and upholding human rights (de Villiers & Alexander, 2014). To ensure their continued existence, mining houses are under enormous pressure to ensure the benefits they provide to society are seen to be more than the costs associated.

Communication is one of the most powerful pillars of legitimacy (Suchman, 1995). In order to prove that they have been socially responsible, companies use disclosures in their annual and integrated reports to communicate the information to the stakeholders (Patten & Zhao, 2014). For South African companies in particular, CSR disclosure in integrated reports is informed heavily by the recommendations of King-III (2009). The GRI’s framework and the guidance provided on integrated reporting by the International Integrated Reporting Council (2011) and Integrated Reporting Committee of South Africa (2011) are also popular reference points for integrated reporting (Carels et al., 2013; Makiwane & Padia, 2012).

The Johannesburg Stock Exchange (JSE), South Africa’s main stock exchange, formed the Sustainable Reporting Index (SRI) in 2004 in order to give investors an opportunity to invest in sustainable companies (Institute of Directors, 2009). Subsequently, South Africa became the first country that attempted to enforce integrated reporting nationally by making King III compliance a listing requirement on the JSE from 2010[2] (Johannesburg Securities Exchange, 2013; Solomon & Moroun, 2012). Integrated reporting involves communicating the organisation's plan, governance, performance (social, economic and environmental) and forecasts to the relevant stakeholders in a manner that correctly provides the holistic context of the business operations (IIRC, 2011). Although reporting on CSR reporting is expected to make companies think and behave responsibly (Intergrated Reporting Committe of South Africa, 2011), corporates have often been accused of using it more as an image-enhancer than an informative and transformation device (Patten & Zhao, 2014).

2.3 Link between CSR and legitimacy theory

Historically, companies were considered legitimate if they achieved a reasonable financial return relative to the level of invested capital (Patten, 1992). Society, however, started to note the negative social and environmental effects that accompany economic growth (Tinker & Niemark, 1987), and began to consider social responsibility when according legitimacy to otherwise profitable organisations (Patten, 1992). A problem with this new legitimisation system, which still exists today, is that the measure of social responsibility is not as clear-cut as profit measurement (Patten, 1992). Instead, public policy became the driving force behind social responsibility as laws were enacted in response to public outcry, which then served to govern the social impact of businesses (Deegan, 2002; Patten, 1992).

Although there is a business case for providing extensive CSR disclosures in corporate reports, which suggests that CSR disclosures are a possible driver of firm value (de Klerk & de Villiers, 2012; International Integrated Reporting Council, 2013), researchers have argued that companies are motivated to manage and report on their CSR activities by a number of factors. Roberts (1992) argues that firms disclose CSR information to avoid government intervention in the running of their businesses through regulations which may have negative impact on firms value (Roberts, 1992). In other words, CSR reporting is seen as a strategic move by management to satisfy government requirements (Roberts, 1992). Similarly, Solomon et al (2013) suggest that, with CSR becoming a generally accepted 'factor' for evaluating contemporary organisations, much of the effort at providing additional information on CSR initiatives

[2] The JSE does not specifically mandate the preparation of an integrated report. It does, however, require a company to comply with King-III (which recommends that companies prepare integrated reports) or state clearly the reasons for not doing so. This can be interpreted as a *de facto* mandatory requirement to prepare an integrated report.

can be attributed to impression management. From a less critical perspective, the International Integrated Reporting Council, Integrated Reporting Committee of South Africa and Institute of Directors argue that 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 (Institute of Directors, 2011; Integrated Reporting Committee of South Africa, 2011; International Integrated Reporting Council, 2013). What these varied interpretations also highlight is the relevance of legitimacy for explaining the proliferation of CSR disclosures.

Legitimacy theory has become one of the most popular theories used to explain social and environmental disclosures (Campbell, Craven, & Shrives, 2003; Guthrie & Parker, 1989; O'Donovan, 2002). Voluntarily disclosing the social responsibilities met by the firm helps in achieving the legitimacy goal as it demonstrates to society that the firm is not just an economic entity but is also a good corporate citizen (Guthrie & Parker, 1989; Naser et al., 2006). This is complemented by conformance with the generally accepted position that long-term sustainability is interconnected with effective CSR (Institute of Directors, 2009; Integrated Reporting Committee of South Africa, 2011). By providing comprehensive information on CSR initiatives in annual reports, organisations are able to demonstrate that they add value for stakeholders in a socially responsible fashion (Solomon, 2010), which enhances their pragmatic and procedural legitimacy (cf. Suchman, 1995).

Societal norms should also not be overlooked. With non-financial reporting being codified in, *inter alia,* King-III (Institute of Directors, 2009), the framework on integrated reporting (International Integrated Reporting Council, 2011) and the G4 Sustainability Reporting Guidelines (Global Reporting Initiative, 2013), ensuring compliance with these codes is important for contemporary firms. The strategy legitimises the firm’s actions and ensures that the firm’s existence continues into the foreseeable future (Naser et al., 2006) by ‘meshing’ the information in annual or integrated reports with the belief sets of constituents which places a high value on non-financial reporting (cf. Suchman, 1995). In this way, CSR reporting can be seen as a powerful means of managing public perceptions (Patten, 1992) and either securing, maintaining or repairing damaged legitimacy (cf. Suchman, 1995).

O'Donovan (2002), for example, conducted interviews in Australia with managers in three industries assumed to have a great negative environmental impact, these being the mining, chemical and paper and pulp industries. The research showed that managers do use legitimacy strategies in the annual reports and tailor them to the situation at hand (O'Donovan, 2002). This is because CSR disclosures are seen as a means to image-enhancement, assisting managers to align their values with those of society through communication, giving them a chance to lead debates and secure societal approval (O'Donovan, 2002).

Similarly, Patten (1992) 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 disclosure after the accident. This is consistent with the strategies of repairing legitimacy noted by Suchman (1995) (Section 2.1), as the increase in disclosures shows that the companies were attempting to explain to stakeholders in greater detail about the incident, and so regaining the favour of the interested public. This was not limited to the company directly involved in the oil spill. The majority of companies in the petroleum sector increased their social and environmental disclosures considerably, probably due to the perceived need to maintain legitimacy (Patten, 1992). This attests to the point made by Suchman (1995) that companies need consistently to maintain their legitimacy due to external shocks that may occur, the Marikana incident being one of those shocks.

Evidence from a study of the Australian company, Broken Hill Proprietary Company Limited's (BHP) annual reports showed inconsistencies between the legitimacy theory and the company's CSR disclosures (Guthrie & Parker, 1989). The researchers compared the disclosures before and after specific adverse events, and found insignificant differences which rebutted the link between CSR and organisational legitimacy (Guthrie & Parker, 1989). Subsequently, however, the results of this study were disputed with Deegan et al (2002), showing that BHP did respond to negative media coverage through increased voluntary social disclosures (Deegan, Rankin, & Tobin, 2002).

Adding an African context to the body of research, de Villiers and van Staden (2006) investigated the environmental disclosures of 140 South African companies over a 9-year period. Their findings indicated that disclosures do initially increase at a time of legitimacy crisis but subsequently decrease. This is not seen to be contradictory to the legitimacy theory, but rather consistent with it as organisations increase disclosures to address an issue, and once it is resolved, they return to their normal disclosures so as to avoid drawing unnecessary attention to past negative incidents (de Villiers & van Staden, 2006).

Prior research shows that legitimacy is important but such research was mainly conducted in European countries. This study aims to provide a unique South African angle by exploring the integrated reports of the mining houses and analysing their reaction to the Marikana incident.

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

In 1994, the African National Congress (ANC) came into power. This threatened the success of the mine owners as the ANC was against capitalism and strongly linked it with social injustices of the Apartheid Era (de Villiers & van Staden, 2006). The ANC appeared to be in favour of nationalisation of the monopolistic, large industries such as banks and mines (Bond & Mottiar, 2013; de Villiers & van Staden, 2006), which was a source of concern for investors in these industries .

Such concerns disappeared a few years after independence, but mining companies were still under pressure to maintain legitimacy in the eyes of the public, and this was achieved mainly through social disclosures relevant to the contentious issues at each specific period (de Villiers & van Staden, 2006). Any instances of poor CSR practices could strengthen the nationalisation debate. This need to gain and maintain legitimacy was not limited to the mining industry but was pervasive to the whole country as Apartheid resulted in the political and economic isolation of South Africa (Maroun, Coldwell, & Segal, 2014). It is for this reason that South Africa was innovative in terms of corporate governance, so as to assure the world that it was now a steady, democratic economy worth investing in (Maroun et al., 2014). The mining industry makes up a significant portion of the GDP (de Villiers & Alexander, 2014), thus showing the importance of investor confidence in the sector.

South Africa has more than 80% of the world's platinum reserves which shows the global significance of the sector (Bond & Mottiar, 2013). During the 2002-2008 period, the platinum price increased by 350%, leaving the platinum houses significantly well-off yet the wealth did not seem to be 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 and housing were other major issues that angered the workforce, leading to the wildcat strikes across the industry in 2012, as the National Union of Mineworkers (NUM) seemed to have lost its loyalties to the workers it purported to represent and was now in favour of the mining houses (Alexander, 2013; Bond & Mottiar, 2013; Chinguno, 2013). These workers were rapidly joining the Association of Mineworkers and Construction Union (AMCU), a new union pioneered by former NUM members (Bond & Mottiar, 2013).

Tumult in the sector began in January 2012 when the Impala platinum mine workers went on an unprotected strike demanding a 200% hike in wages (Chinguno, 2013). This uproar had its roots in the grievances that had characterised the miners' lives, for example, workers were unhappy about their living conditions, safety, working hours, dusty air, high levels of infectious diseases such as TB, as well as racist managers (Alexander, 2013). Most of the mine workers were migrant workers, which forced them to live in informal settlements close to the mines because they could not afford decent accommodation (Alexander, 2013). Soon this was transformed into a racial issue, opening the wounds of the Apartheid era as it appeared that the grievances were of a similar nature, and the disadvantaged race was the same (Chinguno, 2013). This led to the unemployed members of the mining communities identifying with the troubles faced by the miners and ready to give them unwavering support in their plight (Chinguno, 2013). Workers who were initially against the strike were gradually drawn to it through various methods including persuasion and coercion (Chinguno, 2013).

The outcome of the strike motivated other miners to follow the same process. Lonmin workers then decided to embark on a similar strike, which was in the pipeline from June 2012 (Chinguno, 2013). In the few days leading up to the day of the unfortunate incident, 10 people had died in the protests. On the 16 August 2012, 34 Lonmin miners were shot dead and 78 others injured by the police in an attempt to stop violent protests by the miners (Bond & Mottiar, 2013). This is referred to as the Marikana incident. To many, this triggered apartheid memories as the violent shootings were likened to the Sharpeville and Soweto incidents[3] (Nkosi, 2012), thus attracting negative reactions from the society and international communities.

---

[3] During the Sharpeville incident, 69 people were shot dead for burning their passbooks that 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 & Mottiar, 2013).

The Marikana incident has been described by one of the survivors as having its roots in employees asking their employer to pay them a decent wage for their labour underground (Nkosi, 2012). Although Lonmin may have attempted to shift responsibility for the strike violence to the trade unions contesting for membership, the violence could potentially have been avoided had Lonmin agreed to engage with its workers (Alexander, 2013). The circumstances surrounding the Lonmin strike seem to have fuelled several other violent wildcat strikes, not only in the mining industry (AngloGold Ashanti, Goldfield KDC East mines, Kumba Iron Ore, Amplat,), but countrywide, encompassing farming and motor industries (Alexander, 2013). With such negative perceptions and publicity, it is understandable that the company in question, and those in the sector, would need to regain the favour of the investor public and the international community so as to avoid public policy intervention, hence the expectation of attempts to regain legitimacy for the mining houses post the terrible incident (consider Patten, 1992; O’Donovan, 2002). With the integrated report being the primary platform of communication with stakeholders in South Africa (see International Integrated Reporting Council, 2011; Johannesburg Securities Exchange, 2013), it is expected that if any legitimisation strategies were used, they should be present in these reports (cf. O'Donovan, 2002).

3 Research method

Section 3 discusses how the researcher addressed the research question. A brief introduction which classifies the method is found in Section 3.1. Section 3.2 then explains the selected research method, while Section 3.3 justifies the sample selection and size. Section 3.4 then explains the data collection and analysis.

3.1 Research paradigm

Research methods fall into two broad categories of qualitative and quantitative research. Quantitative research, normally referred to as positivist research, makes use of quantitative means to observe data and report on findings, while minimising researcher interference with the process (Leedy & Ormrod, 2010; Maroun, 2012). The number-based approach allows for accurate replication as very little room is left for differing interpretations (Creswell, 2003; Maroun, 2012). It has, however, been criticised for being divorced from daily business approaches as its focus is more on reliability and objectivity (Creswell, 2003) than on relevance (Maroun, 2012), and this approach is not used in this study.

This research adopts a social constructivist (qualitative) perspective on corporate reporting, using an interpretive text analysis to explore the legitimising potential of CSR disclosures (Merkel-Davis, Brennan, & Vourvachis, 2011). This is different from a traditional positivist approach in several ways.

Interpretive text analysis is a qualitative method. It relies on the researcher's analysis of text to draw inferences from the source material according to a particular theoretical framework. This makes the study far more subjective than the positivist scientific approach which, while more mathematically elegant (Leedy & Ormrod, 2010; Maroun, 2012; Merkel-Davis et al., 2011) overlooks the socially constructed nature of corporate reporting (Hopwood, 1987).

Interpretive text analysis permits the researcher to discuss important themes, concepts, assumptions and beliefs, providing an exploratory approach for investigating this little studied aspect of corporate (and integrated) reporting (Wodak & Meyer, 2009). Validity and reliability are ensured, not by following a scientific method (Leedy & Ormrod, 2010) but by documenting the findings in sufficient detail to highlight conceptual links between the material under review and a relevant theoretical paradigm (Creswell & Clarke, 2007; Maroun, 2012).

3.2 Methodology

This study uses inductive thematic analysis, complemented to a lesser extent by discourse analysis. The former falls under the broad category of content analysis (Merkel-Davis et al., 2011). Inductive thematic analysis is a common qualitative inquiry method for analysing material which involves identifying themes in textual data, coding and interpreting the themes (Guest, Namey, & Mitchell, 2013). Thematic content analysis is frequently used in conjunction with discourse analysis to highlight 'naturally occurring language' with the aim of understanding social and cultural meanings embedded in text (Guest et al., 2013, p. 14).

In thematic analysis, the researcher is the measurement instrument, which contributes to its subjectivity, but also to the richness of the analysis and the unique insights in answering the research question (Merkel-Davis et al., 2011).

3.3 Sample[4]

The JSE-listed platinum mining companies were purposefully selected for the study. The selective sampling is justified by the fact that the platinum mining companies were closely linked with the Marikana incident (Chinguno, 2013), as most of the them also faced labour unrest during the same period. If any response was present, it is expected to be readily identifiable from the selected companies. The integrated reports for the 2011-2013 financial years will be analysed for each company, providing a reference point for a year before and after the strike action. This approach is similar to the one used by Patten (1992).

Twelve companies are currently listed on the JSE Platinum and Precious metals mining sector. Three companies out of the twelve only had financial statements with no accompanying integrated reports and were, thus, excluded from the research as the aim is to analyse CSR disclosures. One more company has been excluded from the sample because only 2011 and 2012 reports were found, which was insufficient as the analysis spans 2011 to 2013, capturing before and after the incident. In total, this left eight companies which had published integrated reports consistently (Carels et al., 2013) and these were used for the report. The following Table shows the respective companies:

[4] The term 'sample' is not intended to imply a positivistic approach

Table 2: Companies in the platinum mining sector		
Abbreviation	**Company name**	**Status**
AMS	Anglo American Plat Ltd	✓
AQP	Aquarius Platinum Ltd	✓
ATL	Atlatsa Resources Corporation	No integrated reports
BAU	Bauba Platinum Ltd	✓
EPS	Eastern Platinum Ltd	No integrated reports
IMP	Impala Platinum Holdings Ltd	✓
JBL	Jubilee Platinum Plc	No integrated reports
LON	Lonmin Plc	✓
NHM	Northam Platinum Ltd	✓
PLL	Platfields Ltd	2013 report not published at time of research
RBP	Royal Bafokeng Platinum Ltd	✓
WEZ	Wesizwe Platinum Ltd	✓

The small sample size is in line with comparable interpretive studies[5] as the results are not intended to be generalised over the whole population but rather to answer a specific question (Section 1.2) (Guest et al., 2013; Solomon & Maroun, 2012). The integrated reports were either collected from the McGregor database or from the respective companies' websites (Makiwane & Padia, 2012).

In the results and analysis, company names have not been used but instead, random numbers from 1 to 8 have been ascribed to them so as to preserve anonymity.

3.4: Data collection and analysis

An initial content analysis was carried out to gain a sense of the content and structure of the reports (Leedy & Ormrod, 2010). The objective was to analyse the reports to understand the nature of the CSR information included in the integrated report and where this information was 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 the Marikana incident happened during the 2012 year, this

[5] For example. Patten (1992) used 21 companies over two years, which translates to 42 annual reports, de Villiers and Alexander (2014) had 36 annual reports and Maroun and Solomon (2014) carried out interviews with 30 people.

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 sections of the integrated reports were used as axial codes (Carels et al., 2013), as shown in Table 1. The sections are consistent with those used by Carels et al (2013) to add to the reliability of the study and to ensure a comparative frame of reference with similar research on South African integrated reporting. Themes used by Solomon and Maroun (2012) were then used as content codes for the integrated reports. (Again, this ensures validity, reliability and comparability)[6]. The reports were carefully read to identify additional themes or content categories which were prevalent. Additional codes were included to accommodate specific themes, concepts or issues which are unique to the South African mining industry or are recommended in terms of the Global Reporting Initiative's guidelines (Global Reporting Initiative, 2013). This is not a threat to research quality. On the contrary, it ensures the exploratory potential of the research and is fully consistent with the approach followed by most interpretive studies (Carels et al., 2013; Solomon & Maroun, 2012).

The researcher then analysed each integrated report and recorded, in tabular form, the number of times a specific theme was mentioned (adapted from Solomon and Maroun, 2012). A frequency table was generated to record the number of times a content code was referred to in each report, and in which sections it was mentioned. 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, and the frequencies were categorised as follows:

Table 3: Disclosure scale

Score	Explanation
0	No disclosure pertaining to the theme
1	Descriptive disclosure regarding the theme (qualitative)
1.5	Description and figures to explain the theme (combination of qualitative and quantitative disclosures)

The reason for the differentiation between the score of 1 and 1.5 is that description is much more detailed and provides a more complete picture if it is accompanied by

[6] To ensure validity, both the axial and content codes will be compared to prior studies as a completeness check (Carels et al., 2013)

figures, however, the scale of 2 was not used because although the combination of quantitative and qualitative data was more informative, it did not justify a double weighting when compared to pure qualitative data.

Constant comparison of segments of the text were carried out systematically to ensure consistency and accuracy (Guest et al., 2013). Due to the exploratory nature of the report, a scientific text analysis approach – which involves counting specific words or terms – was not used (Carels et al., 2013; Merkel-Davis et al., 2011).

The cumulative change in CSR disclosure over time (CCOT) was then calculated for each content code. The CSR disclosure scores were totalled per company and content theme to determine whether there was an increase or decrease in total CSR disclosure post-Marikana. An increase in CSR disclosures would prove the assertion made by Suchman (1995) and Patten (1992) that organisations tend to offer extensive explanations in a bid to re-legitimise their operations.

Due to the limited sample size and the qualitative nature of the research, inferential statistical methods, such as the ANOVA or regression analysis, have not been used but rather basic descriptive statistics are employed to compare the changes across the years and types of disclosures.

The researcher also measured the general quantity of CSR disclosure found in the integrated reports of the companies to get a feel of the overall weight of the CSR disclosures in comparison to the other information contained in the integrated reports. This was not an exact scientific process as the intention was not to quantify a measure of reporting quality but merely to gauge generally the extent of CSR reporting (Guthrie & Parker, 1989). The pages dedicated to CSR were then divided by the total pages in the integrated report for the 2011 and 2012 years, giving the proportion of CSR disclosures to the entire report. This was done to determine if the focus on CSR did indeed change in comparison with the rest of the disclosures which are predominantly financial.

In addition to the above, the researcher carefully studied the words, sentences and phrases used in the integrated reports to identify any traces of legitimacy theory in application. Extracts of examples of information that can be interpreted as designed to repair or maintain legitimacy of the respective companies have been provided in the analysis section. This includes statements which show intentions to repair legitimacy through denial, justification, excusing or explaining the respective company's involvement in the Marikana violence and its related consequences (adapted from Suchman, 1995). The reports were also read to investigate legitimacy maintenance which includes protecting past accomplishments and perceiving and proactively embracing change, as explained in Section 2.1 (adapted from O'Donovan, 2002; Suchman, 1995). It should be reiterated that the intention was not to follow a scientifically rigorous approach for analysing the content of the reports. Instead, the analysis was a subjective exercise which required the researcher to read the integrated reports several times (Solomon & Moroun, 2012) and reflect on how the respective companies were using their CSR reporting to maintain or repair legitimacy. While this data analysis process was systematic and extensive, please note that images[7] found in the integrated reports were specifically excluded from the data collection and analysis process as their interpretation due to the difficulty of defining a consistent basis for interpreting this data.

At this point, it should be noted that the researcher was very involved in the data collection and analysis process. This is not a threat to validity or reliability. With interpretive research, it is common for the researcher to be integrally involved in the evaluation of data, given the social constructivist outlook adopted by this study (Leedy & Ormrod, 2010).

[7] Images referred to in this instance are pictures that are part of the integrated reports.

4 Results

Section 4 provides a description of the results from the data collection explained in Section 3.4. The results are broken down into total disclosures per company, and then aggregated into the whole sector as shown in the graphs below.

4.1 Disclosures per company

Figure 1 : Total disclosures per company

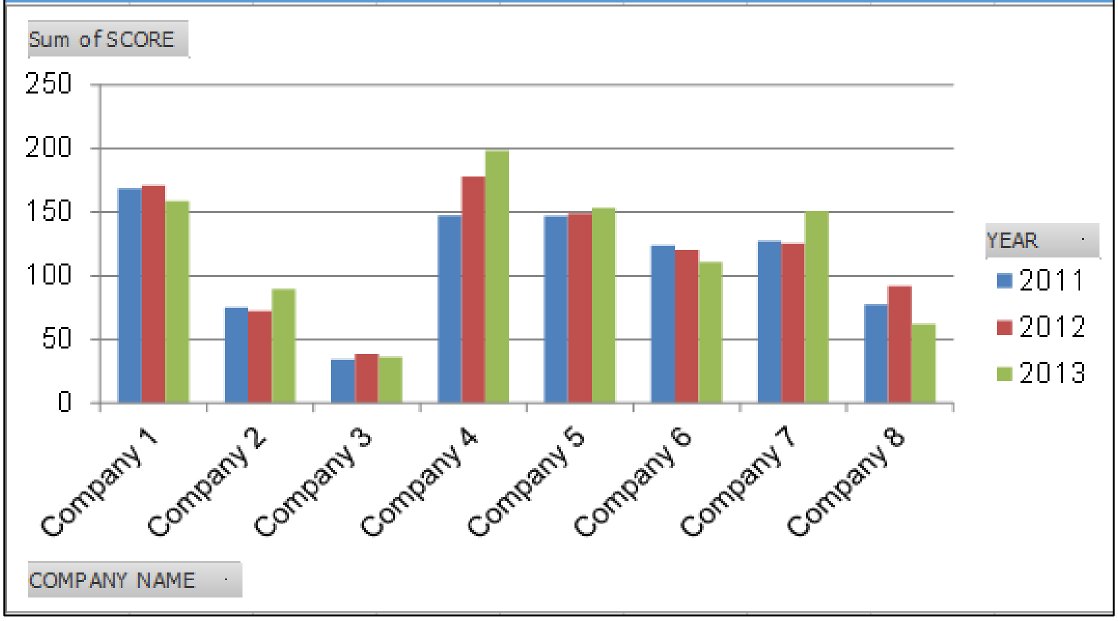
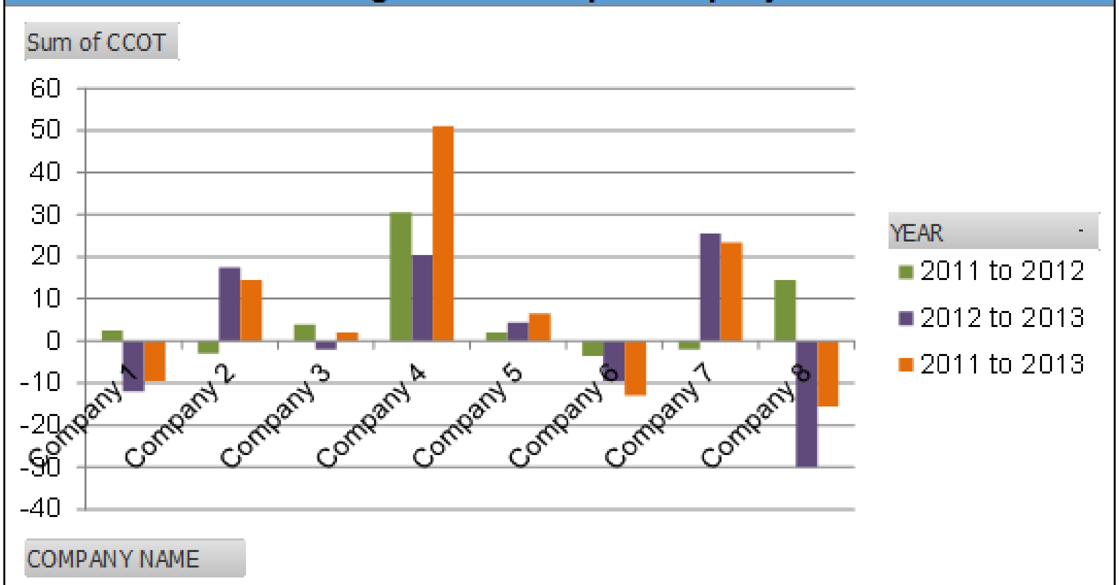


Figure 2 : CCOT per company



CCOT - Cumulative change over time

Figure 1 shows the different companies' total disclosures, while Figure 2 shows the CCOT of each company's total disclosures over the three years under review. Company 1 and Company 8 show increases in 2012 but in 2013 their disclosures dropped to a level below the initial starting point, resulting in a negative CCOT across the three years. Company 3 shows an increase in 2012 disclosures and a small decrease in 2013, leading to a positive CCOT. Company 2 and 7 show a slight decrease in 2012 disclosures but increased substantially in 2013, resulting in a positive CCOT. Companies 4 and 5 had step-up increases in both years, while Company 6 decreases across the three years. The exact figures are shown in Table 4, while the percentage changes per company are shown in Table 5.

Table 4 : Total per company

Row Labels	2011	2012	2013	Grand Total
Company 1	168.5	171	159	498.5
Company 2	75.5	72.5	90	238
Company 3	34.5	38.5	36.5	109.5
Company 4	147.5	178	198.5	524
Company 5	147	149	153.5	449.5
Company 6	124	120.5	111	355.5
Company 7	127.5	125.5	151	404
Company 8	77.5	92	62	231.5
Grand Total	**902**	**947**	**961.5**	**2810.5**

Table 5 : Percentage changes in CSR disclosures per company

Row Labels	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%**

In order to gain additional insights, the disclosures were disaggregated according to type (environmental, ethics and social). These disclosure types were consistent with those used in comparable studies (Carels et al., 2013; Solomon & Maroun, 2012).

4.2 Marikana-specific information

Table 6: Marikana specific disclosures					
Company	**2012_1**	**Marikana**	**2012_2**	**2011**	**CCOT 2011 to 2012_2**
Company1	171	1	170	168.5	1.5
Company2	72.5	1	71.5	75.5	-4
Company3	38.5	1	37.5	34.5	3
Company4	178	1	177	147.5	29.5
Company5	149	9	140	147	-7
Company6	120.5	0	120.5	124	-3.5
Company7	125.5	2	123.5	127.5	-4
Company8	92	1	91	77.5	13.5
Grand Total	**947**	**16**	**931**	**902**	**29**

CCOT – Cumulative change over time.

Table 6 shows the change when Marikana-specific disclosures were excluded from the integrated report frequencies observed in Table 4. The 2012_1 column represents the total CSR disclosure, including Marikana-specific, while 2012_2 excludes Marikana. An increase of 29 is still apparent in the total disclosures from 2011 to 2012_2, as shown above. This is a 3.2% increase from 2011, compared to the total increase in disclosure of 5% from 2011 to 2012. Putting it into perspective, 64% of the increase in CSR disclosures from 2011 to 2012 was not Marikana-specific.

Figure 3 : Disclosures excluding Marikana-specific information

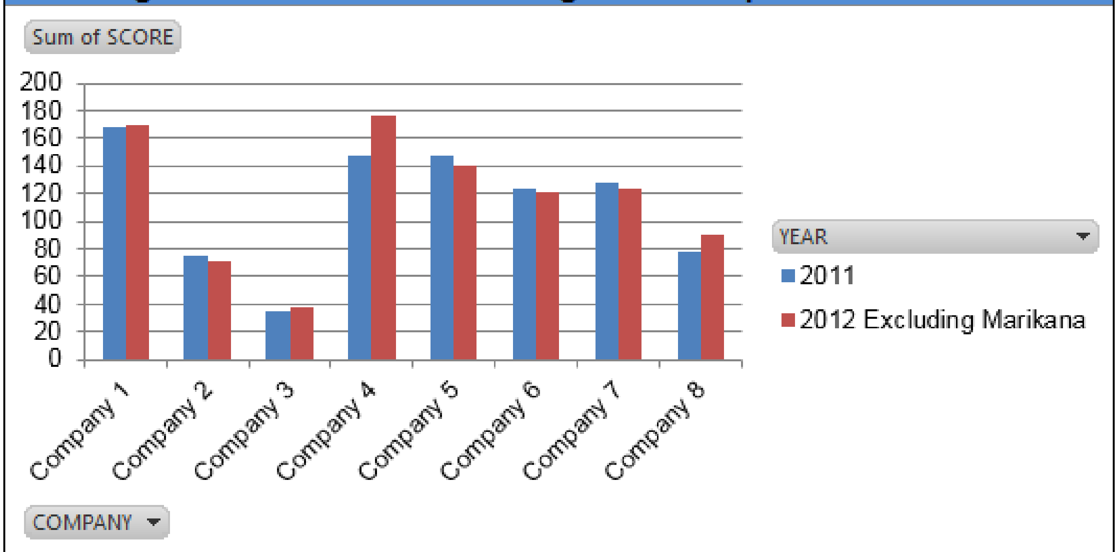
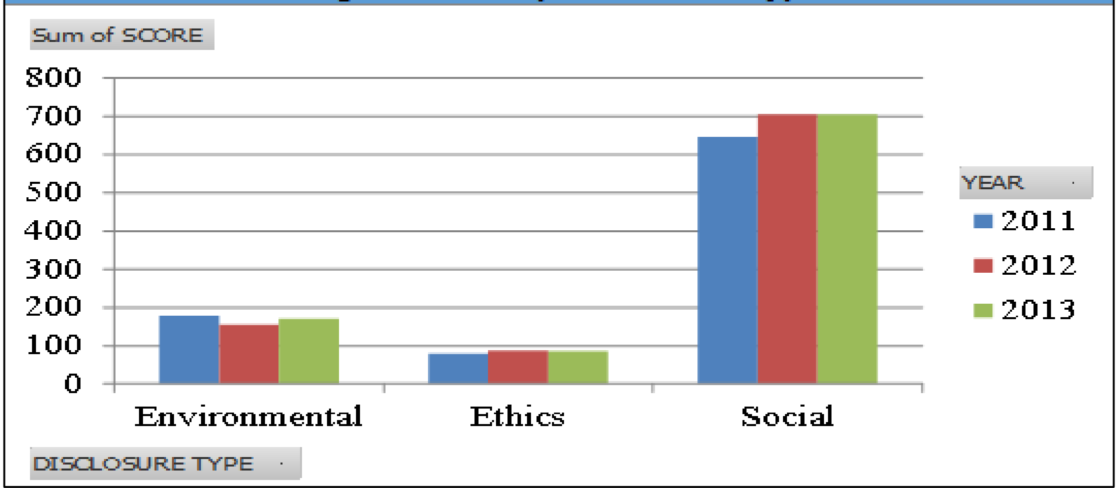


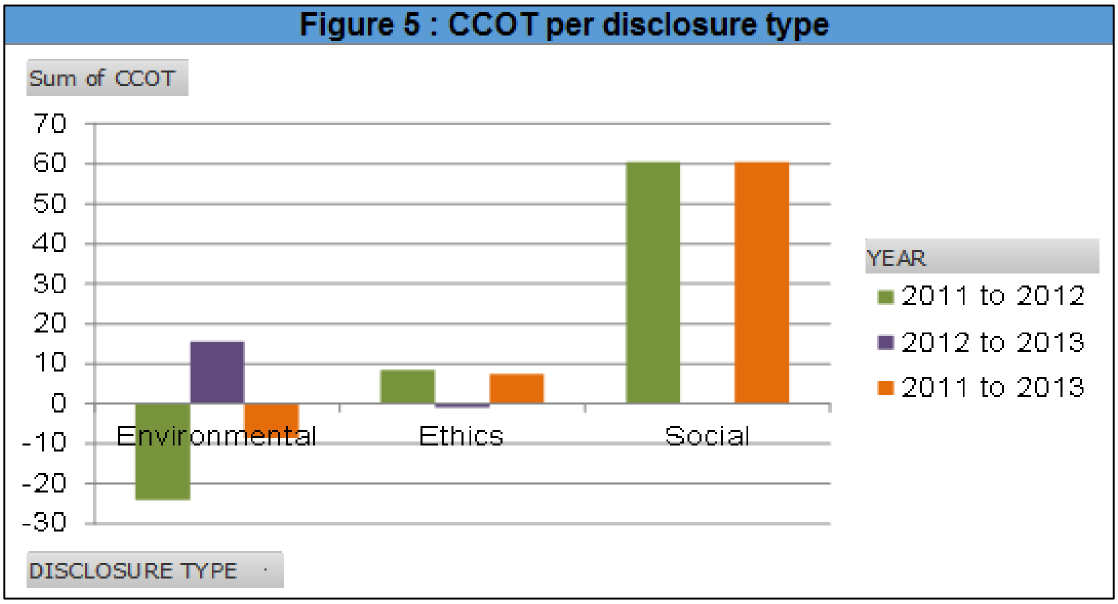
Figure 3 above shows each company's 2011 and 2012 disclosure totals, excluding Marikana-specific information. Four companies out of the eight still present increases in total disclosure, whereas the other four show decreases in disclosure. This information is summarised in Table 7 below:

Table 7 : Analysis of disclosure focus		
	Focus of CSR disclosure	
Extent of 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 and 7
Above average increase	Company 4 and 8	Company 5

4.3 Frequencies per disclosure type

Figure 4 : Total per disclosure type





CCOT – Cumulative change over time.

Figure 4 shows the total industry disclosures per category, being environmental, ethics and social disclosures, and Figure 5 shows the changes in these disclosures over time. Environmental disclosures decreased in 2012 but increased again in 2013, ending up with a CCOT was -8.5 from 2011 to 2013. Ethical disclosures increased to 86.5 in 2012 (from 78 in 2011), then decreased by 1 in 2013. Social disclosures increased from 645 to 705.5 in 2012 and remained at the same level for the 2013 year. The following Table shows the percentage changes, categorised per disclosure type:

Table 8: Percentage changes in each disclosure type

Disclosure type	2011-2012	2012-2013	2011 to 2013
Environmental	-13.41%	10.00%	-4.75%
Ethics	10.90%	-1.16%	9.62%
Social	9.38%	0.00%	9.38%
Grand Total	**4.99%**	**1.53%**	**6.60%**

4.4 Aggregate industry disclosures

Figure 6 : Total industry disclosures

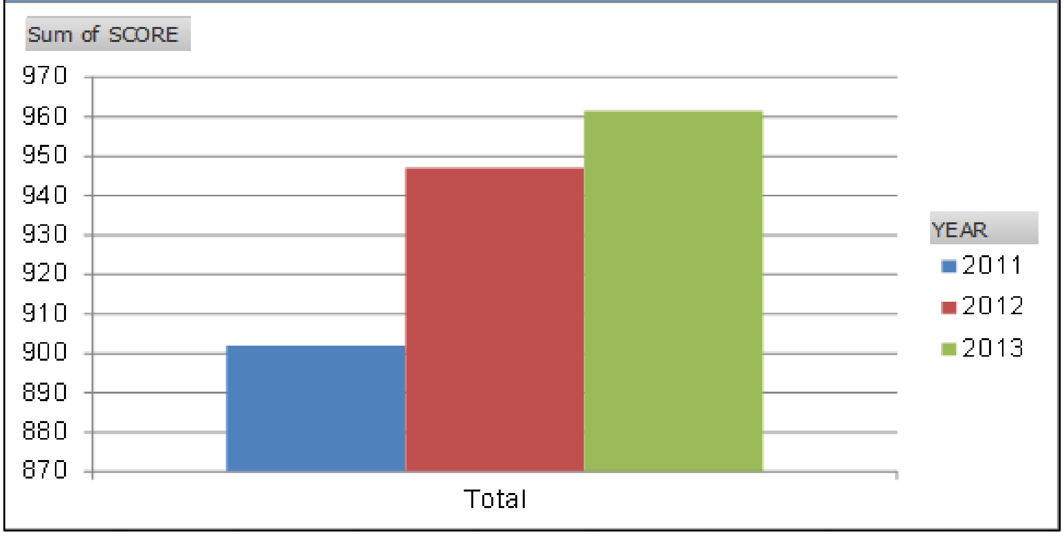
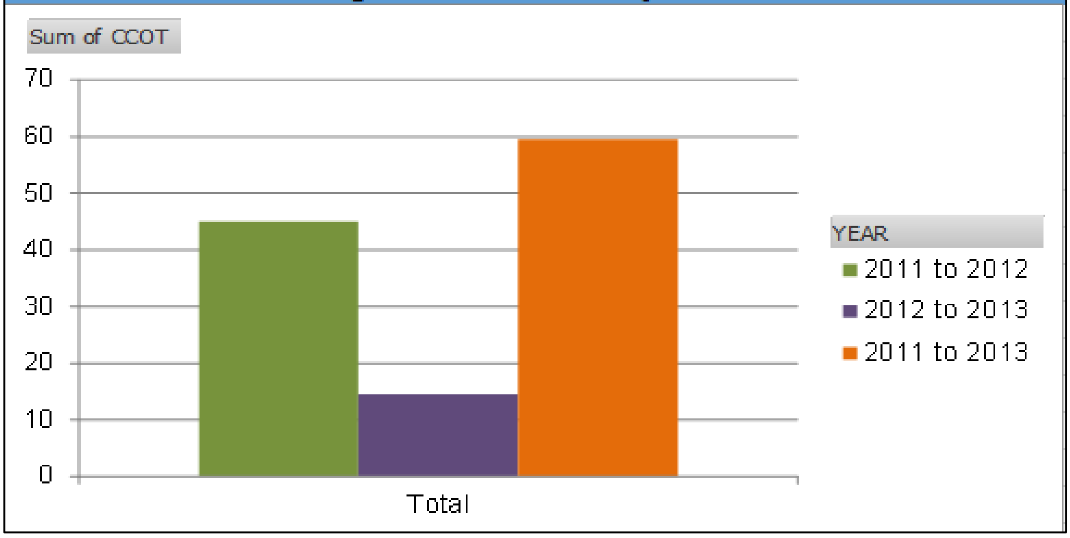


Figure 7 : Total Industry CCOT



CCOT – Cumulative change over time.

Figure 6 depicts the aggregated platinum mining companies' CSR disclosures, while Figure 7 shows their movement across the three years under review. The total disclosures were as follows: 2011 was 902, 2012 was 947 and 2013 had a grand total of 961.5. The increase from 2011 to 2012 was 45 (translates to 4.99%) while the increase from 2012 to 2013 was 14.5 (1.53%). The total CCOT throughout the period was 59.5, being 6.6%.

The Marikana incident involved mineworkers from Lonmin Plc. As a result, the researcher decided to examine the changing disclosure trends in the sector, excluding Lonmin.

4.5 Lonmin versus the industry

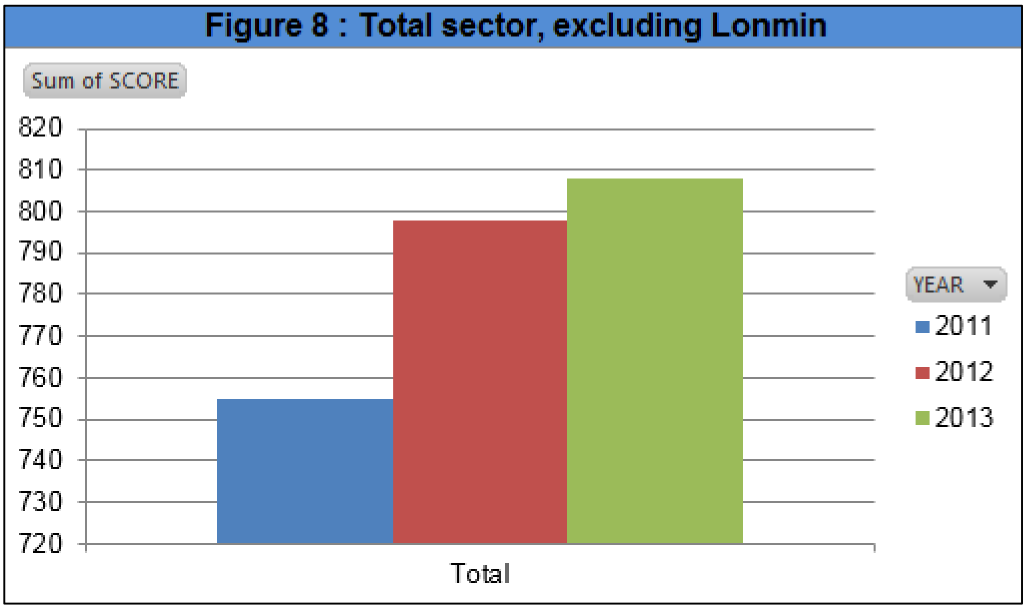
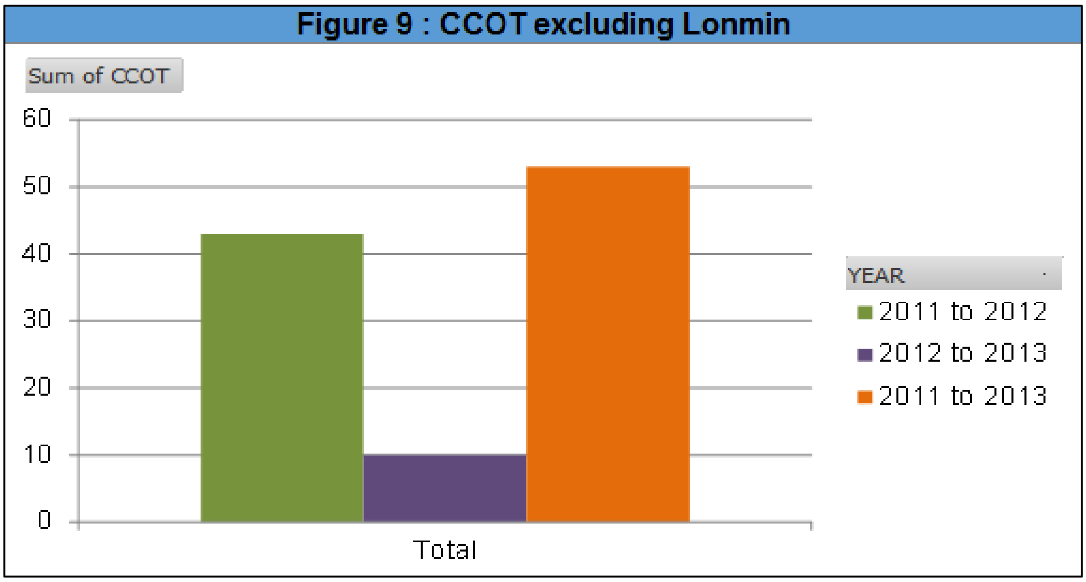


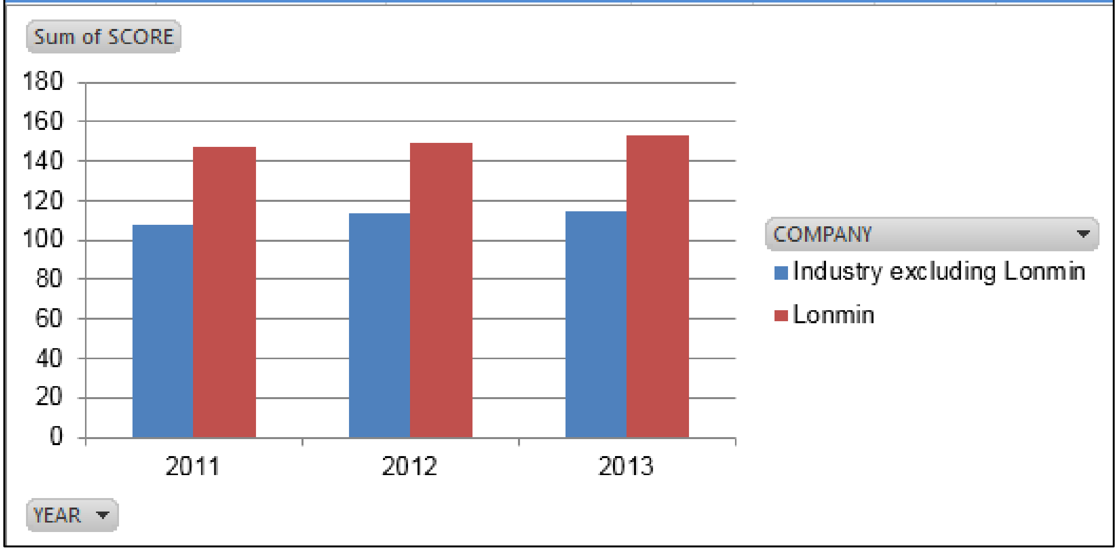
Figure 8 shows the results of the platinum mining companies, excluding Lonmin. As shown in the graph, there is a gradual increase from 755 to 798 and finally to 808 in 2013. The CCOT is shown in the graph below:



CCOT – Cumulative change over time.

Figure 10 then shows Lonmin’s CSR disclosures in comparison to the rest of the platinum mining sector average disclosures over the 3-year period.

Figure 10: Lonmin comparison



It is evident that Lonmin consistently had more CSR disclosures than the industry average, both before and after the incident. The exact numbers are shown below:

Table 9 : Lonmin compared to the industry		
Year	**Industry excluding Lonmin**	**Lonmin**
2011	108	147
2012	114	149
2013	115	153.5
Grand Total	**337**	**449.5**

From the above it is evident that, although Lonmin did react to the incident and increase disclosures, the company was consistent throughout.

Table 10 : Company year-ends	
Company	**Year-end**
Company 1	31 December
Company 2	30 June
Company 3	30 June
Company 4	30 June
Company 5	30 September
Company 6	30 June
Company 7	31 December
Company 8	31 December

Table 10 shows the respective company year-ends. It was noted that although some companies had year ends that were before the Marikana incident (June), they still included the event in their disclosures as their financial statements had not been issued when it occurred.

Figures 1 to 10 were derived from counting how many sections a particular theme is found in. It is, however, also important to gauge the volume of the CSR disclosure in comparison to the rest of the disclosures found in the integrated report to get a general feel of the increase or decrease in relative CSR disclosures. This information is depicted in Table 11 below:

Table 11 : CSR weighting in integrated reports

	2011 report			2012 report			2011 to 2012
Company	**CSR pages**	**Total pages**	**% of CSR pa**	**CSR pages**	**Total pages**	**% of CSR pages**	**% Change**
Company 1	78	324	24.07%	75	276	27.17%	3.10%
Company 2	30	221	13.57%	16	112	14.29%	0.71%
Company 3	10	60	16.67%	14	80	17.50%	0.83%
Company 4	33	220	15.00%	61	154	39.61%	24.61%
Company 5	68	164	41.46%	58	168	34.52%	-6.94%
Company 6	22	138	15.94%	28	182	15.38%	-0.56%
Company 7	46	174	26.44%	64	208	30.77%	4.33%
Company 8	36	128	28.13%	60	166	36.14%	8.02%
Grand Total	**323**	**1429**	**22.60%**	**376**	**1346**	**27.93%**	**5.33%**

Table 11 shows the proportion of CSR disclosure pages compared to the total pages of the integrated reports, and the change in proportion after the Marikana incident. This table is more useful than one comparing actual page number increases because most companies have gradually been reducing their page numbers as they improve their integrated reporting as they understand that the focus of integrated reporting is harmonisation of information rather than quantity of disclosure (cf. Makiwane & Padia, 2012). To control that, the relative figure is used. This information is shown below:

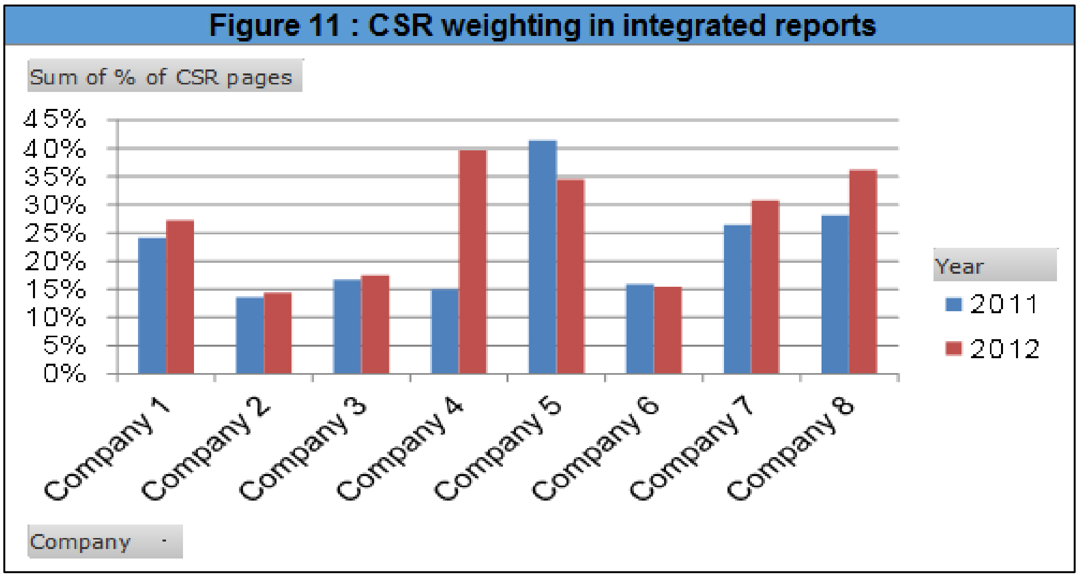


Table 12 : CCOT from 2011 to 2013				
Company	**Environmental**	**Ethics**	**Social**	**Grand Total**
Company 1	-0.5	0	-9	-9.5
Company 2	3	1	10.5	14.5
Company 3	0	2	0	2
Company 4	-1	2.5	49.5	51
Company 5	-1	-1	8.5	6.5
Company 6	-11.5	-3	1.5	-13
Company 7	6.5	4	13	23.5
Company 8	-4	2	-13.5	-15.5
Grand Total	**-8.5**	**7.5**	**60.5**	**59.5**

CCOT – Cumulative change over time.

Table 12 shows the CCOT per company for each type of disclosure class. Companies 1, 5, 6 and 8 appear to have decreased across two classes in the 3-year period but Company 5 still managed to get a positive CCOT whilst the other three had negative CCOTs. The other companies generally increased their disclosures during the period under review, as shown in the graph.

5 Discussion

Section 5 provides an analysis of the results. Section 5.1 gives a preliminary analysis, which interprets the graphs presented in Section 4 in light of the prior research. Section 5.2 provides evidence of legitimisation strategies found in the integrated reports and links them to those identified by Suchman (1995) and O'Donovan (2002).

5.1 Preliminary analysis

As per Figures 6 and 7, there was an increase in CSR disclosure across the platinum mining sector post the Marikana incident. The immediate reaction to the incident spiked an increase of 4.99% in disclosures across the sector in the period 2011 to 2012, and a further increase of 1.53% in the following year, as shown in Table 5. This supports the assertion made by Suchman (1995) and Patten (1992) that, in the face of unfavourable circumstances, organisations tend to explain themselves extensively as a way of gaining societal approval which aids them in maintaining a level of cognitive legitimacy.

Marikana-specific disclosures were only introduced into the integrated reports in the 2012 year, as they were in direct response to the incident. Although the incident threatened the legitimacy of the sector as a whole (cf. Bond & Mottiar, 2013) it was noted that only 1.69% of the CSR disclosures in the integrated reports related directly to the incident and its aftereffects. This is less than expected given the negative publicity and increased media attention attached to the incident (Deegan et al., 2002) and the normal trend in response to such circumstances. Of the 4.99% general increase in disclosure, more than half was not related to Marikana (see Table 6), showing that it was more a general CSR disclosure that increased across the sector. Most companies referred to labour unrest in the platinum mining sector but shied away from constantly referring directly to the incident. Such a response is in line with legitimacy strategy of avoiding the core issue so as not to attract unnecessary attention to it (de Villiers & van Staden, 2006; O'Donovan, 2002). By increasing disclosure of other social activities, the public's attention is focused on generic CSR issues which do not have the same emotional and political sensitivity. The effect of disclosure dealing specifically with Marikana is best illustrated by considering how CSR disclosure scores change when information dealing with the strike action is excluded from the final score (Table 13).

Table 13 : Analysis of Marikana-specific disclosures		
Company	**CCOT (2011-2012)**	**CCOT (2011-2012 Excluding Marikana)**
Company 1	Increase	Increase
Company 2	Decrease	Decrease
Company 3	Increase	Increase
Company 4	Increase	Increase
Company 5	**Increase**	**Decrease**
Company 6	Decease	Decrease
Company 7	Decrease	Decrease
Company 8	Increase	Increase

CCOT – Cumulative change over time.

As shown in Table 13, only Company 5's overall disclosure movement was changed by the exclusion of Marikana information. This is because Company 5 had extensive Marikana disclosures which led to a decrease in their general reported CSR disclosure. To understand the nature of CSR disclosures better, the researcher also considered changes in environmental reporting.

Figures 4, 5 and Table 8 show that environmental disclosures changed by a smaller proportion than social and ethical disclosures. When social disclosures were at their peak in 2012, environmental disclosures actually decreased by 13.41%. This is possibly due to the fact that the reasons for the challenge to legitimacy were social, and not directly related to environmental and ethical compliance (cf. de Villiers & van Staden, 2006). In addition , government's focus was on social issues (de Villiers & van Staden, 2006). The strikes were caused by problems such as lack of decent housing, low remuneration, safety and health concerns, all of which are in the social category. Companies had to prove that they were responsible, ethical and accountable in these. It would have been ineffective to increase environmental disclosures as those were not in question. Disclosures are only increased to address the relevant concern, not to create possible awareness of other problems in different areas of the company. (de Villiers & van Staden, 2006).

The social disclosures which increased include discussions on labour unrest, explanations of the events leading up to strike action and how the respective companies tried to negotiate with employees and their representative unions. All of the companies under review deal with the construction of decent housing for the employees, transformation policies, as well as safety measures that have been put in place to address workers' and government concerns. The ethical disclosure also addressed the issue of employers acting responsibly by finding solutions to the problems raised and being accountable for their actions.

A look at the results in the sector, excluding Lonmin, the company directly affected by the Marikana incident, confirms the general increase in CSR disclosures (see Figure 8 and 9). This evidence is in line with the results found by Patten (1992) who studied the reports of the oil companies after the Exxon oil spill. Patten (1992) concluded that companies in the same sector as Exxon had significantly increased their environmental disclosures in a bid to legitimise their operations and regain favour in the public's eyes, even though they were not directly involved with the spill. A similar trend is being noted in the platinum mining sector post-Marikana. Although not all individual companies increased their disclosures (see Figure 1 and 2), the total sector disclosure increased (as shown in Figure 6 and 7), supporting the legitimacy theory application.

Those companies which did not increase their total CSR disclosures (see Figure 1) appear to provide evidence in support of Guthrie and Parker (1989) who disputed the relevance of legitimacy theory for explaining changes in non-financial reporting. The researchers argued that legitimacy theory did not apply because there was no significant change in CSR disclosures during times when a company's reputation was at stake. Deegan et al. (2002), however, have refuted Guthrie and Parker's (1989) assertion. The general consensus is that legitimacy theory is relevant for explaining changes in CSR disclosure (de Villiers & van Staden, 2006). In this context , a more reasonable interpretation to explain the decrease in disclosure by companies 1 3 and 8 (Tables 4 & 5) is provided by de Villiers and van Staden (2006). These companies increase disclosures in the time of crisis (increase of 1.48%, 11.59% and 18.71% in 2012, respectively) but subsequently reduce disclosures to avoid unnecessary attention (decrease of 7.02%, 5.19% and 32.61% respectively). This is because the pending issue will have been addressed and companies then return to 'normal business'. The change in disclosure is designed to signal this, indicating to the reader that the companies have acknowledged the relevance of the Marikana incident but that, in the following financial year, the social unrest does not have the same relevance to the companies' operations (de Villiers and van Staden, 2006). In other words – and as explained by Suchman (1995) – the reporting strategy is intended to suggest that Marikana is not indicative of long-term impact which characterises operations after 2012.

Consider, for example, Company 6. Although it is one of the largest players in the industry, it experienced most of its strike action during the 2011 financial year and was largely unaffected by the 2012 strikes which plagued the industry. This explains the reduction in its disclosures from 124 in 2011 to 120.5 in 2012 and a further decrease in 2013 to 111 (as shown in Table 4). To this company, 2011 would have had the highest disclosures in direct response to the strike action in their operations. In 2012, they avoid extensive disclosures on labour unrest as this would re-focus unnecessary attention to their operations and cause possible societal disapproval. This is consistent with de Villiers and van Staden (2006) who argue that companies may actually decrease certain CSR disclosures as a legitimacy tool. This means that, even the companies which decreased their disclosures over the period under review were doing so as a legitimacy strategy. This is because legitimacy strategies involve a change in disclosure patterns to influence perceptions, not merely an increase (de Villiers & van Staden, 2006).

However, it is noteworthy that these companies did not exhibit any obvious similarities which could highlight why they chose to decrease their disclosure as a legitimacy strategy. Companies 1, 3 and 6 were established companies, while company 8 was still in its research and development phase. Similarly, other established organisations, such as Company 4, increased disclosure over the period under review. Examining the extent to which the size and nature of operations may be interconnected with legitimacy strategies was not specifically within the scope of this research. This is one of the proposed areas for future research (Section 6.3).

Overall, the results lead to a conclusion that legitimacy is of importance to the mining companies, as traces of its application can be seen in the above analysis. In light of this, specific company disclosures have been selected from the integrated reports which provide evidence of legitimacy strategies as referred to by Suchman (1995) in application.

5.2: Evidence of legitimisation strategies

As discussed in Section 5.1 when companies are faced with a crisis which challenges their legitimacy, they tend to employ strategies to address the situation (O'Donovan, 2002; Suchman, 1995). The strategies are to repair the legitimacy if it was already damaged, and to maintain it if it was just shaken. Examples of such strategies in action have been selected from the 2012 integrated reports and are presented below, classified into their respective classes as discussed in Section 2.1.2.

5.2.1 Diverting attention

In order to repair their legitimacy, all companies used diversion methods (Table 13, Section 5.2.3). However, most diversion strategies were not direct. They were implicit in that companies did not emphasise the negative aspects of the strike action but were quick to point out the positive that they themselves had achieved during the period (O'Donovan, 2002). Consider the following examples:

> "While there have been disappointments along the way, there have, undeniably, been many highlights to celebrate and to look back upon with satisfaction" (Article 11).

> "We recognise the right of our employees to freedom of association and to collective bargaining. Our remuneration practices will be determined according to local market conditions and we will strive to ensure that we pay wages that are, as a minimum, adequate to satisfy the basic needs of our employees and their families" (Article 2)

In the above statements, the companies attempt to divert the attention of the readers from the negative issues surrounding the industry because of Marikana, to the good that the companies have achieved during 2012. This is because the preparers of the reports believe that the public will focus more on the information that is provided in greater detail, hence the need to emphasise the good and try to ignore the bad which occurred (cf. O'Donovan, 2002).

This is consistent with O'Donovan (2002) who found that managers were not likely to ignore completely the adverse event as this could possibly be worse than focusing extensively on it. Instead, disclosure would be made about the event but kept to a minimum. Any opportunity to divert attention from the negative to the positive CSR embarked on during the period was welcome, as explained by Suchman (1995).

As part of the same strategy, O'Donovan (2002) explained that companies would avoid entering into public debate to justify themselves. The following statement was extracted from one of the integrated reports:

> "Of course, the issues around Marikana are the subject of an on-going judicial inquiry in South Africa. It is for Judge Farlam and his team, whom we support fully and completely, to establish causes and examine effects, and we do not intend to do that here. It would be entirely wrong to do so" (Article 14).

The natural response to the accusations included in multiple media reports and journal articles (Alexander, 2013; Nkosi, 2012) would have been to enter into debates and justify the company's actions. This, however, would have attracted more unnecessary attention from stakeholders (cf. O'Donovan, 2002). By publicly supporting due process and the legal bodies set up to investigate the incident, the company conforms to societal norms (O'Donovan, 2002), tries to prove that it has nothing to conceal and signals the acceptance of the dominant legal system in order to gain legitimacy (cf. Suchman, 1995).

5.2.2 Altering stakeholders' expectations

Suchman (1995) asserts that companies facing legitimacy challenges may engage in extensive explanations to stakeholders as a form of re-igniting a level of cognitive legitimacy (Section 2.1.2). Cognitive legitimacy, as explained in Section 2.1.1, can be won if the organisations can provide an account of their operations which is generally accepted by powerful constituents. At the same time an organisation can appeal to a sense of procedural and exchange legitimacy if it is able to offer an explanation for a negative event which reflects it in a positive light (Section 2.1.2). This is evident from Article 20 which had a section dealing with the strike action in detail, as well as the organisation's attempts to stop the violence and negotiate with employees.

> "….having reviewed their demands, we agreed with the unions to make some improvements in terms of the variable portion of their remuneration, which depends on their productivity.These disgruntled employees rejected this offer because they wanted a fixed rate increase and immediately

> resumed the strike. During the strike we set up a 24-hour communications centre to manage the incidents of violence and intimidation reported to us and also to ensure that we could communicate with our employees and they could also share their experiences and expectations with us during this period. [Company X] called on the South African Police Services to assist us in managing the violence and intimidation that was taking place, and also used a helicopter to monitor what was happening on the ground, so we could direct the police to trouble spots, secure our property and keep our employees safe" (Article 20).

In this example, the company provides a normalising account of the strike action. It is careful not to state explicitly that it is not accountable for the event taking place at Marikana lest this be seen as insensitive or socially irresponsible (Suchman, 1995) Instead, language is used to justify the company's actions and deflect blame. The organisation presents itself as taking all of the steps which one would reasonably expect in the context of the growing labour unrest. It also suggests (again subtly) that there were a group of 'disgruntled' workers who were undermining efforts to resolve the strike action peacefully and from whom the remaining employees needed to be kept "safe".

This account provides one reason for the increase in CSR disclosure reported in Section 4 (see Figure 6 and 7). What is important to note is that the disclosures were not only generic (Solomon and Maroun, 2012). As indicated by Table 6, when faced with a significant threat to legitimacy many companies dealt in detail with the Marikana incident as part of a concerted strategy to reassure stakeholders that they were aware of the impact of the crisis (influential legitimacy) and their responses were appropriate (procedural legitimacy). Consider, for example, the following comments:

> "The Board was deeply saddened by the violent unrest which took place during this time and continues to express its profound sympathy to those affected, including the families, friends and colleagues of those who died…….The Company then worked resolutely to resolve the tensions within the various factions of the workforce in order to create an environment where a return to work was possible" (Article 14).

In addition to the above, an organisation may rely on an indirect strategy to maintain or repair legitimacy. As explained by Suchman (1995), emphasising a negative event can have unintended consequences and lead to additional criticism by stakeholders. In this context, a common strategy was to rely on subtle appeals to the exchange legitimacy, convincing society that the respective company still deserves to exist. This was done primarily by pointing out all the benefits that the mining houses continuously give to society, as seen in the example below:

> "Alongside our legal and regulatory obligations, we believe that it is necessary to earn our social licence to operate from the people and communities who host our operations through creating economic value by contributing to addressing their needs and challenges. We have engaged with and invested heavily in our local communities over many years and one of the key obligations we have assumed under our social and labour plan is improving our employees living conditions. To that end, we have focused on constructing houses and converting the former single-sex hostel accommodation into bachelor and family housing units. We continue to support our workforce in improving their general health and we recognise our environmental obligations" (Article 14).

Another similar statement is shown below:

> "[Company X] acknowledges its responsibility to the communities in and around its operations, and aims to provide meaningful developmental, financial, technical and other support to improve the lives of community members, and to eliminate or minimise any negative impacts of mining. In the medium to longer term, the Company intends to contribute to the sustainability of these communities and the development of their members beyond the lives of our operations" (Article 5).

The intention is not necessarily to mislead stakeholders (Solomon et al., 2013). Instead, the companies appeal to a sense of exchange, procedural and structural legitimacy, where they explain to the public how they have discharged their responsibilities for community development (exchange) in a timely and systematic manner (procedure), even though the consequences (consequential legitimacy) may have been unfavourable. In this way, the respective business models are presented as socially responsible and the respective organisations appear as a rational and natural part of the social context. The end result is that the existence of these businesses as a credible part of the economy is taken for granted and alternatives become unthinkable (cf. Suchman, 1995). This re-ignites a level of cognitive legitimacy, where the public cannot imagine life without the organisation.

The intention possibly is to alter society's expectations and perceptions of the respective organisations to the point where stakeholders either condone the organisation's involvement in Marikana or are prepared to accept it as an unusual event for which the respective company cannot reasonably be held accountable. In this context, a focus point is the perceived relationship between capitalism and Apartheid-related social injustices (Section 2.4).

With talks of mine nationalisation already tabled by government before the Marikana incident (de Villiers & van Staden, 2006), the mining houses faced a growing threat of public policy intervention due to the public outcry, as explained by Patten (1992). The parallels drawn between Apartheid violence and the Marikana incident opened room for more scrutiny and criticism. This resulted in the need to address the issue of social inequality while stressing the importance of generating financial returns. To this end, all of the companies under review dealt with key social metrics in their integrated reports such as worker housing, HIV/Aids and occupational health and safety. As explained by de Villiers and van Staden (2006), these are important issues (and a legacy of worker exploitation under Apartheid). As per Figure 4, it is no surprise that companies – faced with additional scrutiny after Marikana – devote attention to these issues in their integrated reports. What must also be emphasised is the continued relevance of the capital market. De Villiers and van Staden (2006) explain how South Africa, despite moving towards a more socialist system of government, still depends on free market systems (Section 2.4). Consequently, although all companies deal with the social implications of Marikana (Figure 4, Section 4.3), they pay particular attention to explaining the financial impact of the strike action.

> "What is clear, though, is that if South Africa is to deal with the historic issues of poverty and dissatisfaction which underpin much of the unrest we have witnessed, it will require a growing and effective private sector to provide the jobs so desperately needed. It is business which will help to deliver much of the growth which, in turn, will help to provide the economic,

> educational and social platforms for change. Given the country's extensive natural resources, mining will be a key part of that" (Article 14).

The above statement appeals to pragmatic legitimacy as it offers society actual benefits from the continuance and support of the private sector. Societal values of nationalisation of the sector being the solution are questioned and capitalism is instead given as the more logical solution if society expects anything in return (exchange legitimacy).

5.2.3 Managing blame

Under this strategy, companies try to shape what society thinks of them. Companies may selectively accept blame but deny ultimate responsibility, as shown below:

> "It was easy to blame Lonmin, as some have done, for the spread of unrest in the weeks after our agreement. We reject this accusation. Unrest in the mining sector predated the Marikana dispute, and was growing elsewhere during it. Deep-rooted issues of poverty and inequality have been highlighted by what has taken place, but those go beyond mining and to every corner of South Africa. It is certainly true that mining companies have faced criticism for their efforts to support the transformation agenda in the country and, on Lonmin's behalf, we accept that we must do more, particularly around the nationally difficult issue of housing" (Article 14)

The perceptions of society were that Lonmin was to blame for all the violence in the sector (Alexander, 2013; Nkosi, 2012) but the above attempts to correct this view. Blame is denied but the company does not seek completely to absolve itself from any responsibility as Suchman (1995) warns that this could backfire. Instead, the strategy is to emphasise that more could have been done on the CSR front while rejecting the view that the company should be held accountable for Marikana (as an example of a broader socio-economic issue beyond the company's control).

Other companies, particularly those not directly involved in Marikana, were more overt. Several examples were found where organisations were more explicit in denying responsibility and shifting the blame to others. This, in essence, serves to justify the organisation by its jurisdiction and presenting negative CSR issues as beyond the entity's control (cf. Suchman, 1995). An example is shown below:

> "…the substantial operational challenges related to two months of unprotected and violent illegal industrial action linked to unrealistic wage demands..." (Article 2)

The above statement supports Suchman (1995)'s strategy of questioning the company's moral responsibility. The blame is shifted to the workers and their respective unions who were supposedly making unrealistic demands, leading to the strike action, for which the company would not accept responsibility, based on the above statement.

> "The violence and intimidation attendant on the strike have to be condemned in the strongest terms. The brutality displayed by a minority was shocking in the extreme" (Article 11).

This shows that the company has taken a moral stand against violence and it appeals to dispositional legitimacy as there are signs of moral values associated with the organisation's beliefs (Suchman, 1995). The organisation has ascribed a non-violent personality to itself, and will condemn it outright. This also serves to distance the company from the violence as it shows that the company did not approve of it. In this way, the company attempts to draw a line between normal business and the violent strike action. Suchman (1995) refers to this as a "firewall", which ensures that the event is seen as a once-off incident and is not used to assess the general operations of the company.

In some instances, companies may even opt to share the blame and show that, although they did contribute to the adverse event, there were many other circumstances that were beyond their control. The idea is that full responsibility should not only rest with them, as shown below:

> "The incidents at Lonmin's Marikana mine and the wildcat strikes across the mining industry in subsequent months catapulted the sector and South Africa onto the global platform. Labour unrest and **lawlessness**, fuelled by **union rivalry**, community discontent with the lack of **social delivery by the state**, and **political posturing** in advance of the leading party's electoral conference in late 2012 inflamed and undermined the fragile social structure of the industry" (Article 5, emphasis added).

This statement is an example of blame being shifted to the government and the unions, leaving almost none attributable to any of the mining houses. It is noteworthy that this statement was not in Lonmin's integrated report but in another company in the sector's report that sought to limit blame. A similar statement was found in another integrated report:

> "This violence was partially related to grievances over service delivery and perpetrated by elements with other agendas and was linked to workplace issues which underscores the importance of all elements of **civil society** – employers, **employees, communities and government** – working hard to prevent a repeat" (Article 11, emphasis added).

This offers an explanation of the circumstances surrounding the strike action and its possible causes. The companies, however, did not state that they are completely blameless, as Suchman (1995) warns that this may only work in the short-term but has the potential to diminish the accumulated legitimacy in the long-run. The blame is rather shared with government as service delivery is named as one of the causes of the violent strike action.

While organisations may choose to share the blame, those not directly involved were quick to point that out and distance themselves from the adverse event. This was seen mainly with companies which were not directly affected by the strike action. Although none explicitly disassociated itself from Lonmin and AMCU, the statements made did so implicitly. An example is shown below:

> "We developed a communication strategy and implemented a communication plan designed to achieve regular transparent communication with our workforce. This approach helped us minimise the impact on our operations of the labour unrest that shook the South African platinum industry in the second half of the year" (Article 20).

The above statement was found on two different pages of the same report, emphasising the point so that stakeholders can understand that the respective company has set itself apart from the rest of the industry when it comes to labour relations. The industry was flooded by violent strikes due to poor labour relations (Alexander, 2013; Chinguno, 2013), something which the company had mastered and excelled in. This company did not want to be associated with the condemned violence in the sector and used a strategy to disassociate itself from the other companies (cf. Suchman, 1995). The same article contained the following statement:

> “Due to the focus of our stakeholder engagement strategy on continually engaging with our employees and communities to strengthen our relationship with them and build mutually beneficial partnerships, we were fortunate to be less affected by the strikes than other members of our industry” (Article 20).

In the two statements above, the company distances itself from the violence in the sector by appealing to the public’s moral legitimacy as the emphasis is not just on avoiding strikes and violence but on treating workers fairly to avoid unrest. This shows some level of procedural legitimacy as the emphasis is on the process of preventing the strike action rather than on the result of being less affected by strikes (cf. Suchman, 1995). In addition to the procedural legitimacy, the statement has traces of influential legitimacy as it shows a level of stakeholder engagement in decision-making, thus allowing the affected parties to have a say in the issues that affect them. This is meant to change society’s perceptions about the entity.

Organisations may use a different method to influence society’s perceptions which entails ensuring that their prior social and governance-related successes overshadow isolated negative events. Legitimacy has its roots in the historic actions of the organisation (Suchman, 1995). The past accomplishments and values are the reason why the company gained legitimacy: holding onto them ensures that society sees past the event and writes it off as an anomaly. Examples of this strategy are shown below:

> “However we are rightly proud of the huge amount we have achieved in education, health, infrastructure and other areas, both for our employees and the wider community – work which has not had the recognition the dedicated teams who deliver it deserve” (Article 14).

> “In this area we should acknowledge that our Group’s great investment in training and skills development has resulted in the creation of a sizeable body of knowledge and expertise that adds unmeasurable value to the societies and economies of both South Africa and Zimbabwe” (Article 11).

> "Our achievements on the provision of family housing and in converting our hostels into one-person-per-room accommodation have involved significant investment and will translate into lasting benefits both for our employees and for the creation of a more stable, more productive workforce. We still have much to do but we have made great strides in this most important area. The recently launched Platinum Village will provide 2 500 decent homes for colleagues" (Article 11).

The above statements show two companies' efforts to protect their past accomplishments in the face of widespread criticism of the mining houses as a whole (see, for example, Chinguno, 2013). Companies tend to continuously stockpile good deeds when there is no social crisis, and conveniently remind society of such instances in the face of a crisis (cf. Suchman, 1995). Reminding society of the good CSR that had been done in the past might serve as a source of cognitive legitimacy. This is because when there is a crisis, society is quick to focus on the negative and possibly lobby for public policy intervention (Patten, 1992). Reminding stakeholders of the positive performed by the companies facing legitimacy attacks serves to convince society that they cannot continue successfully without the contribution of the company. This explains the increase in CSR disclosure which is Non-Marikana related (Figure 3).

From a slightly different perspective, another company suggested that society's perceptions were unfair. Their report argues that stakeholders are quick to judge in times of crisis, overlooking the material social and economic contribution of the platinum sector. At the same time, the company also attempts to secure legitimacy, not by directly justifying or responding to a delegitimising event but by altering the standards according to which they are evaluated. Consider the following statement:

> "As a society we should be **deeply concerned** about the **raised expectations and demands** on our sector. What has become obvious in the aftermath of these developments, are the **glaring misconceptions** amongst our stakeholders about the state of the PGM sector, its **contributions** to the economy over decades, its role as a **major employer**, **provider of infrastructure** and utilities, villages and communities in areas where there has traditionally been sparse economic activity. Now, more than ever, it is **incumbent on all stakeholders to act responsibly** and to discharge their responsibilities judiciously and diligently. The mining industry

> cannot be fingered as a singular contributor to poverty and its associated ills in rural communities" (Article 17).

In the above statement, the organisation is personified and presented as acting in line with generally accepted social norms. A good character appeals to dispositional legitimacy as it allows society to judge the organisation based on its values and not based on an isolated, unfortunate incident (Suchman, 1995).

5.2.4 Adhering to society's values

The final strategy is a direct reaction to the society's expectations. It involves actions that show commitment on the organisation's side to prevent recurrence of such events in future. The organisation corrects some structural defects that it may have had so as to give the impression that the problem has been addressed (Suchman, 1995). The following is an example:

> "Conscious of the imperative to achieve zero harm, [Company X] has created two new executive-level positions related to the safety and health of our employees" (Article 2).

The above shows how one of the companies has reacted to the unfavourable strike action which had arisen mainly as a result of poor working conditions and lack of safety for the workers. This is an example of the restructuring strategy achieved through creation of "watchdogs" who are to help prevent such adverse events as the violent strike action and government intervention in future (cf. Suchman, 1995; Tilling & Tilt, 2010). By creating new positions for monitoring and governance, the company is implicitly admitting that its system was flawed and that they are taking remedial action. This strategy is also apparent in the following extract from one of the integrated reports under review:

> "To help mitigate against future potential unrest and associated challenges in the sector, [Company X] ushered in a new era in stakeholder engagement with the appointment to the executive team of a new Executive for Stakeholder Relations and Corporate Affairs to oversee this new stakeholder engagement approach" (Article 23).

The above involves acknowledging areas for improvement and the identification of possible remedial action (Suchman, 1995), to avoid a repeat of the situation. The creation of additional positions in the company helps to address the structural legitimacy of the organisation by aligning its structures to the expectations of society. In order to appear completely transparent and accepting of change, companies welcome additional monitoring which is meant to assure society of no recurrences of the adverse event (Suchman, 1995):

> "Dialogue with representatives of the Department of Mineral Resources (DMR) will be stepped up in an effort to address concerns related to the application of Section 54 stoppages. We will cooperate fully with the DMR to ensure that our operations comply with and ideally exceed agreed safety standards" (Article 11).

The above invitation for stakeholders to have a significant say in the company's day-to-day decision-making is linked to influential legitimacy. It is important to be seen as cooperative with the community and government in preventing a repeat of the violent unrest. Allowing the affected stakeholders to have a say in the corporation's decisions is a sign of on-going commitment and a valuable source of legitimacy (cf. Suchman, 1995).

In order to appeal to procedural legitimacy, the organisations attempt to amend the root causes of the strike actions, and not merely the consequences. This is to be done through cementing the relationships that had been unstable, as shown below:

> "Following the strike in August and September 2012 [Company X] is rebuilding relationships with employees. This includes at Company level a full engagement strategy with all unions and at an industry level, discussions on moving to collective bargaining for the platinum sector. Rebuilding solid relationships and trust will take time but is something that the Board and management are committed to" (Article 14).

It is interesting to note that in their 2011 integrated report, the above company had identified a breakdown in employee relations as one of their principal risks, implying that they foresaw the possible crisis. Suchman (1995) explains that perceiving possible changes is paramount in maintaining organisational legitimacy, as this gives the company the opportunity to solve the problems proactively. The statement then serves to show that they are reacting to the situation and preventing any future recurrences.

The companies seem to have reacted to the wide-spread unrest through creation of formal, logical procedures, which shows some concerted effort to address the issues in a systematic manner. This method appeals to procedural legitimacy, which is obtained through doing things the right way, in spite of the end result. By doing things the right way, the company adopts societal values and uses them to tailor changes in their structure or procedures. The strategies used by all the companies in the sector have been summarised in Section 5.2.5 below.

5.2.5 Summary of strategies

Table 14 : Summary of Legitimacy strategies used

Company	CCOT 2011-2013	Strategy 1	Strategy 2	Strategy 3	Strategy 4
Company 1	-9.5	✓	✓	✓	✓
Company 2	14.5	✓	✓	✓	✓
Company 3	2	✓	✓	×	×
Company 4	51	✓	✓	✓	✓
Company 5	6.5	✓	✓	✓	✓
Company 6	-13	✓	×	✓	×
Company 7	23.5	✓	✓	✓	×
Company 8	-15.5	✓	✓	✓	✓
Grand Total	**59.5**	**8**	**7**	**7**	**5**

CCOT – Cumulative change over time.

Table 14 shows the legitimacy strategies adopted by each company in addressing the adverse situation faced by the industry because of the violent strike actions. The strategies were explained in Section 2 of this report.

Although Companies 1 and 8 decreased the quantity of their disclosures over time (Table 14), they still employed all the categories of legitimacy strategies (Table 14). This suggests that, although the quantity may have decreased, the content still addressed the issue at hand, thus providing support for relevance of legitimacy theory in the context of CSR reporting.

In contrast, Company 6 decreased the quantity of its disclosures (Table 14) and only used two out of the four strategies mentioned above. In addition to that, they did not have any Marikana-specific disclosure. The reason for this, as explained above, was that the company was not subject to the strike action in 2012. The strategies used by Company 6 are in line with this fact as they avoided focusing on the negative events affecting other companies, which would possibly invite the unwelcome scrutiny into their own operations (Suchman, 1995). This attests to the evidence raised by de Villiers and van Staden (2006) that companies may decrease disclosure whilst still attempting to legitimise their operations. In this light, the decrease in disclosure and limited application of strategies to gain or repair legitimacy is not inconsistent with the view that organisational legitimacy is important (O'Donovan, 2002; Patten, 1992; Suchman, 1995). On the contrary, the variations in the extent of disclosure highlighted in Section 4, coupled with differences in the emphasis placed on different legitimisation strategies, shows how subjective the reporting process is. As explained by O'Donovan (2002), companies are responding to a *perceived* threat to legitimacy which cannot be directly measured. How they react to negative issues is largely a result of management's assessment of the gravity of the matter and how best to deal with it.

6 Conclusion

This Section is divided into three. Section 6.1 summarises the findings from the research. Section 6.2 explains the contribution of the research; Section 6.3 gives recommendations for future research.

6.1 Summary of findings

The aim of this research is to explore the integrated reports of South African platinum mining companies in order to identify strategies used to maintain and repair legitimacy post the Marikana incident. The incident occurred on the 16 August 2012, marking the culmination of a year characterised by violent labour unrest in the platinum mining sector (Chinguno, 2013). Some miners were shot dead and several others injured, leading to the local and international scrutiny of the South African mining industry's future (Cavvadas & Mitchell, 2012). This perceived threat to legitimacy led to a move to manage the social licence to operate (cf. Deegan, 2002; Suchman, 1995) as it awakened painful memories of similar incidents that had been condemned during Apartheid (Alexander, 2013; Bond & Mottiar, 2013; Nkosi, 2012). The research findings refer to evidence of such strategies.

Content analysis was employed to analyse the integrated reports, in line with prior studies of a similar nature (Deegan et al., 2002; Guthrie & Parker, 1989; Patten, 1992). A disclosure checklist of themes summarising King-III and GRI recommendations on CSR reporting was adapted from Solomon and Moroun (2012) and Carels et al (2013). This was used to analyse each section of the integrated report. In addition, interpretive text analysis was used to analyse extracts of the integrated reports that could be classified into specific strategies for managing legitimacy in the context of a social crisis

A general increase in CSR reporting was evident from not only Lonmin, the company directly affected by the Marikana incident, but also from the platinum mining houses in aggregate. These results are similar to Patten's (1992) findings after the Exxon oil spill. The increase in disclosure provides support for the legitimacy theory (Suchman, 1995) that companies tend to offer extensive explanations to the society so as to be understood and so preserve some level of cognitive legitimacy.

This increase, however, is not applicable to each company, as three out of the eight companies analysed show cumulative decreases in disclosure over the three-year period under review. Two of the companies initially increased disclosure in the heat of the Marikana crisis, and then subsequently decreased it in 2013 (Figure 1 and 2). This is in line with de Villiers and van Staden (2006) who found that companies increase disclosures to address a crisis but thereafter decrease them to avoid any further unwelcome attention and scrutiny. One company decreased across all years and (upon further investigation) it was discovered that it had experienced its phase of labour unrest in 2011 which corresponded with the maximum level of CSR reporting.

The data analysis also revealed that the increases in CSR disclosure were more general than Marikana-specific, with the exception of one company. Sixty-four per-cent of the increase in disclosure from 2011 to 2012 was not Marikana-specific, meaning that companies diverted attention from the Marikana incident to other CSR issues, as predicted by Suchman (1995) and O'Donovan (2002).

The researcher then categorised the strategies used by each of the companies, as described by O'Donovan (2002). There are four main strategies identified, and each of them is made up of different actions working together for the common goal of repairing and maintaining legitimacy.

The first strategy was mainly concerned with diverting attention from the negative event. This was achieved through paying minimal attention to the unpopular violent unrest, while re-directing the readers' focus to the positive events and CSR accomplishments. Another method of doing this was avoiding entering into public debates rather leaving the decision to the Farlam Commission of Enquiry[8] set up by the President of the Republic to investigate issues surrounding the shootings at Marikana.

The second strategy involved altering society's expectations by giving extensive explanations about the circumstances surrounding the labour unrest. This led to the increase in CSR disclosure referred to above. In addition to this, the strategy involved creating an appreciation of the organisation and its merchandise so as to be seen as contributing more good than harm to the society.

[8] This is a panel appointed by the President to investigate issues that pertained to the Marikana-incident

The third legitimacy strategy was managing the blame. In this context, organisations not affected by the strikes sought to distance themselves from the violence in the sector, while those affected shifted the blame to government, the unions and other social sectors. As part of this, organisations also tried to protect their past achievements so that all their good work would not be forgotten in the face of the crisis. The final strategy is best described as giving in to societal expectations. This involved selectively accepting the blame for some flaws in the system, and addressing those through structural changes or executive replacement.

In summary, it was found that companies made use of all types of strategies, with the exception of one company, which both decreased disclosures and made use of only two of the specified strategies. What this suggests is the nature and extent of CSR disclosure is not driven by an exact process. Legitimacy cannot be directly observed or quantified: it is a social phenomenon. Companies are required to interpret the extent to which an adverse event has impacted their standing and how best to deal with this. In turn, this translates into variations in legitimacy strategy with organisations relying on the strategies discussed in Section 2.1.2 (see Table 7). This research has not been able to conclude on what drives the choice or focus of the legitimisation strategy. What is clear is that legitimacy strategies are evident from the platinum mining houses' integrated reports post the Marikana-incident. This confirms Hopwood's (1987) assertion that accounting is more than just the numbers: it is a social science.

6.2 Contribution of the research

The research adds to the existing literature on the use of CSR disclosures as a legitimacy tool (Deegan et al., 2002; Guthrie & Parker, 1989; Patten, 1992; Tilling & Tilt, 2010) . The prior studies mainly analysed one company's reaction to a series of negative events over a long period of time[9]. This research uses a similar process for exploring CSR disclosure to Patten (1992), who assessed the reaction of companies in the oil industry to the Exxon oil spill. Giving a South African context, and based on one of the controversial issues in the history of South Africa, this research provides insight into how companies have sought to regain favour in the eyes of the public. South Africa has had legitimacy-related research conducted in prior years (de Villiers

[9] Guthrie & Parker (1989) as well as Deegan et al (2002) studied the reports of BHP reports for and 100 and 15 years respectively, while Tilling and Tilt (2009) studied the reports of Rothman from 1956 to 1999.

& van Staden, 2006), however, to the researcher's knowledge; none has been done on a specific event as in this report. This report adds valuable insight to the field of corporate disclosures being more than just value-relevant but also legitimacy driven. Finally, the study makes an important contribution by adding to the limited body of interpretive research dealing with corporate governance (including organisational legitimacy) in an African setting (Brennan & Solomon, 2008).

6.3 Recommendations for future research

There are several aspects that this research does not explore. Firstly, the influence of size and nature of operations was not considered. Previous studies have explored these determinants in developed countries (Naser et al., 2006), but to the researcher's knowledge, none has been done in South Africa, more so specifically in respect of the Marikana-incident. This would be a valuable contribution to the field of research.

A deep analysis of theory was not delved into, as the report focused more on overall analysis of the reports than linking each point to a part of the legitimacy theory. The theory was used as a background to the research. This leaves room for future research to look into a deeper theoretical understanding of the CSR disclosures related to the Marikana incident, particularly in the context of integrated reporting.

In addition, this research limited the source of information to integrated reports which are issued once a year and are therefore, compressed. A look into the media sources, particularly press conferences during and after the labour unrest might provide a more detailed understanding of the immediate reactions and strategies used to maintain or regain favour in the public's eyes. These extra sources of information have been excluded from prior studies of a similar nature (Guthrie & Parker, 1989) due to possible journalistic bias. However, some insight into the other sources of disclosure might provide additional, valuable analysis.

References

Alexander, P. (2013). Marikana, turning point in South African history. *Review of African Political Economy, 40*(138), 605-619.

Azapagic, A. (2004). Developing a framework for sustainable development indicators for the mining and minerals industry *Journal of Cleaner Production, 12*(6), 639-662.

Bond, P., & Mottiar, S. (2013). Movements, protests and a massacre in South Africa. *Journal of Contemporary African Studies, 31*(2), 283-302.

Brennan, N., M., & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: An overview. [DOI: 10.1108/09513570810907401]. *Accounting, Auditing & Accountability Journal, 21*(7), 885-906.

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.

Carels, C., Maroun, W., & Padia, N. (2013). Integrated Reporting in the South African Mining Sector. *Corporate Ownership & Control, 11*(1), 957-971.

Cavvadas, D., & Mitchell, A. (2012). Marikana-the causes and wider implications and lessons for the mining industry in Africa. *Global Mining Q4*.

Chinguno, C. (2013). Marikana Massacre and Strike Violence Post-Apartheid. *Global Labour Journal, 4*(2), 160-166.

Creswell, J. W. (2003). *Research Design-Qualitative, Quantitative and Mixed Methods Approaches* (2nd ed.). London: Sage Publications.

Creswell, J. W., & Clarke, V. L. (2007). *Designing and Conducting Mixed Method Research*: SAGE.

de Klerk, M., & de Villiers, C. (2012). The Value Relevance of Corporate Responsibility Reporting: South African Evidence. *Meditari Accountancy Research,, 20*, 21-38.

de Villiers, C., & Alexander, D. (2014). The institutionalisation of corporate social responsibility reporting. *The British Accounting Review, 46*, 198-212.

de Villiers, C., & van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organisation and Society, 31*, 763-781.

Deegan, C. (2002). Introduction - The legitimising effect of social and environmental disclosures - a theoretical foundation. *Accounting, Auditing & 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 & Accountability Journal, 15*(3), 312-343.

Denis, D. K. (2001). Twenty-five years of corporate governance research. . . and counting. *Review of Financial Economics*(10), 191-212.

Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *J. Account. Public Policy*, 1-28.

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.

Global Reporting Initiative. (2013). G4 SUSTAINABILITY REPORTING GUIDELINES Retrieved 09/09/2014, from https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). Defining and Designing. Chapter 1 *Collecting Qualitative Data: A Field Manual for Applied Research* Retrieved from http://www.sagepub.com/upm-data/48453_ch_1.pdf

Guthrie, J., & Parker, L. D. (1989). Corporate Social Reporting: A Rebuttal of Legitimacy Theory. *Accounting and Business Research, 19*(76), 343-352.

Hassel, L., Nilsson, H., & Nyquist, S. (2005). The value relevance of environmental performance. *European Accounting Review, 14*(1), 41-61.

Hopwood, A. G. (1987). The Archaeology of Accounting Systems. *Accounting Organizations and Society, 12*(3), 207-234.

Institute of Directors. (2009). King Code of Governance for South Africa.

Institute of Directors. (2011). Code for Responsible Investing in South Africa Retrieved 09/09/2014, from http://c.ymcdn.com/sites/www.iodsa.co.za/resource/resmgr/crisa/crisa_19_july_2011.pdf

Integrated Reporting Committee of South Africa. (2011). Framework for Integrated Reporting and the Integrated Report Retrieved 09/09/2014, from www.sustainabilitysa.org

Intergrated Reporting Committe of South Africa. (2011). Framework for Integrated Reporting and The Integrated Report-Discussion Paper (pp. 1-25).

International Integrated Reporting Council. (2011). TOWARDS INTEGRATED REPORTING-Communicating Value in the 21st Century Retrieved 05/09/2014, from http://theiirc.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf

International Integrated Reporting Council. (2013). The international IR framework Retrieved 09/09/2014, from 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.

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*, 1-13.

Leedy, P. D., & Ormrod, J. E. (2010). *Practical Research: Planning and Design*: Pearson Education Inc.

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.

Maroun, W. (2012). Interpretive and critical research: Methodological blasphemy! *African Journal of Business Management, 6*(1), 1-6.

Maroun, W., Coldwell, D., & Segal, M. (2014). SOX and the Transition from Apartheid to Democracy: South African Auditing Developments through the Lens of Modernity Theory. *International Journal of Auditing*.

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

Merkel-Davis, D. M., Brennan, N. M., & Vourvachis, P. (2011). Text Analysis Methodologies in Corporate Narrative Reporting Research. *(paper presented at 23rd CSEAR International Colloquium, St Andrews, September)*.

Moneva, J. M., & Ortas, E. (2008). Are stock markets influenced by sustainability matter? Evidence from European companies. *International Journal of Sustainable Economy, 1*(1), 1-16.

Murray, A., Sinclair, D., Power, D., & Gray, R. (2006). Do financial markets care about social and environmental disclosure? Further evidence and exploration from the UK. *Accounting, Auditing & Accountability Journal, 19*(2), 228-255.

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*, 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*. Retrieved from 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 & 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*, 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., & Zhao, N. (2014). Standalone CSR reporting by U.S. retail companies. *Accounting Forum*(38), 132-144.

Roberts, R. W. (1992). Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting Organizations and Society, 17*(6), 595-612.

Schadewitz, H., & Niskala, M. (2010). Communication via responsibility reporting and its effect on firm value in Finland. *Corporate Social Responsibility and Environmental Management, 17*, 96-106.

Solomon, J. (2010). *Corporate Governance and Accountability* (3rd ed.). 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., & Moroun, 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., 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.

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*, 263-281.

Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review, 20*(3), 571-610.

Tilling, M. V., & Tilt, C. A. (2010). The edge of legitimacy - Voluntary social and environmental reporting in Rothmans' 1956-1999 annual reports. *Accounting, Auditing & Accountability Journal, 23*(1).

Tinker, T., & Niemark, M. (1987). The Role of Annual Reports in Gender and Class Contradictions at General Motors: 1917-1976,. *Accounting,Organizations and Society*, 65-88.

Wodak, R., & Meyer, M. (2009). *Methods for Critical Disclosure Analysis.* (2nd ed.). London: Sage.

Appendix 1

The first table provides the sections usually found in the integrated report.

Table 1 - Integrated report sections (Carels et al., 2013; Solomon & Maroun, 2012)

CODE	DESCRIPTIONS
BD	Summary of the Board members and key officers/committees
CS	Chairman's statement (letter or equivalent)
FS	Consolidated financial statements
CER	Chief Executive Officer's review
CFR	Chief Financial Officer's report
DR	Director's Report (in financial statements)
CGR	Corporate Governance review
FR	Financial review (at start of report)
IGO	Introductory Group overview (or equivalent, at start of report, summary operational review)
OR	Operational review – general and by subsidiary
OP/M	Our Products (or equivalent, at start of report)/our markets
RR	Remuneration/compensation report
SS	Strategy statements (at start of report)
SRSUM	Strategic Risk summary
VV	Value added statements
SDC	Sustainable development and commentary
SA	Segmental analysis and summarised financial information
EP	External appraisals

Table 2-Themes (Global Reporting Initiative, 2013; Solomon & Maroun, 2012)

Table 2 classifies the disclosures into theme codes as explained above for each respective year.

Theme	2011	2012	2013	CCOT
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/ skill 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 programs, 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				