

Isomorphism in social and environmental disclosures

By

Charl de Villiers[#], Debbie Alexander

The University of Auckland

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[#]Corresponding Author
Department of Accounting and Finance
The University of Auckland Business School
Private Bag 92019
Auckland, New Zealand
Phone: +649 373 7599 extension 85196
Fax: +649 373 7406
E-mail: c.devilliers@auckland.ac.nz

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ABSTRACT

Purpose – Legitimacy theory suggests that differences in stakeholders will lead to trade-offs between different types of social and environmental disclosures (SED). We test this proposition by comparing disclosure in two countries with different social issues, because they are developed and developing.

Design/methodology/approach – We compare various qualitative and quantitative characteristics of the social and environmental disclosures of the South African listed mining companies with no cross listings outside of South Africa and compare them with those of a matched sample of Australian mining companies listed only in Australia. We use the disclosure items recommended by the Global Reporting Initiative (GRI) G3 and others as a guide to the analysis and record several qualitative aspects as suggested by Hackston and Milne (1996) and others. We expect major differences.

Findings - Among the 30 comparisons of disclosure patterns and characteristics, we find practically no significant differences between the two countries.

Originality/value – We expected the social differences between Australia and South Africa to cause different SED and we expected the similarities in institutional environments to influence economic reporting practices. However, we conclude that the isomorphic influences of the similar institutional environments extend to SED practice. Our findings imply that SED practices are converging towards certain patterns and characteristics on a worldwide basis. We regard this as a sign that SED is becoming systemised and managed and can therefore no longer be viewed as indicative of managerial intent, but is rather indicative of managerial talent in managing SED and everything else. SED convergence over international boundaries can be regarded as the use of SED templates devoid of local context to (re)gain or maintain local legitimacy. With the systematisation of SED, researchers may have to take the perspective that SED is just another management decision and not unique in any way.

Keywords - Environmental disclosure, Social disclosure

Paper type - Research paper

1. INTRODUCTION

In addition to economic information, companies disclose social and environmental information in their annual reports and on their websites (see for example KPMG, 2008). Together, these three types of information are sometimes called triple bottom line reporting (see for example Milne *et al.*, 2003) or sustainability reporting (see Gray, 2009). The Global Reporting Initiative (GRI) also suggest reporting in the three main categories of economic, social and environmental (GRI, 2009b). Corporate disclosures influence the allocation of capital (Watts and Zimmerman, 1978) and play a role in the creation and maintenance of corporate image (Basu and Palazzo, 2008), and thereby influence employees, customers and other groups in society. The reasons why companies choose to disclose social and environmental information has been investigated (e.g. Clarkson *et al.*, 2008), where they disclose the information (e.g. Van Staden and Hooks, 2007) and the characteristics of the information (e.g. Hackston and Milne, 1996). We contribute to the understanding of corporate disclosure motivations in a unique way, while also providing descriptive information regarding the characteristics of mining companies' social and environmental disclosures (SED), including where they disclose (i.e. in annual reports or on websites). A better understanding of the motivation for disclosure will influence the interpretation of these disclosures.

According to legitimacy theory, companies make social and environmental disclosure decisions in reaction to pressures from stakeholders (Lindblom, 1993). Managers decide how much information to disclose on particular issues to address these threats and potential threats (O'Dwyer, 2002). Less powerful stakeholders can, for example, be ignored or dealt with by symbolic gesture (Neu *et al.*, 1998). Thereby, stakeholders influence the volume and content of these disclosures. We argue that the importance of various social and environmental issues will be different in a developing country and a developed country. For example, we expect the public to be less aware of environmental issues in developing countries and other social issues, such as job creation, to be regarded as more important. We expect this difference to be reflected in the disclosures of companies, because the different social issues are mediated through the pressures of stakeholder groups. We compare the social and environmental disclosure of mining companies in Australia and South Africa for several reasons. Firstly, mining is a relatively large and therefore important industry in both countries. Secondly, both countries are democracies with freedom of the press, which influences the ability of stakeholder groups to exert pressure by harnessing political structures and the media. Finally, their social structure differ widely, Australia being a developed and South Africa a developing country. Despite the major social differences, Australian and South African mining companies operate within a similar institutional environment. For example, capital markets and accounting rules are similar. We discuss these differences and similarities further in a section below.

We expect the social differences between Australia and South Africa to influence companies' social and environmental disclosure practices. We further expect the similarities in institutional environment between the two countries to influence companies' economic disclosure practices, but not their social and environmental disclosure. We focus on social and environmental disclosure practices and make 30 comparisons of different characteristics and qualitative aspects of these disclosures. We expect major differences for the reasons mentioned.

However, the statistical comparisons of the characteristics of social and environmental disclosures by Australian and South African mining companies show almost no significant

differences. We conclude that the institutional environment faced by companies in both countries exerts isomorphic forces not only over their economic disclosure, but also over their social and environmental disclosure practices. These forces are, in this instance, stronger than the social differences (mediated through stakeholder groups).

The hegemony of capitalism and other isomorphic forces have resulted in similar capital market structures, accounting rules, and social and environmental reporting guidelines (such as GRI) being followed in seemingly diverse parts of the world. Our results show that these forces bring about convergence in SED practices on a world-wide basis and that this can be a stronger predictor of disclosure practice than specific differential stakeholder pressure. An important implication of these findings is that SED is becoming a standardised business practice driven by institutional forces towards worldwide convergence. Perhaps "good" SED is no longer indicative of "good" managerial intent, but rather indicative of good business practice being followed in reporting as much as it might be followed in other areas. In a word, SED is now systematically managed. Our findings rely on the comparison of patterns and characteristics of SED. However, within these patterns of disclosure, there is room for individual companies to react to specific legitimacy threats with specific disclosures, as predicted by legitimacy theory.

In the next section, entitled background, we discuss stakeholders' influence over corporate social and environmental disclosure and current mining company disclosure practice. Thereafter, we explain relevant differences and similarities between Australia and South Africa. Subsequent sections deal with theory, method, results, discussion and implications, and conclusion.

2. BACKGROUND

Stakeholders linked with disclosure

Tilt (1994) shows that community pressure groups have a major influence on corporate social disclosures. Deegan and Gordon (1996) also link the increase in environmental organisation membership with corporate environmental disclosures and Gray *et al.* (1996, 128) state that NGOs has a "notable influence" on social disclosures. According to Schepers (2006), NGOs often target multinational corporations. Deegan and Blomquist (2006) specifically show that the World Wide Fund for Nature (WWF) influenced mining company environmental reporting in Australia.

Georgakopoulos and Thomson (2008) conceptualise social and environmental disclosure as a contest whereby stakeholders engage with companies, regulators, political institutions and the general public, the contest being mediated by issue amplifiers (such as the media). Media attention influence corporate social and environmental disclosure, as shown by Ader (1995), Brown and Deegan (1998), and Patten (2002). As for mining companies, Deegan *et al.* (2002) also show a link between media attention on specific social issues and social disclosures by BHP, the large mining company.

Mining company disclosure practices

The mining industry is a significant provider of employment and wealth. South Africa and Australia are well known for their abundance of mineral resource with both countries being in the top five producers of the world's key mineral commodities. According to The

International Marketing Council (IMC) of South Africa (2009), "South Africa accounts for over 10% of world gold production, and is the leading producer of platinum, manganese, titanium, chrome, zirconium and vanadium... It is also South Africa's biggest employer, with around 460,000 employees and another 400,000 employed by the suppliers of goods and services to the industry".

According to The Minerals Council of Australia's fact sheet (2009), the Australian minerals industry is ranked first in the world for bauxite, second for uranium and third for gold and diamonds. In the financial year from 2008-09 the minerals industry contributed 8% of GDP. The industry is the largest employer of environmental professionals. It directly employs about 133,200 people and indirectly 200,000.

The abundance of minerals has provided these two countries with great economic advantages but mining has major environmental and social consequences such as intrusion of the land, exhaustion of non-renewable resources, and higher than normal threats for health and safety of workers. These issues have prompted the mining industry to debate and devise strategies that respond to the challenge of sustainable development (Azapagic 2004).

Stakeholders in the mining industry hold varying degrees of interest in sustainability issues. According to Azapagic (2004), environmental issues such as water, energy and biodiversity conservation as well as greenhouse gas emissions will be of strong interest to insurers, local communities, local authorities, governments and NGO's, with some interest being displayed by employees, customers, shareholders and creditors. In terms of social issues such as employment, skills development, health and safety, the group of stakeholders who are strongly interested would be the same as those who are interested in the environmental issues together with employees and trade unions. Some interest would again be shown by customers, shareholders and creditors.

In terms of social and environmental disclosures, large mining companies are reported disclose heterogeneously (Jenkins and Yakovleva, 2006), each company using different approaches to disclosure (Perez and Sanchez, 2009). However, the four large mining companies studied by Perez and Sanchez (2009) have "evolved to a greater maturity level in reporting" with a "good level of transparency" and "sector relevant information" being provided. A KPMG (2006) survey found that ninety-one percent of the 50 largest mining companies in the world include sustainability information in their annual reports and 100% had sustainability information on their web sites.

The KPMG (2006) Global Mining Reporting Survey shows the reporting practices of companies in, among other countries, Australia (5 companies surveyed) and South Africa (6 companies surveyed). According to the KPMG (2006) definitions, 100% of the Australian mining companies in the survey provide detailed sustainability information, whereas only 50% of the South African companies provide detailed information and the other 50% provide basic information. All of the Australian and South African companies disclose CEO sustainability statements. Separate sustainability reports are published by 100% of the Australian companies and 83% of the South African companies (KPMG, 2006). It is important to note that these results are indicative only, because the surveyed companies do not necessarily form a representative sample and also because these large companies may be cross-listed and are, therefore, influenced by stakeholder pressures from outside their own countries.

3. AUSTRALIA AND SOUTH AFRICA: DIFERENCES AND SIMILARITIES

Australia and South Africa are different in terms of social structure. We provide some evidence below with reference to income, health and unemployment statistics. We posit that these differences result in different social priorities in the two countries. This should, in turn, lead to different levels of power for similar stakeholder groups in the two countries and to different corporate social and environmental disclosure priorities.

<<Insert Table 1 about here>>

The World Bank classifies Australia as "high income OECD" and South Africa as "upper middle income" (World Bank, 2009).^[1] However, this simple classification does not provide a complete picture. Other development indicators provided by the World Bank show that South Africa's gross national income per capita was US\$5,410 in 2006, whereas Australia's was US\$29,243. The infant mortality rate was 49.6 per 1,000 live births in South Africa and 4.8 in Australia. Life expectancy at birth was 50.7 years in South Africa and 80.3 years in Australia.

The HIV/AIDS epidemic is extraordinarily severe in South Africa with an estimated 5.2 million people living with the disease (2008), more than in any other country. The Avert HIV/AIDS organization, based in the UK, estimates the national prevalence to be around 11% with almost one-in-three women aged 25-29, and over a quarter of men aged 30-34, living with HIV. These infection rates impact the social and economic spheres considerably because the vast majority of people living with HIV are in the prime of their working lives. It also has a disturbing effect on children with over 250,000 South Africans dying of AIDS in 2008 and children being left without assets and incomes. There are 1.4 million AIDS orphans with 20% of these children usually not attending school (Avert Organization, 2009).

The South African mining industry can be a major player in this social devastation. It attracts thousands of male workers, often from poor and remote regions, who mostly live in hostels separated from their families. A thriving sex industry flourishes around many mines and HIV is spread. To combat this, mining companies have begun working with a number of organisations to implement prevention programmes for the miners with some mining companies starting to replace all-male hostels with accommodation for families.

As a direct comparison, the HIV prevalence on a population-wide basis is estimated at 18.2% in South Africa versus 0.08% (16,692 of 21,237,900) for Australia. These income differential and health statistics show some of the social differences between the two countries.

The official unemployment rate in South Africa was 23.1% (Statistics South Africa, 2009) in the second quarter of 2009. However, closer inspection show that only 44.7% of 15-64 year olds were employed and categories such as "discouraged work seekers" were not included in the unemployment percentage. Of those who are classified as "employed" in these statistics, 17.0% are in the "informal sector", signifying that they do not have regular jobs with regular pay checks subject to income taxes. In Australia, the unemployment rate was 5.9% in July 2009 with a labour participation rate of 65.3% (HRM Guide, 2009). Employment status influence social wellbeing. These unemployment statistics show another important social difference between the two countries.

In spite of these major differences, Australia and South Africa share some social characteristics. They are both democracies with freedom of expression and the media. These are important issues, because it influences the ability of stakeholders to be heard and to exert

the kind of pressure that has the potential to change corporate social and environmental reporting (Brown and Deegan, 1998).

There are also many similarities in the institutional environment that listed mining companies face in both countries. Accounting standards are similar, both countries having adopted IFRS based standards. Listed companies also face similar requirements for the disclosure of additional information. Good corporate governance practice and the disclosure thereof are encouraged in guidelines in both countries (King II in South Africa and the ASX Corporate Governance Guide in Australia). Both countries have considerable social and environmental legislation, for example requirements regarding provisions for rehabilitation after mining operations cease. These similarities in disclosure and other rules lead to similarities in SED. For example, if mines do not have to rehabilitate after operations cease, there would be no environmental liability to disclose. Furthermore, if there was a rehabilitation requirement and the accounting rules did not require disclosure, some companies could choose not to disclose. Similar rules also cause similar concerns among stakeholders, for example, shareholders may need information regarding the impact of employment or environmental rules on future business prospects.

Another interesting similarity between the mining industry in the two countries, is that the same company, BHP Billiton, is the largest in both Australia and South Africa. The company is the result of a merger between BHP (Australian) and Billiton (South African), with the result that both Australians and South Africans claim it as their own. Not only is BHP Billiton the largest, but the company is also a leader among mining companies in social and environmental reporting (Perez and Sanchez, 2009).

4. THEORY

Reactive Legitimisation

According to legitimacy theory, organisations, including companies, cannot thrive if they do not conform to societal norms (Lindblom, 1993). However, a consensus on societal norms do not necessarily exist and, therefore, companies take their cues regarding societal norms from powerful stakeholders (Unerman and Bennett, 2004). O'Donovan (2002), for example, refers to these groups as "legitimacy-conferring stakeholder groups" and thus succinctly describes the relationship between legitimacy and stakeholder concepts. Stakeholders derive their power from their ability to harness the media (see e.g. Brown and Deegan, 1998 and Deegan and Blomquist, 2006). Less powerful stakeholders are ignored or dealt with by symbolic means, which translates into less disclosure directed at them (Neu *et al.*, 1998). Managers decide how much information to disclose on different social and environmental issues (O'Dwyer, 2002). They base these decisions on their assessment of which strategies will be most successful to appease or counter powerful stakeholders (Neu *et al.*, 1998). In this way, powerful stakeholders influence corporate SED patterns. Accordingly, in South Africa, a developing country, one might expect social priorities to render stakeholder groups which aim to increase employment opportunities stronger than, for example stakeholder groups with an environmental agenda, i.e. trade unions might be stronger than Greenpeace. Conversely, in Australia, a developed country, environmental stakeholders might be stronger. Following legitimacy theory, we therefore expect South African companies to emphasise employee disclosures and Australian companies to emphasise environmental disclosures. Because we do not examine the relative power of stakeholders in the two countries directly, other more

nuanced differences reflecting different priorities and power relationships may also be revealed in other comparisons of our disclosure data.

This approach to legitimacy can be characterised as managerial, where the company is in control (Gray *et al.*, 1995). Bassu and Palazzo (2008) call this pragmatic legitimacy and differentiate it from moral and cognitive legitimacy, where the company is not in control. Moral legitimacy tends to occur when there are major changes in society and companies co-operate with stakeholders to agree on acceptable norms (Suchman, 1995). Cognitive legitimacy, the third approach, refers to firms actually changing to align themselves with perceived societal norms. This form of legitimacy seeking behaviour is, in fact, called isomorphism by DiMaggio and Powell (1983: 149).

We use the term legitimacy in this paper to refer to managerial or pragmatic legitimacy seeking strategies in response to stakeholder pressures.

Isomorphism

The concept of isomorphism is part of institutional theory and is by no means new to the accounting literature (see e.g. Lounsbury, 2008 and Tsamenyi *et al.*, 2006). Tuttle and Dillard (2007), for example use the three types of isomorphism identified by DiMaggio and Powell (1983), namely mimetic, coercive and normative. As the adjectives suggest, mimetic refers to companies benchmarking (read copying) each other, coercive refers to companies being forced into a course of action, and normative refers to professionalization of norms (Dacin, 1997). Each of the three types of isomorphism mentioned potentially influence social and environmental disclosures.

Mimetic isomorphism - Companies benchmark and follow the best practice of others in their industry (Haveman, 1993). The large multinational companies benchmark against their peers, namely other large multinationals. For example, BHP Billiton would benchmark against Rio Tinto. Smaller companies on a national scale benchmark against companies they regard as leaders in their industry on a national basis. For example, a listed South African mining company may benchmark against BHP Billiton, because the company is listed on the Johannesburg Securities Exchange. But the same may apply to an Australian listed mining company, because BHP Billiton is listed in Australia. This chain of events suggests that the social and environmental disclosures of multinational mining companies will converge over time and so will the disclosures of local mining companies.

Coercive isomorphism – The capital markets operate along similar lines in Australia and South Africa. Coercive isomorphism takes place when companies are forced to adopt similar methods in order to comply with rules and regulations. Relevant rules and regulations are enforced by government, stock exchanges, large shareholders, lenders, and others. Mining companies have similar operations and impacts on the environment and society in different countries. Legislation of mining company practice and disclosure in both countries focus on similar issues. For example, before a mining licence is issued, the authorities in both countries have to approve the environmental rehabilitation programme that will be implemented.

Normative isomorphism – “The professionalization of management tends to proceed in tandem with the structuration of an organisational fields. The exchange of information among professionals helps contribute to a recognized hierarchy of status, of center and periphery, that becomes a matrix for information flows and personnel movement across organizations” (DiMaggio and Powell, 1983: 153). Normative isomorphism takes place when norms are

internalized within the company along with outside coercive social pressure (Mizruchi and Fein, 1999). Companies sometimes become pressurized to follow best practice or normative guidelines (Dacin, 1997). (The Global Reporting Initiative (GRI) G3 guidelines propagate both principles of good social and environmental reporting and specific types of reporting. Its normative nature is revealed, for example, in the first sentence in the G3 guidelines executive summary (GRI, 2009a, p.1, our emphasis), which reads: "*The Sustainability Reporting Guidelines help organizations determine what they **should** report on and how they **should** report it.*" There is evidence that more and more companies follow the GRI guidelines. As this process gathers momentum, companies' social and environmental reporting becomes more and more alike.

Clarification of our definitions of legitimacy and isomorphism

The point of isomorphism is, of course, to increase legitimacy (Deephouse, 1996) and cognitive legitimacy seeking behaviour (actually changing) has been described as isomorphism (DiMaggio and Powell, 1983). However, we separate the concepts by defining legitimacy as managerial or pragmatic strategies, not cognitive. Furthermore, we regard any coercive influence that social and environmental stakeholders may have over individual companies as stakeholder pressure, not coercive isomorphism (because other companies are not necessarily forced to respond). Legitimacy, conceived in the way just described, suggests that managers react to powerful stakeholders with, among other things, disclosures. These disclosures will be in addition to or fit within the pattern of disclosure suggested by isomorphism. For example, as more and more companies adopt the GRI guidelines, their disclosure categories become the same. However, within a category, companies respond to their specific issues. For example, if a sludge dam burst causing the destruction of habitat and it drew the attention of powerful stakeholders, the company will disclose information about the issue under the appropriate environmental disclosure category.

To summarise this section, we expect companies to react to specific legitimacy threats with specific SED, as predicted by legitimacy theory. Due to the different social pressures and therefore different legitimacy threats in developed and developing countries, we therefore expect differences in SED between Australian and South African mining companies. We have outlined some isomorphic forces that impact the patterns and characteristics of SED. However, we expect the legitimisation efforts to be stronger and to lead to many differences.

5. METHOD

The major impact of company size and industry on SED is well known in the literature. To ensure that we control for these factors, we consider only mining companies and we match our samples for size. We include only listed companies in the interest of data availability and to ensure that the companies in our sample are adequately visible to be forced to reflect stakeholder pressures in their disclosures. To ensure that the companies in our sample reflect in their disclosures only the stakeholder pressures of their own country, we exclude cross-listed companies. There are more mining companies listed on the ASX than on the Johannesburg Securities Exchange (JSE). Thus, we start with all companies listed on the JSE and discard non-mining companies and mining companies also listed on stock exchanges in other countries. We match the resulting 18 companies with 18 listed (but not cross-listed) Australian companies based on their market values and the exchange rate on 31 December 2007. The market capitalisations of the sample firms range from \$5.3 million to \$15,067 million with a mean of \$1,777 million and a median of \$720 million, all in Australian dollars.

We analyse the 36 companies' 2007 annual reports and websites based on the GRI guideline categories and the disclosure items suggested by GRI and others combined with sentence counts based on Hackston and Milne (1996) during 2008. We count sentences (including graphs, tables, etc.) and various quality characteristics of the sentences based on Hackston and Milne (1996), because these volumes and characteristics are indications of the importance managers attach to certain topics and aspects of social and environmental issues in response to legitimacy threats. This improves on research designs where a checklist of items is used and each item is simply recorded to be present or not. We record patterns and characteristics of disclosure and not the specific information, because prior research shows that mining companies do not report the same information in the same ways (Perez and Sanchez, 2009; Jenkins and Yakovleva, 2006). This lack of consistency extends to compulsory disclosures, which managers can choose to ignore or cover in greater or lesser detail. For each sentence, we capture whether it includes monetary information, other quantitative information, specific information (but non-quantitative), or is declarative in nature. In addition, we capture whether sentences represent good, bad or neutral news from the perspective of the company. We are therefore able to compare both quantitative and qualitative aspects of the disclosure.

In the analysis, we consider social and environmental (but not the economic) disclosure items suggested by guidelines (such as the GRI G3 guideline including the mining sector supplement; SustainAbility, 2006; the International Institute for Environment and Development (2002) multi-stakeholder appraisal of sustainability in mining; and the International Council on Mining and Metals, 2002) and disclosure items suggested in prior research (such as Deegan *et al.*, 2002; Azapagic, 2004; Hackston and Milne, 1996; Davis-Walling and Batterman, 1997; Milne *et al.*, 2003). We categorise these items in the GRI categories of environment, labour, society, and products. Although corporate governance is not a separate GRI disclosure category, they have corporate governance recommendations and it is a social issue. Therefore, we classify corporate governance disclosures into a separate category as part of social disclosures.

Milne and Adler (1999) found that even inexperienced coders (their term for content analysers) can be relied on for aggregate disclosure analysis, but that they need to have coded at least 20 reports before their coding is reliable enough for detailed sub-categories. We use the services of a highly experienced coder who has, in a previous project done a Hackston and Milne (1996) type coding of 100 annual reports. In addition, one of us perform a limited audit on the coding and, after discussion with the coder, agree with her interpretation on all issues raised.

6. RESULTS

Table 2, Panel A shows the overall results. The first comparison shows the average market capitalisation of the Australian and the South African companies. The numbers are very close to each other and not significantly different. This was expected, since the matching of the samples was done on the basis of the market capitalisation. Next, the average number of sentences of social disclosure each company had in their annual reports and on their websites is compared. Also, the average number of sentences of environmental disclosure in all media is compared. Both comparisons show no statistical significance (with p-value above 0.6).

<< Insert Table 2 about here >>

Even with this absence of overall differences, there may still be underlying differences between the disclosures in the two countries. We slice and evaluate the data in several different ways to find the differences and present these comparisons in Panels B-F.

In Panel B, social disclosures are split into the GRI categories. None of the comparisons show significant differences.

We also capture whether disclosures are good, bad or neutral news from a company perspective and compare both the social and the environmental disclosures along these lines in Panel C. Again, none of the comparisons show significant differences.

The location where social or environmental information is disclosed may also differ between the countries, therefore we compare where Australian and South African companies disclose this information and report the results in Panel D. Specifically, we split social disclosures between financial statement disclosures, disclosures in the rest of the annual report, and those on websites and the same for environmental disclosures. There are no significant differences. Note that the comparison for environmental disclosure in the financial statements yields a p-value of 0.087, however, we regard 5% as the cut-off point for significance.

Panel E shows a comparison of quality of disclosure scores. This entails weighting disclosures according to the type of disclosure, i.e. monetary disclosures sentences are multiplied by 4, quantitative (but non-monetary) disclosures are multiplied by 3, specific by 2 and declarative by 1. Neither the social, nor the environmental disclosure quality scores comparisons show a significant difference between the two countries.

The comparison in Panel E can potentially still hide differences because the quality scores are aggregated. In Panel F, the number of sentences of each quality type of disclosure is compared separately. The only significant difference among the 8 comparisons is between the average volume of monetary environmental information disclosed ($p=0.008$) by South African companies (16.00 sentences) and Australian companies (5.46 sentences).

In summary, we compare a comprehensive range of characteristics of the social and environmental disclosures of Australian and South African mining companies, matched for size, with each other. Among the 30 comparisons, we find only one significant difference. This difference is that South African mining companies disclose more monetary environmental information than their Australian counterparts.

In the next section, we discuss the conclusions we draw from these findings and the implications thereof.

7. DISCUSSION AND IMPLICATIONS

Companies disclose economic, social and environmental information in their annual reports and on their websites to influence the allocation of capital and to create and maintain their corporate image thereby influencing employees, customers and other groups in society. This paper contributes to the understanding of the social and environmental corporate disclosure motivations by specifically focusing on the mining industry, and comparing two countries, one that is developing (South Africa) and one that is developed (Australia).

We expect the social differences in terms of income, health and unemployment between South Africa and Australia to influence companies' social and environmental disclosure

practices. We further expect the similarities in institutional environment between the two countries to influence companies' economic disclosure practices, but not their social and environmental disclosure.

The fact that the characteristics of the SED of Australian and South African mining companies are so similar, bring about the conclusion that the relative power of different stakeholders groups in the two countries are less important in determining SED than the various forces of isomorphism, specifically mimetic, coercive and normative isomorphism.

Companies benchmark their activities and disclosures to others within their industry. Benchmarking is normally based on best practice. Since BHP Billiton is the largest mining company both in Australia and in South Africa, it is conceivable that mining companies in both countries model their social and environmental disclosures on BHP Billiton. The Perez and Sanchez (2009) finding that BHP Billiton is a leader in SED practice lends credence to the idea that other mining companies would follow their lead. This would be an example of mimetic isomorphism.

Coercive isomorphism refers to the converging influences of institutional structures and rules on organisations. The relevant institutional structures and rules that encourage or enforce similar disclosure behaviour in this instance are, for example, accounting standards, stock exchange rules, corporate governance guidelines, and both environmental and disclosure legislation.^[2] Australian and South African accounting standards are practically identical, both being IFRS based. Stock exchange rules, corporate governance guidelines, and disclosure legislation are also similar. Several of the South African companies, for example, state in their annual reports that they comply with King II, non-compulsory recommendations similar to Cadbury in the UK. Given the similarity in the structure of the capital markets and the accounting rules in both countries, the forces of coercive isomorphism influence companies in both countries to make similar disclosures, including SED. The mechanism for the convergence of mandatory SED (e.g. environmental liabilities) is that similar employment and environmental rules lead to similar liabilities that, through similar accounting rules, lead to similar disclosure. Similar rules also lead to similar concerns by stakeholders (such as concern regarding the future business impact of rules) that managers need to address with voluntary SED.

The disclosure guidelines of the GRI are normative in nature and have gained influence due to its acceptance by professionals and their networks. For example, by requiring the accounting profession to focus on implementing GRI reporting and specifying that they be responsible for its success, acceptance by companies has become more likely (Mizruchi and Fein 1999) and many of the larger companies in the world are now following GRI guidelines (KPMG, 2008). Of specific importance here, is that BHP Billiton base their social and environmental reporting on the GRI guidelines. If mining companies in both Australia and South Africa also follow such (normative) disclosure guidelines, practice converges in normative isomorphic fashion. This is confirmed by Azapagic (2004: 640) who proposed a framework for sustainable development indicators for the mining industry which although viewed as sector-specific and compatible with the GRI general indicators were seen as contributing to "a further standardisation of sustainability reporting". An example of this is Australian company X disclosing the statement: "This report has been prepared using the internationally recognised G3 Global Reporting Initiative (GRI) framework". A similar statement was disclosed in the matching South African Company X stating "This report has been prepared using the Global Reporting Initiatives (GRI) Guidelines and the Mining and Metals Sector Supplement as a framework." Each company then provided their own self-

declared GRI application level in similar fashion. In another similarity the two companies referred to stakeholders, with Australian company X disclosing: “This report aims to present our stakeholders with information about our economic, environmental and social performance”, and South African company X stating: “This framework has been designed to provide comprehensive information to stakeholders of an organisation on economic, social and environmental performance that make up its triple bottom line.”

You may recall from the theory section that we mention DiMaggio and Powell (1983) who posit that as a field develops and matures, homogeneity increases (through isomorphism) and that as the field matures, the normative form of isomorphism becomes more and more prevalent. We observe signs that the field of corporate social and environmental disclosure is maturing, that homogeneity is now increasing and that especially normative isomorphism plays an important part in this process. We find support for our view that the field is maturing in Bebbington *et al.* (2009: 595) with their statement that SED is becoming institutionalized through the convergence of various regulative, normative (such as the GRI) and cognitive (organisations using mimicry for competitive reasons) institutions. We show this process in Table 3 that we developed based on DiMaggio and Powell (1983); Tuttle and Dillard (2007); Mizruchi and Fein (1999).

<< Insert Table 3 about here >>

Tuttle and Dillard (2007) suggest that there are three main phases in development towards homogeneity. Initially there is competitive isomorphism which is characterized by market competition that is free and open allowing diversity in approach to processes and procedures. Economic efficiency pressures drive change and innovation increases. As the field matures, stability occurs when innovations are widely adopted and routine behaviours, rather than competitive measures, become dominant in behaviour. “At this point, criteria and practices that differentiate successful members become more symbolic and ceremonial. That is, isomorphisms become institutionalized” (Tuttle and Dillard 2007: 388 - 389).

Table 3 shows the transition from a formative phase (mimetic and coercive isomorphism) to a more mature phase (normative isomorphism). While all three phases or types of isomorphism “can and, generally do, operate simultaneously” (Tuttle and Dillard 2007: 392), we show that normative isomorphism currently dominates contemporary institutional processes in SED. Norms and processes, that were previously unique to the leaders in the field of SED, have now solidified around frameworks like the GRI and become resistant to change and have now been entrenched in new institutional structures. This is the third phase, or entrenched state, envisaged by Tuttle and Dillard (2007: 391).

The disclosures of our matched sample of companies, for example, reveal that similar board committees are used in both countries to recommend SED policies and strategies; to monitor and coordinate the implementation of these strategies; and to advise on SED issues. The committees usually comprise of at least one independent director and a few members of the board with the CEO sometimes attending. Specific examples are:

- (1) Carbon Committees whose role “is to ensure that adequate resources and systems are available to meet regulatory requirements.”
- (2) Safety, Health and Environment Committees where the common theme was to identify risks, evaluate policies and practices, monitor performance and ensure thorough incident investigations.

- (3) Sustainability Committees where the role is to ensure that “effective measures, systems and controls are in place for sustainability” (Australian company) and to “facilitate and engender a culture of sustainability” (South African company).

Commonality in management structures is also evident. The annual reports disclose the creation and the expansion of responsibilities of management positions in order to manage social and environmental issues, such as the General Manager for Human Resources title being changed to General Manager, Human Resources and Sustainability to reflect the increased focus on sustainability and the attendant risks. In specific examples, Australian Company Z state that “The role of Head of Safety, Environment and Risk has been created, reporting directly to the Managing Director... The Managing Director reports monthly to the Board on all environmental and health and safety incidents”, whereas the matched South African Company Z indicated that “Strategic direction for sustainable development is managed at the corporate office level by the safety and occupational health department, and the sustainable development and environment department.” The specific examples show that similar management and board structures are used in both countries to manage social and environmental issues, including the disclosure of these issues.

Our findings suggest that patterns of SED are converging and this is because certain influences have global impact. The maturing of SED has given rise to the development of similar institutional structures in different countries. As a result, companies do not just tactically react to pressures from local stakeholders. Neither are there major differences between the innovators in SED and other companies anymore. Companies appear to take their cues from institutional structures (the capital markets) and the rules that govern them (coercive isomorphism). These structures can be remarkably similar in completely different settings. Cormier and Magnan (2003: 58) support this idea by suggesting that despite different socio-cultural environments, the globalised stock markets foster convergence between various country’s corporate practices. Companies also learn from best practice in their industry worldwide (mimetic isomorphism). However, as SED has matured, companies increasingly follow best practice guidelines worldwide, such as GRI (normative isomorphism). Delmas (2002) predicts that a standard that could clearly spell out a procedure for stakeholders to assess environmental performance within and across countries would diffuse more quickly on an international scale than a standard that is incomplete in its environmental measures. The GRI guideline is such a standard and is taking a leading role among SED standards. The three isomorphic forces collectively influence the SED practices of companies worldwide, with normative isomorphism becoming more important as the field matures.

The similarity of the managerial SED response is indicative of the managerial systematisation of SED. As a result of this systematisation, SED may be losing any unique characteristics it had over other areas of management decision-making. If this is the case, research into the motivations for SED will have to link with the general management literature.

A further insight brought by these findings is that global forces are now impacting on SED and this leads to global SED templates being applied without reference to local conditions, local stakeholders or local concerns. The idea of templates can be found in DiMaggio and Powell (1983), Tolbert and Zucker (1983) and Heugens and Lander (2009), stating that companies incorporate templates taken from the institutional environment in search of legitimacy. Heugens and Lander (2009:63), along with many others (Tolbert and Zucker, 1983; Giddens, 1984; Fligsten, 1985; Edelman, 1990; Tuttle and Dillard 2007) view this isomorphism as the sensible end state for all firms that are highly professionalized, because it increases their access to resources.

Tuttle and Dillard (2007:390) express concern that templates cause “the institutionalized practices and norms [to] become generally accepted without serious questioning as to their relevance in particular instances”. In the case of SED, these particular instances can be seen as local stakeholder needs and concerns. Templates are used to increase legitimacy, however this is achieved not by systematically engaging with stakeholders and responding to their concerns, but by a less costly and less relevant process of adopting global, un-contextualised disclosure templates.

We identified several isomorphic forces on SED and we found evidence that support a view that companies in two diverse settings display similar patterns of SED characteristics. We understand that within these similar patterns, companies can still react to specific legitimacy threats with specific disclosures to (re)gain or maintain legitimacy. However, indications are that the field of SED is maturing and that companies are now using SED templates and are institutionalizing, systematizing and managerializing the field. This implies that increased SED may in future not be indicative that companies have elevated social and environmental intentions, but rather that disclosure itself is increasingly “the right thing to do”.

8. CONCLUSION

We compare several characteristics of the social and environmental disclosures (SED) of a size matched sample of Australian and South African mining companies in their annual reports and on their websites with each other. The two countries are completely different in social makeup, one being a developed and the other a developing country. Therefore, we expect to find many differences in SED. We find only one significant difference among the 30 characteristics tested, namely that South African mining companies disclose more monetary environmental information than their Australian counterparts. In other words, the characteristics of the SED of the two groups are remarkably similar.

Even though the social structures of the two countries are different, the institutional environment for mining companies in both countries is similar. We conclude that SED is subject to many isomorphic forces related to the similarities in institutional environment. Specifically, coercive isomorphism plays a role by way of similar accounting rules, stock exchange rules, corporate governance rules, and the structure of the capital markets in the two countries. With benchmarking being a widespread business practice, mimetic isomorphism is also at work. For example, mining companies in both countries can pattern their disclosure on BHP Billiton, as their largest peer. The increased following of the GRI guidelines can be classified as a normative isomorphic force that influence convergence in SED among companies from different countries. The management literature (e.g. DiMaggio and Powell, 1983; and Tuttle and Dillard, 2007) suggests that as a field matures, as SED shows signs of doing, normative isomorphism becomes increasingly important, as the GRI guidelines are becoming.

There are many influences on corporate SED towards convergence on a worldwide scale. However, within the general disclosure structure, companies will still react to legitimacy threats with specific disclosures. The realisation that isomorphic forces causes convergence in the SED practices of companies alters the interpretation of the disclosures, i.e. disclosure to conform rather than disclosure to show concern. We regard this conformance as evidence that SED has become another matter that needs to be managed. Therefore, extensive or "good" SED may be more indicative of good management talent in a firm than of management intent regarding social and environmental issues. Managers use SED templates that were developed

independent of local issues and concerns to (re)gain local legitimacy and deflect local criticism. This form of free of context legitimacy seeking behaviour can be seen as a further nuance in the development of legitimacy theory and in particular in its application to SED. Furthermore, this insight may cause future research into the motivations for SED to take a general management research perspective, i.e. SED as an example of a management issue and not as a unique social and environmental issue with unique characteristics.

No two companies disclose exactly the same information in the same way. In any study of this nature, characteristics and patterns of disclosure are compared. Similar to other studies, our method of capturing and comparing disclosures can be a limitation. Having said that, we follow the GRI guidelines to indentify the types of disclosures and we include many different quantitative and qualitative measures of disclosure suggested by the prior literature. We realise that disclosure characteristics can be the same whilst the specific information differ. Therefore, we comment and conclude only on disclosure characteristics and patterns. It is within these patterns of disclosure that we see signs of SED maturing and converging to the global GRI template.

NOTES

[1] Based on 2008 GNI per capita, with upper middle income being \$3,856 - \$11,905, and high income being \$11,906 or more.

[2] Stakeholder groups (e.g. environmental groups) can also play a role in coercive isomorphism, but you may recall that in this paper, we regard this as stakeholder pressure dealt with by way of disclosure specifically designed to gain or maintain legitimacy.

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Table 1: Social Differences between Australia and South Africa

	Australia	South Africa
Status	Developed	Developing
Income	High	Upper Middle
Gross national income per capita (2006)	US \$29,243	US \$5,410
Infant mortality rate per 1,000 live births	4.8	49.6
Life expectancy at birth	80.3 years	50.7 years
HIV prevalence among 15 – 49 year old	0.08 %	18.2 %
Official Unemployment rate	5.9 %	23.1 %

Table 2: Mining company social and environmental disclosures in annual reports and on websites

Average number of sentences	Australia			South Africa			ANOVA	
	Mean	Std Dev	n	Mean	Std Dev	n	F-stat	P value
Panel A: Overall								
Size (market capitalisation) AUS \$ million	1814.657	3615.118	18	1738.318	3615.402	18	0.004	0.950
Social disclosure	279.333	196.972	18	334.667	433.722	18	0.243	0.625
Environmental disclosure	98.056	126.850	18	120.278	169.833	18	0.198	0.659
Panel B: Social disclosures by GRI disclosure category								
Labour practices	210.611	156.585	18	219.778	298.056	18	0.013	0.909
Society	41.389	52.229	18	105.765	141.566	17	3.115 [Ⓢ]	0.093 [Ⓢ]
Products	5.333	4.042	3	2.333	2.805	6	1.750	0.227
Corporate Governance	26.444	43.176	18	14.222	10.957	18	1.355	0.252
Panel C: By Good, Bad, Neutral news from a company perspective								
Social - good news	31.944	21.217	18	58.056	69.778	18	2.307 [Ⓢ]	0.144 [Ⓢ]
Social - bad news	5.750	3.334	12	8.929	9.683	14	1.325 [Ⓢ]	0.266 [Ⓢ]
Social - neutral news	243.556	182.923	18	269.667	360.132	18	0.075	0.786
Environment - good news	17.333	18.901	15	12.588	14.833	17	0.632	0.433
Environment - bad news	5.857	7.988	7	9.500	11.263	8	0.507	0.489
Environment - neutral news	81.333	107.004	18	104.167	147.773	18	0.282	0.599
Panel D: By disclosure medium								
Social - Annual report	218.500	126.019	18	233.833	273.457	18	0.047	0.830
- Social - Financial Statement	71.944	52.352	18	59.294	79.180	17	0.314	0.579
- Social - Rest of Annual Report	146.556	100.025	18	177.833	198.738	18	0.356	0.555
Social - Website	84.231	103.169	13	121.000	174.797	15	0.441	0.513
Environment - Annual report	44.278	51.961	18	84.882	101.783	17	2.247	0.143
- Environment - Financial Statement	13.385	8.262	13	22.625	18.453	16	3.218 [Ⓢ]	0.087 [Ⓢ]
- Environment - Rest of Annual Report	34.611	46.716	18	63.588	91.172	17	1.424	0.241
Environment - Website	80.667	126.945	12	51.571	77.717	14	0.513	0.481
Panel E: By Quality scores (not sentences)								
Social disclosures	492.944	331.600	18	532.722	686.176	18	0.272	0.605
Environmental disclosures	145.222	201.672	18	182.833	229.983	18	0.049	0.826
Panel F: Monetary, Quantitative, Specific, Declarative								
Social - Monetary	40.765	26.054	17	26.938	25.684	16	2.354	0.135
Social - Quantitative	43.529	29.557	17	49.278	69.569	18	0.099	0.755
Social - Specific	20.429	25.919	14	35.571	63.524	14	0.682	0.416
Social - Declarative	183.833	136.036	18	233.778	291.890	18	0.433	0.515
Environment- Monetary	5.462	5.043	13	16.000	13.221	16	8.622 [Ⓢ]	0.008 [Ⓢ]
Environment- Quantitative	48.500	48.661	6	16.375	19.639	8	2.920	0.113
Environment- Specific	7.714	10.563	7	9.600	13.525	10	0.095	0.762
Environment- Declarative	74.944	93.553	18	93.444	140.450	18	0.216	0.645

Ⓢ = F-stat and P-Value from Welch and Brown - Forsythe Test as Homogeneity of Variance test was significant.

The table reports the mean number of sentences disclosed by companies in various categories, unless otherwise stated. Means are based on the number of companies disclosing (indicated), not the number of companies in the sample. Market capitalisation figures are for 31/12/07. Quality scores are calculated by multiplying monetary sentences by 4, other quantitative sentences by 3, specific by 2 and declarative by 1.

Table 3: The development of isomorphism over time (Homogeneity Increases with Maturity)

	MIMETIC	COERCIVE	NORMATIVE
PHASE	Formative phase	Formative phase	Field Matures
CHARACTERISTICS	Standard responses to uncertainty	Political Influence and the problem of legitimacy	Professionalization
FORCES	Clear course of action is unavailable. Best response is to mimic a peer perceived to be successful	External pressure from other organizations on which the organization is dependent. Internal pressure to conform to cultural expectations of the larger society	Members of the profession receive similar training and also interact through professional and trade associations, which socializes them into similar worldviews and diffuses ideas among them
RESPONSE	Copying superior performances	Conformance to demands	Conformance to expectations
CHANGE	Voluntary	Imposed or mandated	Persuaded to follow norms
PROCESSES	Benchmarking Identifying best practices Identify leading players	Informal or formal influences Persuasion Invitation to collude	Internalization of established norms and values Disseminate through social or peer networks Social pressure by members of other organizations
EXAMPLE	Organizations tend to follow the behaviour of both large others and highly profitable others	SED in response to real or anticipated pressure from actors in the environment	Response to communication with peers or to common socialization experiences that create certain views about SED
THEORETICAL BASE	Unique to DiMaggio and Powell (1983) Ecology model?	Resource Dependent Model	Network Analytic Formulations
Each mechanism involves a separate process, but two or more could operate simultaneously and their effects will not always be clearly identifiable (Mizruchi and Fein 1999)			
EXAMPLE OF OPERATING SIMULTANEOUSLY	Attributes arising from copying superiorly performing actors may become part of the professional standard of behaviour. (Normative)	Demands from external sources may become recognized as part of the professional standard of behaviour. (Normative)	

Adapted from: DiMaggio and Powell (1983); Tuttle and Dillard (2007); Mizruchi and Fein (1999)