Integrated reporting in South Africa: some initial evidence

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Abstract

Purpose – This study aims to examine whether the integrated reports prepared in accordance with the King III Code of corporate governance regulation are providing the information intended of an integrated report, i.e. to communicate the "ability of an organisation to create and sustain value". Second, it explains the behaviour of companies listed on the Johannesburg Stock Exchange (JSE) when responding to the regulation to publish an integrated report. The King III Code of corporate governance requires companies listed on the JSE to prepare annually an integrated report or provide reasons for not doing so.

Design/methodology/approach – This paper uses legitimacy theory to formulate two alternative propositions on how JSE-listed companies may disclose information relating to a number of capitals, as described by the International Integrated Reporting Committee, in response to the King III Code. Annual/integrated reports of the top 25 JSE listed companies for the years 2009/2010 and 2011/2012 are content-analysed for the presence of information on capitals. The change in the extent of disclosure of capitals is analysed using *t*-tests to test the propositions.

Findings – The results show that the introduction of integrated reporting in South Africa has resulted in an increase in the extent of disclosure of human, social and relational, natural and intellectual capital information of the listed companies. The increment in the disclosure of social and relational capital is statistically significantly greater than the increment in the disclosure of other capitals. The findings indicate that JSE-listed companies are adopting a legitimation strategy based on symbolic management when preparing integrated reports.

Practical implications – This study sheds light on the relevance of regulating corporate reporting within a setting where companies are already voluntarily reporting on social, environmental, human, intellectual and natural capital information. Findings have implications for policymakers who have mandated or considering mandating integrated reporting. To the South African policymakers, in particular, this study highlights the need for incorporating, within the listing rules, minimum requirements in relation to the nature and content of an integrated report.

Originality/value – This paper provides the first initial evidence on the impact of the introduction of integrated reporting regulation, followed by limited guidance to preparers, on the nature and extent of disclosure of capitals. This study extends the work of Solomon and Maroun (2012) by explaining disclosure practices of South African-listed companies in relation to information on relational, human and intellectual capital.

Keywords Intellectual capital, South Africa, Integrated reporting, Human capital, Capitals

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1. Introduction

The past 30 years have seen substantial progress made by companies in complementing financial reporting with a broader range of non-financial information. Top companies in the world are now providing more information about their corporate sustainability and governance (KPMG, 2011). Also, the number of companies providing such information has increased steadily (Albertini, 2014). Despite the progress, concerns remain about the representational faithfulness and relevance of such disclosure. In particular, corporate sustainability reporting is criticised from a social justice perspective for not faithfully representing companies' sustainability performance and ignoring important issues (Gray, 2010; Milne and Gray, 2013). Moreover, critics argue that sustainability reports are disconnected from the organisation's financial reports; rarely link sustainability concerns with organisation strategy; and fail the tests of credibility, materiality and relevance to investors. The lack of systematic disclosure of corporate value creation processes and intangible drivers of value, such as intellectual capital, is another limitation that has been highlighted (Guthrie *et al.*, 2012). When companies disclose non-financial information, be it for compliance or other reasons, very little effort has been made to link discrete pieces of information coherently to tell the story of organisational value creation.

A novel approach to corporate reporting that is intended to overcome these limitations, enabling investors to obtain a broader and holistic view of organisational value creation and performance is integrated reporting (Eccles and Krzus, 2010; IIRC, 2011; PriceWaterhouseCoopers, 2012a):

> An integrated report is not simply an amalgamation of the financial statements and the sustainability report […] An integrated report should provide stakeholders with a concise overview of an organisation, integrating and connecting important information about strategy, risks and opportunities and relating them to social, environmental, economic and financial issues (Integrated Reporting Committee of South Africa [IRCSA], 2011, p. 2).

The focus of integrated reporting is different to that of traditional sustainability reporting, which solely concerns organisation's environmental, social and governance (ESG) performance or explain "value-to-society" (EY, 2014; Flower, 2014; Tweedie and Martinov-Bennie, 2015). At the heart of integrated reporting is capital market efficiency – "bridging the gap between management's value creation story and investors' assessment of business value and stewardship" (KPMG, 2012, p. 5), and it aims to support the providers of financial capital in their capital allocation decisions. Due to its emphasis on "value-to-investors" (Flower, 2014) integrated reporting does not claim to address all the problems endemic to sustainability reporting. However, corporate sustainability performance is an integral part of an integrated report insofar as it affects company's value creation over time. Integrated reporting acknowledges that long-term business survival and growth depends on effectively addressing the growing social, environmental and economic challenges (IRCSA, 2011). Moreover, by attempting to shift financial capital from a short- to long-term investment horizon, integrated reporting arguably progresses sustainability goals (Tweedie and Martinov-Bennie, 2015).

South Africa is an early adopter of integrated reporting and is the only country to have regulated such reporting at present. The King Code of Corporate Governance 2009 (King III Code), which was incorporated into the listing rules of the Johannesburg Stock Exchange (JSE), adopts an "apply or explain" approach to corporate governance and requires all listed companies to issue an integrated report for financial years starting on or after 1 March 2010 or provide reasons for not doing so. However, very limited guidance on what comprises an integrated report is provided in the King III Code, leaving companies with considerable discretion in determining the format, structure and content of an integrated report. To address this gap, the IRCSA has issued a discussion paper providing some guidance. From September 2011, companies also had at their disposal guidance provided by the International Integrated Reporting Committee (IIRC) in the form of a discussion paper, although, not specifically designed for South Africa. The limited guidance in the King III Code and non-binding nature of both the discussion papers provides a setting for regulated companies to exercise their judgement on how best to comply with the King III Code.

This study has two purposes. First, it examines whether the regulatory requirement to publish an integrated report, on an apply or explain basis, has resulted in increased disclosure of information on the "ability of an organisation to create and sustain value". This is important because according to the IRCSA Discussion Paper the overarching objective of integrated reporting is to "enable stakeholders to assess the ability of an organisation to create and sustain value over the short-, medium- and long-term" (IRCSA, 2011, p. 1). Because the intention of the regulation is to promote greater transparency around organisational value creation, this study provides initial evidence on how the regulation is achieving its intended purpose. Towards this end, we compare the extent of relevant disclosure made by a sample of JSE listed companies before (2009/2010) and two years after the regulation (2011/2012). We operationalise the factors of organisational value creation using the concept of capitals which is a fundamental concept in the integrated reporting framework (hereafter <IR> Framework) issued by the International Integrated Reporting Council (formerly Committee) [IIRC]. It can be expected that JSE listed companies were aware of the fundamental concepts of integrated reporting, including the capitals[1] when preparing integrated reports for 2011/2012, as the IIRC's first discussion paper explaining these aspects was available since September 2011.

Second, this study aims to explain the behaviour of JSE-listed companies when responding to the regulation to publish an integrated report. We use legitimacy theory to formulate two alternative propositions on how JSE listed companies may disclose information relating to a number of capitals. The propositions are informed by two micro-legitimisation strategies (i.e. substantive management and symbolic management) that are likely to be used in a non-voluntary disclosure environment. By testing legitimacy theory in a unique setting characterised by limited guidance for report preparers and extending it, for the first time, to explain integrated reporting, we respond to calls for an extension of legitimacy theory to new settings.

The importance of this study lies in the practical and theoretical insights it generates for the progression of integrated reporting in South Africa, and possibly in other countries. First, it informs about the effectiveness or lack thereof of having a loosely regulated environment for integrated reporting. Second, it highlights where policy initiatives are necessary for improving integrated reporting practices of companies. Third, the findings of this study contribute to the development of the concept of capitals and related guidelines for reporting on capitals in integrated reporting, by empirically testing its application. Finally, we provide evidence on cross-sectional variations in disclosures relating to integrated reporting in JSE-listed companies with a view to highlighting deficiencies and best practices.

This paper makes several contributions. First, it adds to the non-financial disclosure literature by explaining corporate reporting practices of "factors affecting of an organisation to create and sustain value" when preparing an integrated report. In doing so, the paper sheds light on the relevance of regulating corporate reporting within a setting where companies are already voluntarily reporting on social, environmental, human, intellectual and natural capital information (Dawkins and Ngunjiri, 2008; Maubane *et al.*, 2014; Wagiciengo and Belal, 2012). In particular, we extend the work of Solomon and Maroun (2012) by investigating the extent of change in human, relational and intellectual capital disclosures in addition to social and environmental disclosure when moving from a unregulated to a regulated environment for integrated reporting. The importance of examining disclosure of human, relational and intellectual capital as part of integrated reporting lies in the fact that they are considered as important factors of organisational value creation and fundamental components of an integrated report (IIRC, 2013b).

Second, the paper contributes to the refinement of legitimacy theory by testing its application in a loosely regulated setting to examine how the regulation of integrated reporting affects voluntary disclosure of different types of non-financial information (or capitals). Despite the extensive body of research that tests the application of legitimacy theory to sustainability disclosure, accounting researchers still see it as an underdeveloped theory (Bebbington *et al.*, 2008) with room for further refinement (Archel *et al.*, 2009). Prior literature has mainly tested the explanatory power of legitimacy theory in voluntary reporting settings. Application of legitimacy theory to integrated reporting, particularly to explain reporting of capitals, and to a semi-regulatory setting, are novel aspects of this study. Third, we develop and use a disclosure index for measuring the disclosure of the various capitals. Given that research on integrated reporting related disclosure is still in its infancy, this index can be the point of departure for more refined disclosure indices. Our findings have implications for policy setters who have mandated or are considering mandating integrated reporting.

2. Integrated reporting in the South African context

The development of integrated reporting in South Africa should be discussed within the context of its background and regulation of corporate sustainability and sustainability reporting. One of the primary catalysts for the development of corporate sustainability in South Africa is considered to be regulation put in place especially in the post-apartheid period (Visser, 2005). In 1994, the African National Congress (ANC) launched the Reconstruction and Development Programme (RDP) to address economic, social, legal, political, moral, cultural and environmental problems that were facing the country. Invariably, this also set the broad tone for a corporate sustainability agenda. The period from 1994-2004 saw the enactment of a wave of legislation that had direct or indirect implications for corporate sustainability (Visser, 2005). While legislation seemed to have driven companies to be environmentally and socially responsible in the 1990s (KPMG, 1997), the new millennium provided a business case to continue with an environmentally and socially responsible agenda (Trialogue, 2004)[2]. In addition, matters relating to the "second phase" of Black Economic Empowerment (BEE)[3], HIV/AIDS and South Africa's re-entry into the international community were significant catalysts for furthering the corporate sustainability agenda in post-apartheid South Africa.

Commensurate with these socio-political developments, a culture of sustainability reporting was being created (Visser, 2005). In 2002, with the release of the King II Code on Corporate Governance (King II Code) and its incorporation into the JSE-listing rules, South Africa became the first country in the world to require companies to report on the nature and extent of social, transformation, ethical, safety, health and environmental management policies and practices by way of an integrated sustainability report (IoDSA, 2002). This was intended to shift the emphasis of corporate reporting from the single "bottom line" (i.e. financial) towards a "triple bottom line" (Wagiciengo and Belal, 2012). The positive impact of this regulation becomes apparent with the evidence that more than 88 per cent of the top 100 JSE-listed companies in 2006 were reporting on aspects such as environment, community, diversity and employee relations, while a comparative group which comprised Fortune Global 100 companies was significantly lagging behind (Dawkins and Ngunjiri, 2008). This increase in sustainability reporting was also fuelled by the introduction of the JSE Socially Responsible Investment Index (JSE SRI) in May 2004. JSE SRI uses Global Reporting Initiative (GRI) guidelines as a point of reference and, as a result, provides a guide for companies to report on corporate sustainability (Maubane *et al.*, 2014).

In another world first, the King III Code, issued in 2009, introduced a requirement to prepare an integrated report. This Code was incorporated into the JSE listing rules, and as a result, all JSE listed companies are required to prepare an integrated report or explain reasons for non-compliance. The King III Code describes that an integrated report should enable financial results to be put in perspective by also reporting on "how the company has both positively and negatively impacted on the economic life of the community in which it operated during the year under review", often categorised as ESG issues. Further, it should report "how the company intends to enhance those positive aspects and eradicate or ameliorate the negative aspects in the year ahead" (IoDSA, 2009, p. 4). The emphasis on reporting on the company's impact on the community in this Code is interesting, as it implies that the readership of an integrated report is much broader than providers of financial capital. This highlights an embodiment of a "value-to-society" perspective, in line with the tradition of sustainability reporting, rather than a "value-to-investors" perspective underpinning integrated reporting as explained by the IIRC. Thus, we see the influence of the historical significance of social issues and a long tradition of strong sustainability reporting in the conceptualisation of integrated reporting in South Africa.

However, the "value-to-society" emphasis seems to have been later abandoned as can be seen from the discussion paper published in January 2011 by the IRCSA, which provides a framework for integrated reporting in addressing the lack of guidance in the King III Code (IRCSA, 2011). The following statement in the Discussion Paper highlights that the focus is now on the impact of sustainability issues on the business rather than the businesses' impact on the society and the environment:

> The users of an organisation's integrated report should be able to determine from the report whether the organisation's governing structure has sufficiently applied its collective mind in identifying the social, environmental, economic and financial issues *that impact on the*

organisation's business, and whether these issues have been appropriately incorporated into its strategy (emphasis added) (IRCSA, 2011, p. 2).

While a detailed analysis of the Discussion paper for evidence of an investor focus is beyond the scope of this study, it is important to note that even in identifying material issues for reporting the discussion paper recommends a company to consider those "that are relevant to the organisation's current and anticipated activities" (IRCSA, 2011, p. 13). A similar approach is advocated by the IIRC. It states that while the ability of an organisation to create value for itself is interrelated with the value the organisation creates for stakeholders and society, it should be included only when material to the organisation's ability to create value for itself. Arguably, integrated reporting, as conceived by both IIRC and IRCSA, turns a blind eye to the harm inflicted on the society and environment, if such action has no subsequent impact on the organisation (Flower, 2014; Thomson, 2014). Undoubtedly, this marks a significant change in policy direction as far as sustainability accounting is concerned and makes integrated reporting as adopted in South Africa broadly consistent with that advocated by the IIRC. Flower (2014) argues that while having commenced with the focus of developing a "globally accepted framework for accounting for sustainability"[4], IIRC abandoned this ideal in the various iterations of the <IR> Framework in favour of providing information more relevant to capital providers (see, Flower, 2014). Due to the explicit acknowledgement of the primacy of financial capital providers IIRC recognises that other reports such as sustainability reports may be needed to satisfy the information needs of other stakeholders (Flower, 2014). In contrast, the King III Code advocates a single integrated report for JSE listed companies.

The redefinition of the integrated report in the Discussion Paper arguably creates a dilemma for JSE-listed companies. On the one hand, the guidance in the Discussion Paper results in a dilution of sustainability disclosures. On the other hand, to comply with the King III Code, companies are still required to disclose their sustainability performance (Section 9.1.4) and positive and negative impacts of their operations (Section 9.3.4) within an integrated report. At the same time, one would expect corporate reporting to be influenced by companies' and a country's long tradition and culture of sustainability accounting. Our investigation of the impact of the requirement to prepare an integrated report enables greater understanding regarding how these competing interests are addressed.

3. Literature review

3.1 Is integrated reporting a solution or a problem?

Traditionally, financial information has been adequate for assessing organisational value. However, current trends in the business environment, such as globalisation, changing accounting perspectives, increased stakeholder expectations and the transition to a knowledge economy have impacted the value relevance of financial statement information (Ashton, 2005; Brown *et al.*, 1999). It has been found that financial analysts, fund managers and investors rely on information beyond the financial statements to judge organisational value (Abhayawansa and Guthrie, 2014; Ghosh and Wu, 2012; Holland, 2006; Liang and Yao, 2005; Orens and Lybaert, 2010). There is a growing demand from various stakeholders for non-financial information (Cascino *et al.*, 2013; Holland, 2004; Langfield-Smith *et al.*, 2009). Company managers, having identified this, have experimented with various initiatives in non-financial reporting, including human capital, triple bottom line (TBL), social and environmental, sustainability and intellectual capital reporting. Despite these developments, a criticism that continues to be echoed in various quarters is the lack of integration between financial and non-financial performance (de Villiers *et al.*, 2014; Hubbard, 2009; Parrot and Tierney, 2012; Skouloudis *et al.*, 2014). Given this backdrop, integrated reporting, whose purpose is to provide a broader and more holistic view of organisational value creation and performance (Eccles and Krzus, 2010; IIRC, 2011; PriceWaterhouseCoopers, 2012a), has been welcome by many constituents including large accounting firms, professional accounting bodies, regulatory bodies and supranational organisations with an interest in corporate reporting (de Villiers *et al.*, 2014).

One of the notable strengths of integrated reporting is its requirement for non-financial elements to be incorporated and integrated, not only for reporting but also in every decision-making process of an organisation. Hence, proponents of integrated reporting promote it as not only an improved reporting tool but also an effective management instrument that is capable of driving positive changes in corporate behaviour. Adams (2015) suggests that the practice of integrated reporting brings about improvement in organisations' decision-making, communication, materiality determination and risk management processes. Better decision-making results from integrated reporting, as it encourages management to recognise and appreciate non-financial elements in decision-making (Hampton, 2012) and think beyond short-term goals and out of the confinements of the profit maximisation (Adams and Whelan, 2009). Integrated reporting also assists organisations in adapting to changing business expectations, providing more meaningful accounts of organisations' performance to a wide range of stakeholders (Eccles and Krzus, 2010) and meeting increasing information demand from stakeholders. Lodhia (2014) argues that integrated reporting achieves better cross-departmental communication as it helps break down organisational silos: the production of an integrated report requires contribution from and cooperation between disparate departments within the organisation. Stubbs and Higgins (2014) show that the process of integrated reporting enables finance and strategy teams to work together to provide a broader and more connected account of organisational performance than is provided by traditional financial and sustainability reporting. Eccles and Armbrester (2011) argue that integrated reporting, by driving its adopters to formulate a sustainable strategy to generate value in the medium- and long-term and communicate it to stakeholders, helps drive the firms' share price higher. In a study of South African executives, Steyn (2014) finds that the respondents fully support the attainment of expected benefits of the integrated reporting processes and believe that such benefits will exceed the costs involved in implementing integrated reporting. The study revealed that listed companies recognise the contributions of the integrated reporting process primarily from the perspective of corporate reputation, investor needs and stakeholder engagement and relations. These benefits sufficiently strengthen the business case for voluntary integrated reporting.

The view held by proponents and instigators of integrated reporting that it will lead to sustainable development has come under heavy criticism. One of the main criticism is that integrated reporting embraces the notion of "value-to-investors" and focuses excessively on the information needs of providers of financial capitals (Cheng *et al.*, 2014; de Villiers *et al.*, 2014; Flower, 2014). Due to its narrow focus on investors, Flower (2014) warns about an abandoning of sustainability stakeholders by reporting organisations, and van Bommel (2014) argue that integrated reporting is unlikely to forge a legitimate compromise with a broader range of stakeholders, especially sustainability stakeholders. Brown and Dillard (2014) contend that integrated reporting has not accommodated divergent environmental, social and political discourses, hence failing to advance sustainability practice and conditions of adopting organisations.

Others criticise the attempt to integrate sustainability and profit maximisation objectives through integrated reporting. According to Thomson (2014), it is inappropriate to degrade sustainability management as a part of profit making mechanism, and warns that integrated reporting may be manipulated by organisations to cover their business-as-usual activities and unsustainable behaviour. Flower (2014) delves into this argument, paying particular attention to the requirement of reporting on capitals, which is advocated by IIRC. The <IR>Framework allows trade-offs between different types of capital as long as the total stock of capitals increases. However, such trade-offs, according to Flower (2014), are problematic if they involve a loss in natural capitals, which will deteriorate future sustainability. As the framework permits those trade-offs to take place, it inadvertently justifies unsustainable activities in which organisations exploit natural capitals to generate other types of capitals, including financial capitals. Milne and Gray (2013, p. 20) conclude that:

> […] should IR take over from GRI and TBL as the focus of choice, then we will be heading even further away from any plausible possibility that sustainability might be seriously embraced by any element of business and politics.

Researchers express reservations about the practical implementation of integrated reporting. Stubbs and Higgins (2014) investigate the practice of integrated reporting in Australia and concludes that at the present stage, it is in an incremental phase of sustainability reporting instead of being an influential practice that transforms corporate behaviour. They speculate it will take more time before innovative disclosure mechanisms emerge through integrated reporting. Solomon and Maroun (2012) analysed the integrated reports of ten South African companies and questions whether corporate behaviour has improved due to integrated reporting or it has just resulted in empty rhetorical statements. KPMG (2012) argues that full adoption of integrated reporting is a journey of three to five years for many organisations and the implementation may pose some challenges as it requires organisational change at all levels and problems associated with efficient gathering of non-financial information. Ernst & Young Global Limited (2013) also lists various obstacles, such as availability of limited guidance on preparing integrated reports in South Africa, few published examples and conceptual ambiguity arising from potentially conflicting guidance issued by the IIRC and IRCSA. Similarly, de Villiers *et al.* (2014) identify communication of non-financial risks and opportunities, integrating strategy and sustainability, trade-offs between different capitals and the assurance of integrated reports as important areas of improvement for the successful implementation of the IR.

3.2 Integrated reporting related disclosure research

Companies have been publishing self-declared integrated reports since 2002. However, it was not until recently the relevance of this form of reporting was formerly recognised by the mainstream accounting fraternity (ACCA, 2012). Perhaps due to its novelty, little empirical research has been published in peer-reviewed academic outlets about how companies prepare integrated reports or the content of those reports. Some empirical academic work has nonetheless been commissioned by professional accounting bodies and large international accounting firms (ACCA and The Net Balance Foundation, 2011; Ernst & Young, 2012; GRI, 2013; PriceWaterhouseCoopers, 2012b; Solomon and Maroun, 2012). Also, there is, some research on the drivers of preparing integrated reports (e.g. Frias-Aceituno *et al.*, 2013, 2014, 2013; García-Sánchez *et al.*, 2013; Jensen and Berg, 2012).

A review of this work reveals that integrated reporting is still in its developmental and trial phase. A survey of integrated reports from South Africa's top listed companies and top state-owned entities found that only a few leading organisations can be assessed as excellent in terms of the level of adherence to what an integrated report is envisaged to comprise (Ernst & Young, 2012). According to an evaluation of the integrated reports of the top 40 companies in The Netherlands, only six were scored strongly on the adequacy of coverage of IIRC content elements (PriceWaterhouseCoopers, 2012b). The pattern is repeated in Australia with only nine out of the 50 largest Australian listed companies adequately communicating the importance of ESG matters to their core business (ACCA and The Net Balance Foundation, 2011). The main weakness of most integrated reports is the lack of connectivity made between non-financial and financial performance and risks (ACCA and The Net Balance Foundation, 2011; Ernst & Young, 2012). An analysis conducted by GRI (2013) of 756 self-declared integrated reports published between 2010 and 2013 revealed that half of them comprised an annual report and a sustainability report combined with little cross referencing.

More positively, most of these studies identify an increase in the level of environmental and social information provided within the integrated reports between 2010 and 2012. This period overlaps with the introduction of the requirement to prepare an integrated report in South Africa and the issuance of the prototype framework by the IIRC. Solomon and Maroun (2012) analysed the annual/integrated reports of ten major JSE-listed companies immediately before (2009) and after (2010-2011) the introduction of integrated reporting to assess its impact on social, environmental and ethical disclosures. The study revealed that the introduction of integrated reporting has resulted in an increase in the extent of social, environmental and ethical disclosure, with a marked increase in the quantity of social information. The number of sections of the annual/integrated report in which social information appeared had also increased during the investigated period. The study saw a growing focus on risk and risk management, most notably risk implications of non-financial information. Also, Ernst & Young (2012) found a significant increase in the disclosure of stakeholder related information (e.g. identifying the company's stakeholders, company's interactions with them and what is important to them) in companies listed on the JSE and South African state-owned entities.

Our review of the literature identifies that while companies vary significantly in terms of the level of integration of non-financial and financial performance/risks with the majority falling to the lower end, most have increased the extent of non-financial information disclosed. However, either owing to the lack of methodological rigour or having predominantly a professional focus, it is difficult to understand from the reviewed literature the specific nature of the type of non-financial information investigated and the extent of their disclosure. The present study addresses these limitations and the lack of scholarly research on the integrated reporting practices of organisations.

4. Theory and development of research propositions

4.1 Legitimacy theory

Organisational legitimacy theory suggests that the justification of an organisation's role in the society, and thus its existence and success, depends on it being perceived as legitimate (Dowling and Pfeffer, 1975). Legitimacy enables an organisation to attract resources and gain the continued support of constituents (Ashforth and Gibbs, 1990). Legitimacy is conferred upon or attributed to an organisation when its means and ends appear to conform to social norms, values and expectations (Ashforth and Gibbs, 1990; Dowling and Pfeffer, 1975). By agreeing to act within the bounds of what society identifies as socially accepted behaviour in exchange for legitimacy the organisations enters into a social contract (Deegan, 2002).

According to Suchman (1995), legitimacy is a resource that can be managed by focusing on the organisation's communication with various stakeholders. This is because organisational legitimacy is a direct result of how stakeholders perceive the organisation (Suchman, 1995) and lack of stakeholder awareness about the organisations performance on the terms of the social contract can result in a legitimacy gap (Deegan, 2002). Accounting reports are considered social, political and economic documents (Guthrie and Parker, 1990) that facilitate organisations in gaining and maintaining organisational legitimacy (Chu *et al.*, 2013). Differences in the extent of disclosure of social, environmental and intellectual capital information are considered to be a systematic function of organisational legitimacy-seeking behaviour (e.g. Abhayawansa and Azim, 2014; Cowan and Deegan, 2011; Deegan and Gordon, 1996; Patten, 2002a; Tilling and Tilt, 2010).

A legitimacy gap could arise due to changing societal values, norms and expectations even when companies' operations have not altered (Wartick and Mahon, 1994). Prior research shows that changing social awareness (Choi *et al.*, 2013; Freedman and Jaggi, 2005), media influence (Brown and Deegan, 1998; Deegan *et al.*, 2002), interest group pressure (Deegan and Gordon, 1996) and regulatory changes (Cowan and Deegan, 2011; Patten, 2002a) can alter social expectations (O'Donovan, 2002) and create a legitimacy gap. The change in the regulatory environment for JSE-listed companies requiring them to prepare an integrated report arguably constitutes such a change.

A legitimacy gap can be addressed by implementing legitimation strategies, which could vary between "making real, material changes in organisational goals, structures, process and socially constituted practices" (substantive management) and portraying "them so as to appear consistent with social values and expectations" (symbolic management) (Ashforth and Gibbs, 1990, pp. 178-180). Substantive management may result in "consequential legitimacy", if organisational accomplishments are consistent with socially expected accomplishments, and/or "procedural legitimacy", if the organisational practices used to achieve the accomplishments are consistent with socially accepted practices (Suchman, 1995). They are both classified as "moral legitimacy" strategies. Akin to symbolic management is Suchman's (1995) concept of "dispositional legitimacy". Kim *et al.* (2007) found that substantive management is more effective than symbolic management in managing stakeholder perceptions.

Meznar and Nigh (1995) discuss two strategies entitled "bridging" and "buffering". Bridging is similar to substantive management where organisational activities are adapted to conform to societal expectations. Buffering is concerned with insulating the organisation from external interferences or influencing the external environment through political action, lobbying, and advocacy advertising. It is generally agreed that even actual changes that an organisation has made in its operations and activities need to be appropriately communicated from a legitimation point of view (Cormier and Gordon, 2001; Lindblom, 1994). Lindblom (1994) suggests three additional legitimation strategies using corporate disclosure: changing the relevant public's perception about the organisation's activities and operations; deflecting the attention of the relevant public from the issue at hand; or change the expectations of the relevant publics of its performance (Gray *et al.*, 1995; Lindblom, 1994). Companies may choose to use more than one of these strategies at a point in time.

Prior research shows that the legitimation strategies of companies depend on whether they are attempting to gain, maintain, repair or defend legitimacy (O'Donovan, 2002). Maintaining legitimacy is considered to be easier than gaining or repairing legitimacy, as it generally requires maintaining relationships with stakeholders (O'Donovan, 2002). The current situation facing JSE-listed companies is one that of maintaining legitimacy. The strategies for maintaining legitimacy depends on the level of legitimacy an organisation should maintain. O'Donovan (2002, p. 350) argues that "the less legitimacy an existing organisation has to begin with, the less it needs to maintain". It has been shown that organisations with greater corporate social responsibility profile or environmental sensitivity adopts legitimation strategies that are different to their counterparts (Cuganesan *et al.*, 2010). Substantive management is found to be more suitable for companies in less environmentally/socially sensitive industries (Cuganesan *et al.*, 2010; Hrasky, 2012). The accounting disclosure literature is ripe with investigations of how organisations strategically use sustainability, environmental and intellectual capital disclosures for gaining, maintaining and repairing legitimacy. These disclosures are largely voluntary.

4.2 Development of research propositions

The King III Code, which, *inter alia*, introduces integrated reporting, is implemented on an "apply or explain" basis[5]. However, considering the framing of integrated reporting within the South African context and the growing societal expectations for companies to explain their dependence and impact on the society, economy and the environment, it is likely that a decision not to issue an integrated report would be detrimental to organisational legitimacy. Notably, integrated reporting has been positioned within the discourse of transparency and accountability (IIRC, 2011). Mervyn King highlighted the significance of integrated reporting to the society at large when he stated "we can only speculate whether the financial crises since 2008 would have happened if integrated reporting had been well-established" (Hanks and Gardiner, 2012, p. 2). This is a sentiment shared by IIRC and many others (IIRC, 2011). Hence, the appropriate legitimacy strategy for JSE-listed companies is substantive management/bridging, i.e. producing an integrated report to meet or exceed regulatory requirements (Meznar and Nigh, 1995). Moreover, as regulation manifests are implied terms of the social contract, mere regulatory compliance with enables the company to honour the social contract, and avoid societal penalties and sanctions.

The King III Code recommends that an integrated report should "convey adequate information regarding the company's financial and sustainability performance" (Section 9.1.4) and "describe how the company has made its money" (Section 9.2.3) (IoDSA, 2009, p. 6). However, limited guidance is provided on the contents and scope of an integrated report (ACCA, 2012). The glossary of the King III Code merely reiterates what is stated in the recommendation when it defines integrated reporting as "a holistic and integrated representation of the company's performance in terms of both its finance and its sustainability" (IoDSA, 2009, p. 54). As far as complying with the recommendations is concerned, the inclusion of statutory financial statements achieves the requirement of conveying financial performance. In fact, a survey conducted by Ernst & Young (2012) on the 2011 integrated reports of JSE-listed companies showed that many companies included statutory reports as an "add-on" to be compliant rather than for conveying financial performance. Therefore, the extra disclosure burden on companies in complying with Section 9.1.4 can be reduced to demonstrating sustainability performance. Since 2002, under the King II Code incorporated in the JSE listing rules, companies have been required to prepare an integrated sustainability report disclosing a range of sustainability issues. These include occupational health and safety, HIV/AIDS impact, social investments, BEE initiatives, environmental impact and human capital development. Although the King III Code does not stipulate specific disclosure items for sustainability performance, more aspects of sustainability performance, than required under King II, shall be necessary to comply with King III, given its broader ambit. Thus, we are likely to see an increase in the extent of sustainability disclosures of JSE listed companies if the intention was to follow the letter of the law.

Despite the limited guidance in the King III Code, a company wanting to follow the spirit of the Code in preparing an integrated report has at its disposal the guidance provided in the discussion papers issued by the IRCSA (in January 2011) and IIRC (in September 2011). The IRCSA (2011, p. 3) suggests that an integrated report should provide information on strategy, risks and opportunities relating to social, environmental, economic and financial issues. It further states that that the:

> […] success or failure of organisations is dependent on their ability to create and sustain value without depleting the capital assets – financial, human, manufactured, social or natural – on which that value depends.

The IIRC Discussion Paper introduced intellectual capital to the list of capitals and conceptualised the six capitals as stores of value, encompassing all organisational resources and relationships. The capitals are inputs to an organisation's business model and are enhanced, consumed, modified and/or destroyed due to the activities and outputs of the business model. The IIRC (2011) expects an integrated report to make visible all the capitals, explaining the organisations use of and effect on the capitals in the creation and sustenance of value. Flower (2014) argues that this notion of reporting on the effect on all the capitals, some of which are not of the organisation but of the society (e.g. social, natural and human), is similar to the sustainability accounting notion of explaining "the improvements or deterioration of economic, social and environmental conditions". Maintaining the value of the capitals ensures that resources and capabilities are available for future generation and not depleted due to organisations' present activities. The various iterations of the integrated reporting framework, subsequently, issued by the IIRC, including the final version published in 2013, consider capitals as one of the three pillars of integrated reporting. Because of this guidance, South African companies are likely to increase the disclosures of a broader range of capitals, if their intention is to follow the spirit of the law on integrated reporting.

Legitimacy theory would suggest that companies adopting symbolic management will attempt to increase the extent of sustainability disclosures if that enables them to create the perception that the report they have produced is an integrated report. Sustainability reporting is mostly concerned with ESG issues. In the IIRC's integrated reporting framework, the environmental element of sustainability reporting is represented by natural capital and social element by social and relational capital. Governance issues are not represented by the capitals but are incorporated in the content elements (IIRC, 2013a, also see Section 2). Hence, for a company attempting to only increase sustainability disclosures (by adopting symbolic management), one would expect to see more disclosure of social and relational capital and natural capital compared to the other capitals in its integrated report. On the other hand, if an organisation is adopting a "bridging" strategy, then it may disclose much more than the minimum required. Under such a scenario, we would expect to see an increase in disclosure of all types of organisational value drivers, including capitals such as human, relational and intellectual, which are not components of sustainability reporting. In this light, it should be noted that capitals, such as relational and intellectual capital, which form part of an integrated report, have not been required disclosures for JSE listed companies in the past.

Following this line of thought, based on legitimacy theory, we form the following propositions to understand the extent of disclosure of information on capitals in integrated reports:

P1. If the JSE-listed companies are adopting symbolic management then the increment in the extent of social and relational capital and natural capital disclosure will be significantly greater than the increment in the extent of disclosure of other capitals in their integrated reports.

P2. If the JSE-listed companies are adopting substantive management, then there will be significant increments in the disclosure of all types of capitals, especially those that are not related to sustainability.

5. Research method

5.1 Sample

This research analyses the corporate reports of the top 25 companies listed on the JSE immediately before (2009-2010) and after (2011-2012) the regulation of integrated reporting. In 2010, JSE-regulated integrated reporting (as part of King III) via its listing requirements, making South Africa the first country in the world to do so. This is the primary reason for selecting South African companies for our research. Our sample consisted of the 25 largest companies by market capitalisation, and the sample companies maintained their ranking among the top 25 over the period of this research. The sample represents 78 per cent of the market capitalisation of the JSE as at 31 December 2012. All the companies in the sample appeared in SATRIX 40, which features the top market capitalisation companies listed on JSE. Most of them were also among 2000 biggest companies in the world list issued by Forbes and companies such as

Standard Bank group, Vodacom and SAB Miller were among Forbes Top 500. The sample includes global mineral giants such as BHP Billiton, Anglo American, Kumba Iron Ore, Anglo Gold, Anglo Platinum, Impala Platinum, Gold fields and Exxaro.

5.2 Content analysis

This study uses content analysis to measure the extent of information on factors of organisational value creation disclosed by JSE-listed companies. Content analysis involves classifying the information disclosed in a source document, such as an integrated report, into categories of items that capture the aspects of particular information one wants to analyse. A most commonly used form of content analysis is analysing the presence or absence of particular items of information (Patten, 2002b), which is also referred to as a disclosure index method (Krippendorff, 2004). We adopt this variant of content analysis, in line with a large number of researchers who have adopted a similar approach to determine sustainability, environmental and intellectual capital disclosures in various corporate media. This method can be contrasted with the approach used by Solomon and Maroun (2012). They perform an interpretive/critical approach to content analysis of integrated reports of ten JSE-listed companies. Moreover, they let social, environmental and ethical themes emerge from the reports while we applied a purpose designed disclosure coding scheme based on the guidelines issued specifically by the IIRC for reporting on organisational value creation. One of the main shortcomings of our method of content analysis, however, is that it does not capture every occurrence of a particular information category. Instead, the importance of a given information category is determined by aggregating the number of source documents in which that category is present. Hence, our approach results in a reasonable measure of management's willingness to disclose information (García-Meca and Martínez, 2007; Guthrie and Parker, 1990; Orens and Lybaert, 2007).

For the content analysis, we developed a coding scheme around the concept of capitals exemplified by the IIRC in their various pronouncements to measure the types of factors of organisational value creation that sample companies disclose. IIRC conceptualises the key organisational resources or value drivers in terms of six capitals: financial, manufactured, human, intellectual, natural and social/relationship capital. The focus of this study is limited to the latter four, as our propositions are built only around them. Hence, we excluded financial and manufactured capital from the content analysis. Moreover, as most disclosures of financial and manufactured capital tend form part of statutory financial reporting, inclusion of them in this study is inappropriate. Being the first study to measure disclosures relating to these capitals in the context of integrated reporting, the existing literature is of little assistance in developing disclosure items and coding rules for coding content within the capital categories. Therefore, we relied on the definitions of the capitals and explanations provided by the IIRC in demarcating the boundaries of the categories of capitals, devising disclosure items within the categories and in developing coding rules. Further, we consulted the well-established literatures on intellectual capital disclosure, corporate social responsibility disclosure and non-financial information disclosure in developing disclosure items and coding rules for human, intellectual and social and relational capital categories due to the similarities between the corresponding concepts. The final coding scheme comprised 37 disclosure items classified into four capital categories.

Eight disclosure items were included in human capital, 3 in natural capital, 17 in social and relationship capital and 9 in intellectual capital.

The method used is for one researcher to read the annual/integrated reports and record information related to each disclosure item on a coding sheet. If the attribute is disclosed in the annual/integrated report, then it was given a score of "1" and "0" if not disclosed. A second researcher independently confirmed the score of each company to assure the accuracy and reliability of the data collected.

6. Results and analysis

6.1 Extent of disclosure of capitals (company wise)

Table I shows the number of disclosure items in each disclosure category disclosed by the sample companies in 2009/2010 and 2011/2012 periods. The percentage change in the number of items disclosed by each company is also provided for disclosure categories. The 2009/2010 annual reports of sample companies on average disclosed 6.16 (out of 8) human capital items, 10.8 (out of 17) social and relational capital items, 1.68 (out of 3) natural capital items and 7.08 (out of 9) intellectual capital items. The average number of items disclosed by sample companies in each of these categories has increased from 2009/2010 to 2011/2012, resulting in an increase in the average capital items disclosed from 25.8 in 2009/2010 to 28.6 in 2011/2012. The greatest increment is seen for natural capital disclosure (19 per cent), which is closely followed by social and relational capital disclosure (18 per cent). It should, however, be noted that the total disclosure items in the natural capital category is three, and, therefore, the observed increment is of little economic significance.

Looking at the average number of items disclosed in each category as a percentage of the total number of items a company can potentially disclose in that category, intellectual capital category scored highest in both years (78.6 per cent in 2009/2010 and 82.2 per cent in 2011/2012). Human capital was a close second covering 77 per cent of the items, on average, in 2009/2010 and 81.5 per cent of the items in 2011/2012. Natural capital items were the least disclosed as a percentage in both years.

Table I highlights that a majority of companies increased the number of items they disclose from 2009/2010 to 2011/2012. The total number of items disclosed showed a small reduction in six companies: four of them showing a decrease of only one disclosure item. The total number of items disclosed did not change in three companies. Among the companies that increased the number of items disclosed, the greatest increment was 222.22 per cent (i.e. from 9 to 29). The number of companies that showed a reduction in the number of items disclosed in each of the capitals varied from three for natural capital to six for intellectual capital. Twelve companies did not change the number of natural capital items they disclosed. The number of companies with no changes for disclosure items in social and relational capital, human capital and intellectual capital was four, nine and eight, respectively.

The last two columns in Table I ranks the sample companies based on the number of items disclosed in total. The rankings for 14 companies have gone down from their previous levels in 2009/2010. Some companies, such as Impala Platinum Holdings Ltd and Old Mutual Plc, have gone down drastically in their ranking. The reason for the downward shift in rankings for most companies is not poor disclosures by these companies, but better disclosures by other companies in their integrated reports of 2011/2012. There were 17 companies disclosing more items than the average for the

Table I. Extent of disclosure by company

No.	Company name	Human capital (N = 8) 09/10	10/11	%Δ	Social and relational capital (N = 17) 09/10	10/11	%Δ	Natural capital (N = 3) 09/10	10/11	%Δ	Intellectual capital (N = 9) 09/10	10/11	%Δ	Total (N = 37) 09/10	10/11	%Δ	Rank 09/10	10/11
1	BHP Billiton plc	7	7	0	11	10	−9	2	3	50	7	6	−14	27 (73.0%)	26 (70.3%)	−3.70	11	18
2	British American Tobacco plc	6	8	33	13	17	31	2	2	0	8	9	13	29 (78.4%)	36 (97.3%)	24.14	4	1
3	SABMiller plc	6	8	33	14	16	14	2	2	0	6	7	17	28 (75.7%)	33 (89.2%)	17.86	7	5
4	Anglo American plc	6	6	0	12	16	33	0	3	30	7	7	0	25 (67.6%)	32 (86.5%)	28.00	18	6
5	Compagnie Fin Richemont	3	4	33	9	9	0	2	1	−50	7	7	0	21 (56.8%)	21 (56.8%)	0.00	22	25
6	MTN Group Ltd	7	7	0	14	17	21	1	2	100	7	8	14	29 (78.4%)	34 (91.9%)	17.24	5	2
7	Naspers Ltd.	7	7	0	12	15	25	1	1	0	7	8	14	27 (73.0%)	31 (83.8%)	14.81	12	8
8	Kumba Iron Ore Ltd.	6	7	17	10	9	−10	3	2	−33	7	6	−14	26 (70.3%)	24 (64.9%)	−7.69	15	21
9	Standard Bank Group Ltd.	7	7	0	9	10	11	2	2	0	8	8	0	26 (70.3%)	27 (73.0%)	3.85	16	16
10	Firstrand Ltd.	6	6	0	11	11	0	1	1	0	8	7	−13	26 (75.7%)	25 (67.6%)	−3.85	17	20
11	Vodacom Group Ltd.	7	7	0	11	14	27	1	0	−100	8	8	0	27 (73.0%)	29 (78.4%)	7.41	13	11
12	Old Mutual plc	8	7	−13	14	13	−7	1	2	100	8	8	0	31 (83.8%)	30 (81.1%)	−3.23	2	10
13	Anglogold Ashanti Ltd.	6	7	17	11	13	18	3	3	0	8	5	−38	28 (75.7%)	28 (75.7%)	0.00	8	15
14	Anglo American Plat Ltd.	6	4	−33	11	12	9	3	2	−33	7	6	−14	27 (73.0%)	24 (64.9%)	−11.11	14	22
15	ABSA Group Ltd.	6	7	17	9	14	56	2	2	0	4	8	100	21 (56.8%)	31 (83.8%)	47.62	23	9
16	Impala Platinum Holdings Ltd.	7	7	0	12	9	−25	3	3	0	7	7	0	29 (78.4%)	26 (70.3%)	−10.34	6	19
17	Shoprite Holdings Ltd.	4	6	50	2	13	550	0	2	20	3	8	167	9 (24.3%)	29 (78.4%)	222.22	25	12
18	Nedbank Group Ltd.	6	8	33	6	14	133	1	2	100	7	8	14	20 (54.1%)	32 (86.5%)	60.00	24	7
19	Sanlam Limited	7	5	−29	7	10	43	1	2	100	8	7	−13	23 (62.2%)	24 (64.9%)	4.35	21	23
20	Gold Fields Ltd.	6	7	17	13	14	8	1	2	100	8	6	−25	28 (75.7%)	29 (78.4%)	3.57	9	13
21	Remgro Ltd.	4	6	50	11	11	0	2	2	0	7	8	14	24 (64.9%)	27 (73.0%)	12.50	19	17
22	Aspen Pharmacare Holdings Ltd.	7	6	−14	12	15	25	2	3	50	7	9	29	28 (75.7%)	33 (89.2%)	17.86	10	4
23	Bidvest Ltd.	8	8	0	14	15	7	2	2	0	8	8	0	32 (86.5%)	33 (89.2%)	3.13	1	3
24	Exxaro Resources Ltd.	6	5	−17	12	12	0	3	3	0	9	9	0	30 (81.1%)	29 (78.4%)	−3.33	3	14
25	Woolworths Holdings Ltd.	5	6	20	12	10	−17	1	1	0	6	7	17	24 (64.9%)	24 (64.9%)	0.00	20	24
	Average	6.16	6.52	6	10.8	12.7	18	1.68	2	19	7.08	7.4	5	25.8	28.6	11.16		
	Average %	77.0	81.5		64.0	75.0		56.0	67.0		78.6	82.2		69.7	77.5			

sample (i.e. 25.8) in 2009/2010. This number has reduced to 14 in 2011/2012 highlighting that more companies have increased the number of items disclosed. The significant progress made by companies, such as Shoprite Holdings Ltd., Anglo American plc and Nedbank Group Ltd. may explain this reduction.

In sum, our results highlight that the introduction of integrated reporting has seen an increase in the extent of disclosure of human, social and relational, natural and intellectual capital disclosures of JSE-listed companies in general. This increase in the extent of disclosure is not limited to few major companies but is found across the sample. It is interesting to note that companies, which were poor disclosers in 2009/2010, show a substantial increase in the number of items disclosed after the introduction of integrated reporting. This has resulted in a reduction in the variance of the extent of items disclosed by sample companies, producing a more even distribution. Our results are consistent with the findings in the research reports published by Ernst & Young (2012) and Solomon and Maroun (2012). The latter report found an increase in the extent of social, environmental and ethical information and the former found an increase in the extent of stakeholder related information disclosed by JSE listed companies during the period investigated in our study.

6.2 Extent of disclosure of capitals (item wise)

Table II shows the number and percentage of companies disclosing each of the disclosure items in 2009/2010 annual reports and 2011/2012 integrated reports.

Panel A of the table shows the number and percentage of companies disclosing human capital related items. In both years, all the companies have reported on training and development and employee benefits. Except for one company, all others have disclosed competencies, and capabilities and experiences of employees in 2009/2010. This number has dropped slightly in 2011/2012. Most companies were reluctant to disclose information on employee morale, employee loyalty and motivation in 2009/2010. However, the number of companies disclosing these two items has increased significantly in 2011/2012. South African companies' willingness to provide human capital information (compared to other broad categories of intellectual capital information) was also confirmed by Wagiciengo and Belal (2012). Further evidence of the popularity of human capital disclosure comes from Belal (2001) and Abeysekera (2008).

Panel B of Table II shows that there is an increase in the number of companies disclosing natural capital items between 2009/2010 to 2011/2012. Examples of disclosures of natural capital included "area of deforestation in square meters", "total land area used for business purpose", "the extent of wasteful air passing through chimneys" and "depletion of non-renewable natural resources (i.e. losses due to exploitation of non-renewable natural resources like minerals, water, gas)". More companies have provided information on the "use of and impact on land and atmospheric resources" in their integrated reports than in their annual reports. The number of companies disclosing the "use of and impact on water resources" has reduced slightly from 21 to 19 companies during the period. The "use of and impact on atmospheric resources" tend to be the least disclosed item among the natural capitals in both before and after the introduction of integrated reporting regulation. The increase in disclosure of information on natural capital supports Solomon and Maroun (2012), who

Disclosure items	2009/2010	(%)	2011/2012	(%)	%Δ
Panel A: human capital					
Employee competence and capabilities	24	96	22	88	−8
Employee experience	24	96	23	92	−4
Employee loyalty and motivation	12	48	17	68	20
Employee diversity	19	76	19	76	0
Employee morale	3	12	8	32	20
Human resource management	22	88	24	96	8
Employee benefits	25	100	25	100	0
Human resource development	25	100	25	100	0
Panel B: natural capital					
Use of and impact on land resources	14	56	20	80	24
Use of and impact on atmospheric resources	7	28	11	44	16
Use of and impact on water resources	21	84	19	76	−8
Panel C: social and relational capital					
Customer health safety and privacy	12	48	17	68	20
Customer satisfaction	11	44	17	68	24
Relations with competitors (e.g. anti-competitive behaviour)	8	32	18	72	40
Relations with suppliers	20	80	23	92	12
Relations with lenders	6	24	7	28	4
Relations with shareholders	23	92	25	100	8
Human rights	17	68	16	64	−4
Indigenous rights	11	44	17	68	24
Involvement in social action	20	80	20	80	0
Social investment	19	76	23	92	16
Donations and charitable work	20	80	20	80	0
Involvement in cultural projects	11	44	13	52	8
Relations with legislators, regulators and policy makers	18	72	18	72	0
Relations with business partners	21	84	23	92	8
Corporate culture	17	68	21	84	16
Claims and lawsuits	21	84	19	76	−8
Relations with employees	17	68	22	88	20
Panel D: intellectual capital					
Corporate governance	25	100	25	100	0
Intellectual property	6	24	11	44	20
Information technology and information systems	21	84	23	92	8
Research and development	22	88	20	80	−8
Processes, policies and procedures	25	100	24	96	−4
Organisational structure	16	64	20	80	16
Brands	22	88	21	84	−4
Corporate image	20	80	20	80	0
Market share	20	80	21	84	4

Table II.
Extent of disclosure by items

reported a significant increase in environmental information in 2011/2012 integrated reports compared to 2009/2010 annual reports.

On social and relational capital disclosures, Panel C of Table II shows that more companies in 2011/2012 compared to 2009/2010 disclosed each social and relation capital item except for "human rights", "claims and lawsuits" and "involvement in social action". The number of companies disclosing the two former items fell from 17 to 16 and 21 to 19, respectively during the investigated period. The decrease in the disclosure of "claims and lawsuits" could be somewhat associated with the increase in the level of compliance with laws and regulations by the companies. A close examination of the information disclosed under these items shows that the companies are becoming more conscious of their corporate image and reputation and handling of issues that might have an adverse impact on them.

The social and relational items disclosed by the most number of companies are "shareholder relations", "relations with business partners", "claims and lawsuits", "involvement in social action", "donations and charitable work" and "relations with suppliers". The number of companies disclosing these items either increased or remained the same during 2009/2010 and 2011/2012, except for the item "claims and lawsuits". Perhaps this observation is reminiscent of the greater attention South African companies pay to their relationship with selected stakeholders, particularly shareholders, business partners and suppliers and the high degree of corporate responsiveness to the expectations and norms of the community and society at large. Our findings are in line with Ernst & Young (2012) who found a significant increase in the disclosure of stakeholder related information in the annual reports of South African-listed companies and state-owned entities. Also, Solomon and Maroun (2012) found a significant rise in the quantity of social and ethical information stated in 2010-2011 integrated reports in their sample of South African companies.

Panel D of Table II shows that the intellectual capital items disclosed by every company in 2009/2010 are "corporate governance" and "processes, policies and procedures". However, in 2011/2012, one of the samples companies did not report "processes, policies and procedures" information. The least reported intellectual capital item in both years is "intellectual property". Four more companies disclosed this information in 2011/2012 compared to 2009/2010. At least 20 companies are disclosing all other items of intellectual capital in their integrated reports in 2011/2012. Slight decreases in the number of companies disclosing are found for "research and development", "processes, policies and procedures" and "brands". The upward trend in intellectual capital disclosures is consistent with the findings of a recent study by Wagiciengo and Belal (2012). They found that intellectual capital disclosures in South African companies increased over a five-year period, with some organisations reporting considerably more than others.

The upward trend in the number of companies disclosing most items of relations with stakeholders and social capital is in line with our *P1* that the extent of social and relational capital disclosures will see the highest increment in integrated reports.

6.3 Statistical analysis of change in the extent of disclosure

Table III presents the descriptive statistics of various capitals and the results of paired sample *t*-tests. The *t*-tests were conducted to determine whether the average number of items disclosed in each disclosure category differs between 2009/2010 annual reports

					Pair differences					
Year	Mean	N	SD	SE mean	Mean difference (%)	SD	SE mean	t	df	Significance (two-tailed)
Human capita										
2010	6.16	25	1.17898	0.2358	5.84	1.18603	0.23721	1.518	24	0.142
2012	6.52	25	1.1225	0.2245						
Social and relational capital										
2010	10.88	25	2.77369	0.55474	17.28	3.073	0.6164	3.059	24	0.005
2012	12.76	25	2.57034	0.51407						
Natural capital										
2010	1.68	25	0.9	0.18	19.05	0.94516	0.18903	1.693	24	0.103
2012	2	25	0.76376	0.15275						
Intellectual capital										
2010	7.08	25	1.28841	0.25768	4.52	1.67631	0.33526	0.954	24	0.349
2012	7.4	25	1.04083	0.20817						

Table III.
Statistical comparison of disclosure of capitals

and 2011/2012 integrated reports. The table highlights that the extent of disclosure of all capitals has increased. Also, the reporting has become more consistent as indicated by a reduction in the standard deviations of the disclosure of all capital categories. This shows that the introduction of integrated reporting has improved the provision of non-financial information. The greatest increase is observed for social and relational capital disclosures. The average number of items of social and relational capital disclosed for the year 2011/2012 was 12.76 (SD = 2.57) as against 10.88 (SD = 2.77) in 2009/2010. The paired-sample t-tests show that the average difference for social and relational capital is statistically significant ($t = 3.059$ and $p = 0.005$). The difference in the extent of disclosure of none of the other disclosure categories is statistically significant. Hence, we find support for our *P1*. When comparing the percentage difference between the means in 2009/2010 and 2011/2012 for each category, we find that natural capital shows the highest difference (19.05 per cent) followed closed by social and relational capital (17.28 per cent). The finding that the increment in the disclosure of social and relational capital is statistically significantly greater than the increment in the disclosure of other capital categories supports *P1*. As the increment in the extent of disclosure of human, natural and intellectual capital categories between 2009/2010 and 2011/2012 is not statistically significant, we do not find support for *P2*.

7. Discussion and conclusion

This study examined the extent of disclosure of organisational value drivers in the form of four capitals (human, social and relational, natural and intellectual capital) pre (2009/2010) and post (2011/2012) introduction of integrated reporting in South Africa. The sample includes the top 25 companies listed on the JSE by market capitalisation. The study contributes to the disclosure literature and addresses the need for research on integrated reporting practices. It provides an understanding of the extent of disclosure of capitals of top JSE-listed companies. This understanding is important as capitals are considered inputs in an organisation's business model and are affected by the value creation activities and outcomes of an organisation (IIRC, 2013a). Legitimacy theory was used to explain the impact of the introduction of integrated reporting, with limited guidance to preparers, on the nature and extent of disclosure of capitals.

We find that JSE-listed companies disclose significantly more information on social and relational capital in integrated reports (2011/2012) compared to annual reports (2009/2010). A statistically significant increase in the extent of disclosure was not observed for the rest of the categories of capital. In line with *P1*, this result suggests that the sample companies adopt symbolic management as a legitimation strategy, as they attempt to merely follow the letter of the King III Code in preparing an integrated report. In line with Solomon and Maroun (2012), these findings lead us to question whether corporate behaviour has improved due to integrated reporting or has it added to the empty rhetoric endemic in annual reporting.

Another important finding is that the companies that showed the greatest level of increment in disclosure were those who had below-average disclosures in 2009/2010. This supports the argument that the extent of effort (in terms of disclosure) that needs to be expended to achieve legitimacy is dependent on the level of legitimacy an organisation should maintain based on how it has always been perceived. This action has resulted in more companies with above-average disclosures in 2011/2012, highlighting that the regulation of integrated reporting has created a lesser dispersion of extent of disclosure among companies.

Recently, IIRC called for research efforts from the academics to contribute to the development of an internationally acceptable framework for integrated reporting. This study contributes to the further development of the <IR> framework by empirically testing the application of capitals described in it. It will help policymakers in understanding the implications of the real world application of the <IR> Framework. The findings of the present study will be important for the progression of integrated reporting in South Africa as the study clearly reports recognition of integrated reporting through the disclosures of various capitals. Thus, this study will serve as a lighthouse for the development of integrated reporting regulation in other parts of the world.

The results suggest that companies report more non-financial information when the disclosures are under increased scrutiny via regulated disclosure requirements. Hence, the regulation has been successful to some extent in providing users with a more balanced view of organisational performance compared to what existed under the previous voluntary disclosure system. However, for South African policymakers our findings also highlight the need for incorporating, within the listing rules, minimum requirements in relation to the nature and content of an integrated report. This is especially important to achieve greater transparency in relation to human, relational and intellectual capital information.

This paper raises concerns about the level of compliance of at least some of the top listed companies in South Africa with mandatory listing requirements. Our results showed that ten companies either reduced (in most cases slightly) or did not change the extent of their disclosure of information related to capitals. Such an observation would not have come as a surprise if those companies were making a high level of disclosures already. However, this was not the case in this instance. Eight of the companies were disclosing less than 30 of 37 items investigated in this study. This suggests that the requirement to issue an integrated report did not result in the expected step change in disclosure with a minority of companies. This could be attributed the lack of detailed guidance on the content and format of an integrated report. Hence, South African policymakers should consider providing detailed guidance on the format and content of an integrated report. However, the importance of proper enforcement of the requirement and monitoring compliance with it cannot be ignored.

This paper has several limitations. First, the categories of disclosures investigated in this study were based on the <IR> Framework, and, similarly, the disclosure items were identified from prior literature and the <IR> Framework. Although the discussion paper issued by the IIRC explaining the six capitals was available since September 2011, some JSE-listed companies may not have been aware of this guidance when determining the content and scope of an integrated report. However, given that the companies in the sample are the top 25 companies listed on the JSE, it is unlikely that such an omission could occur. Second, this study only investigated reporting of capitals in the period before and after the introduction of the requirement to issue an integrated report. Hence, it can be argued that the change in the extent of disclosure during this period could be due the general pattern of change in disclosure, which may have happened even in the absence of regulation. By extending the period of investigation to include more years pre- and post-regulation, one would be able to provide conclusive evidence of the impact of regulation on the extent of disclosure of capitals. This is an opportunity for future research.

Another opportunity for future research would be to replicate this study in the period after 2012 where more detailed guidance on preparing integrated reports was available (e.g. the draft and final <IR> frameworks) and comparing results with this study. Such a comparison would provide insight into disclosure practices of JSE-listed companies when specific guidance is available in the form of the <IR> Framework. It could also clarify whether the mediocre increase in disclosure of capitals observed in this study can be attributed to the lack of guidance provided by South African regulators. A further extension of this research would be to compare the changes in integrated reporting practices of companies subjected to the requirement to issue integrated reports with companies that are not required to issue integrated reports. Such a study could provide corroborative evidence on the impact of the King III Code on the extent of provision of non-financial information. Another useful avenue for future research is to investigate industry-wide effects.

Notes

1. The IIRC provides a detailed description of six capitals (explained as factors that materially affect the ability of an organisation to create value over time) in its publications, including the discussion paper that was available from September 2011. The six capitals are financial, manufactures, intellectual, human, social (later renamed as social and relationship) and natural capital. Financial capital is the pool of funds available to a firm to carry out its value creation activities. The man-made physical objects at the disposal of a firm (e.g. buildings, equipment and infrastructure) are explained as manufactured capital. Intellectual capital is defined as comprising legally enforceable intellectual property, organisational capital such as systems, procedures and tacit knowledge, and intangibles associated with the brand and reputation. The competencies, capabilities and experiences of the firm's employees and their ability and willingness to contribute to the success of the firm are explained as human capital. Social and relationship capital includes the shared norms, common values and behaviours in a firm and its key stakeholder relationships. Finally, natural capital is all renewable and non-renewable environmental resources the firm depends on.

2. The readers are referred to Kolk (2010) for a discussion of motivations for sustainable reporting.
3. BEE is a central element in the Reconstruction and Development Program of the ANC. The initial focus of BEE was increasing "black" ownership of shared in major corporations (Ponte *et al.*, 2007). Since early 2000 the focus of BEE has been broaden to include a further six aspects (resulting in a total of seven criteria) such as management representation, employment equity, skills development, preferential procurement, enterprise development and corporate social investment in assessing the empowerment credentials of a business. This marks the "second phase" of BEE (Ponte *et al.*, 2007). Broad-Based BEE Act 2003 requires companies to set targets on their performance in relation to the aforementioned seven criteria. Subsequently a Code of Good Practice was issued as an implementation framework for Broad-Based BEE legislation which provides compliance thresholds for companies.
4. See "Press Release 'Formation of the International Integrated Reporting Committee' available of the South African Institute of Chartered Accountants" website at: www.saica.co.za/News/NewsArticlesandPressmediareleases/2010/tabid/2313/itemid/2444/language/en-US/Default.aspx (accessed 27 September 2014).
5. A company is deemed to have complied with the King III Code when it explains how the principles and recommendations were applied, or if not applied, by providing reasons. A company need not follow a recommendation if the "the board of directors, in its collective decision-making, could conclude that to follow a recommendation would not, in the particular circumstances, be in the best interests of the company" (IoDSA, 2009, p. 6). Also, "the board could decide to apply the recommendation differently or apply another practice and still achieve the objective of the overarching corporate governance principles of fairness, accountability, responsibility and transparency" (IoDSA, 2009, p. 6).

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