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**INTELLECTUAL CAPITAL DISCLOSURES BY THE SOUTH AFRICAN COMPANIES: A LONGITUDINAL INVESTIGATION**

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## **ABSTRACT**

Most of the previous studies on intellectual capital disclosures have been conducted from developed countries' context. There is very limited empirical evidence in this area from the context of emerging economies in general and Africa in particular. This paper is one of the early attempts in this regard. The main purpose of this study is to examine the extent and nature of intellectual capital disclosures in 'Top 20' South African companies over a 5 years period (2002-2006). The study uses content analysis method to scrutinize the patterns of intellectual capital disclosures during the study period. The results show that intellectual capital disclosures in South Africa have increased over the 5 years study period with certain firms reporting considerably more than others. Out of the three broad categories of intellectual capital disclosures human capital appears to be the most popular category. This finding stands in sharp contrast to the previous studies in this area where external capital was found to be most popular category.

### **Key Words**

South Africa, Intellectual Capital, Disclosures, Longitudinal Study, Human Capital, External Capital, Internal Capital

## **1. Introduction**

Intellectual capital (IC) refers to the resource base of an organisation which relates to, inter alia, knowledge and skill set retained by the organisation. It also includes important organisational relationships with the outside world. In today's global knowledge economy perhaps more attention needs to be given to the intellectual capital to maintain competitive edge. As a result, organisations are attaching increased importance to the recognition, measurement and reporting of intellectual capital. This emerging practice has attracted attention of the academic researchers and a significant literature has evolved in recent times. A strand of this literature has examined the extent and nature of intellectual capital disclosures (ICD) in the corporate reports. Within this strand of ICD literature researchers have mainly examined the ICD within the published annual reports (subject to some exceptions) by the use of content analysis procedures (See for example, Abeysekera, 2008a; Abeysekera & Guthrie, 2005; April, Bosma, & Deglon, 2003; Bozzolan, Favotto, & Ricceri, 2003; Burgman & Roos, 2007; Goh & Lim, 2004; Guthrie, 2001; Guthrie & Petty, 2000; Pablos, 2003; Petty & Cuganesan, 2005; Seetharaman, Sooria, & Saravanan, 2002; Striukova, Unerman, & Guthrie, 2008; Sujan & Abeysekera, 2007; Vandemaele, Vergauwen, & Smits, 2005; Vergauwen & Alem, 2005). The purpose of this paper is to contribute to this strand of ICD literature from an emerging economy perspective.

Most of the previous studies on ICD have been conducted from the developed countries' context. There is very limited empirical evidence in this area from the context of emerging economy in general and Africa in particular (but see, Abeysekera, 2008a; Abeysekera & Guthrie, 2005; April et al., 2003; Goh & Lim, 2004). This paper is one of the few early

attempts in this regard. The main purpose of this study is to examine the extent and nature of ICD in 'Top 20' South African companies over a five years period (2002-2006). There is only one ICD study available from the South African perspective which is conducted by April et al (2003). The current study builds on the work of April et al (2003). They used only one year's data (2001) which is nearly a decade old. Moreover, they focused mainly on the mining sector of South Africa. The current study extends this previous work by using more up to date data and also differs in other significant aspects. For example, it provides a longitudinal perspective of ICD in South Africa over a five years period using cross sectional data rather than concentrating on a single sector and a single year. Moreover, our current work is based on a robust sample of 'Top 20' companies as per 2006 ranking of South African companies by the Financial Mail (FM) which looks beyond corporate size and financial numbers.

The paper proceeds with a review of prior research on ICD in the next section. In this section we mainly concentrate on a sub set of IC literature which examines ICD within the annual reports mainly using content analysis procedures. The third section examines the socio-economic and political context of South Africa within which ICD is being made. The fourth section explains the content analysis procedures adopted in this paper and justifies the sample selection procedures. The penultimate section presents the main results of this study in details. The final section provides discussion and conclusion of the results.

## **2. Prior Research**

As indicated earlier, most of the previous studies on ICD have focused on developed countries such as Canada, Australia, Ireland, United Kingdom and other continental European countries.

Bontis (2003) conducted a content analysis of the annual reports of 10,000 Canadian corporations. The study used a list of 38 intellectual capital related terms, searched electronically within the annual reports. Significantly, small levels of disclosure were found with only 74 occurrences by 68 companies across the 10,000 reports.

Guthrie & Petty (2000) examined the ICD practices of the largest 19 listed companies in Australia and one other company that held itself out as being best practice in the field of intellectual capital reporting to act as a benchmark. Their intellectual capital framework consisted of 24 separate intellectual capital items across 20 companies. Their findings suggested that intellectual capital was poorly understood, inadequately identified, inefficiently managed and inconsistently reported. This also included the 'best practice' firm. They concluded that Australian companies did not compare favourably with European firms in their ability to measure and report intellectual capital.

Brennan's (2001) study looked at the extent of ICD in 11 knowledge-based firms in Ireland. The study compared the firms market and book values and also conducted a content analysis of the annual reports. Brennan's study concluded that, with the exception of two firms, there were significant differences in market and book values suggesting these firms had a substantial level of intellectual capital. However, the study found that the amount of disclosure by the firms was substantially low. She concluded that there appeared to be little

interest in, and progress towards, measuring and reporting of intellectual capital by the Irish companies.

Striukova et al (2008) have provided an empirical understanding of ICD practices of the UK companies. However, to develop this understanding the study considered a range of media in which ICD was made including annual reports, website, CSR reports and other reports. Their sample included 15 companies from the FTSE index covering four sectors, viz. information technology, pharmaceutical, real estate and the retailing. The key findings of the study include variations in ICD with company size and industrial sectors. Contrary to *a priori* expectations the study reported that knowledge intensive sectors (e.g. information technology and pharmaceutical) did not disclose most of the intellectual capital items. Consistent with the previous studies they confirmed that external capital was the most popular category amongst the firms. Striukova et al (2008) extended the previous UK study on ICD by Williams (2001) which mainly concentrated on the annual reports and a range of companies irrespective of sectors.

Within the continental Europe Bozzolan et al (2003) performed a content analysis on the 2001 annual reports of 30 non financial companies listed on the Italian Stock Exchange. Their framework consisted of 22 intellectual capital items across three categories: human, external and internal capital. Their results remained consistent with other researchers in Europe showing extensive disclosure on external capital of around 49 percent, 30 percent related to internal capital and the remaining 21 percent concerning human capital. They also found that the size and industry of the firms had a significant effect on the level of disclosure. In a latter study Bozzolan, O'Regan, & Ricceri (2006) compared the ICD practices of Italy

and the UK. They could not support the hypothesis that country of origin had an influence on ICD practices. Other comparative studies, however, showed differences in ICD practices in different countries. For example, in a comparative study Vandemaele et al (2005) showed that UK and Dutch companies made less ICD than the Swedish companies.

While a great deal research has been undertaken on ICD practices in developed countries a substantially less amount of research can be found on ICD practices in emerging economies. Only a handful of studies are available from the emerging economies' context. The most noteworthy here is the study conducted by Abeysekera & Guthrie (2005) over a 2 year period (1998/1999 to 1999/2000) into ICD practices of the top 30 Sri Lankan companies listed on the Colombo Stock Exchange. Informed by Guthrie & Petty (2000) their framework consisted of 45 intellectual capital items classified into external capital, internal capital and human capital items. Their findings showed that there was a notable increase in the frequency of disclosure over the two year period with external capital as the most reported category. Internal capital was the least disclosed category and it actually decreased over the period in terms of line count. In a later study Abeysekera (2008a) compared the ICD practices of 20 Sri Lankan firms with that of Singaporean firms over a three years period of 1998-2000. He found differences in the ICD practices between the two countries and attributed those differences to various social, political and economic factors. In a study of the Indian ICD practices in the information, communication and technology sector Kamath (2008) observed that the level of ICD is very low and there is no significant relationship with the firm size. Goh & Lim (2004) in their study of 20 Malaysian companies found that external capital was the most dominant category and most of the ICD was made in a narrative form.

From the African perspective April et al (2003) investigated intellectual capital measurement and reporting in South Africa's mining industry. Their research methodology was based on Guthrie & Petty's (2000) intellectual capital framework consisting of 24 items across three categories of human, internal and external capital. The study involved content analysis procedures and examined the annual reports of the 20 largest listed companies, combined with interviews with senior individuals in South African mining companies. Their results showed that mining companies in South Africa tend to report less on intellectual capital attributes than the other companies and that they focused more on external attributes such as business collaborations and favourable contracts. It was concluded that although the companies valued intellectual capital they lacked appropriate systems and structures to measure it meaningfully. As far as we know this is the only study available from the African perspective.

Most of the previous studies of the ICD are descriptive in nature and did not employ theoretical perspectives to understand corporate motivations behind ICD (but see, Abeysekera, 2008b). Guthrie, Petty, Yongvanich, & Ricceri (2004) have called for theoretically informed ICD research and argued that stakeholder theory and legitimacy theory might help in this regard. Legitimacy theory, according to Guthrie & Parker (1989), is based on the notion that firms are bound by the social contract in which they agree to perform various socially desired actions in return for approval of their objectives and this ultimately guarantees their continued existence. This would suggest that companies disclose intellectual capital information to appear legitimate in the eyes of society and to avoid the potential costs that arise from non-legitimacy. Alternatively, stakeholder theory suggests that all stakeholders have a right to be provided with IC information. The theory is based on the

premise that management is expected to take on activities expected by their stakeholders and to report on those activities to the stakeholders (Guthrie et al., 2004).

The above review suggests that most of the previous studies focused on single year's data while only a handful of studies used longitudinal data. Several researchers (Abeysekera, 2008a; Bozzolan et al., 2003; Guthrie & Petty, 2000; Kamath, 2008) called for longitudinal studies for detailed examination of ICD practices. Amongst the few studies available from the emerging economies' context most of them concentrated on the Asian countries. With the exception of April et al (2003) there is no study available from the African context. This study is an attempt to bridge the gap in the literature identified above by providing a longitudinal perspective of South African ICD practices. South Africa is an emerging nation in Africa with robust economic growth since 2004. 63% of its GDP is derived from the service sector (<https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html>), which implies the dominance of knowledge based firms holding significant intellectual capital related assets. Hence, the issue of ICD might be very significant for the South African firms. We consider the socio-political context of South Africa in the next section.

### **3. The South African Context**

South Africa is a nation of over 47 million people of diverse origins, cultures and beliefs ([www.safrika.info](http://www.safrika.info)). According to World Bank classifications South Africa is classified as an upper middle income country with well developed financial, legal, communications, energy and transport sectors ([www.worldbank.org/southafrica](http://www.worldbank.org/southafrica)). It has the largest stock market in Africa. Due to an abundance of natural resources such as gold, diamonds and platinum, mining continues to be an important industrial sector. However sectors such as clothing and

textiles, banking and financial services and information technology have shown significant growth in recent years ([www.mbendi.co.za](http://www.mbendi.co.za)).

Although it boasts as the largest economy in the Sub-Saharan Africa and continues to demonstrate an impressive acceleration of economic growth, the country is plagued with major problems of large socio-economic inequalities that resulted from the apartheid regime. During this period black South Africans who accounted for 90 percent of the population were prevented from participating in the economy and were denied the right to acquire factors of production: land, labour, capital and entrepreneurship (Gqubule, 2004). Today, in post apartheid South Africa the resulting problems continue to manifest themselves in the form of poverty, crime, corruption and high rates of HIV/AIDS infections ([www.cia.gov](http://www.cia.gov)).

Despite being among the 50 wealthiest countries in the world South Africa's life expectancy is amongst the worst 30 (Aliber, Kirsten, Maharajh, Nhlapo-Hlope, & Nkoane, 2006). South Africa is one of the countries most scourged by HIV/AIDS, with an estimated five and a half million people infected with the disease ([www.avert.org/aidssouthafrica](http://www.avert.org/aidssouthafrica)). Without effective prevention and treatment between 5 and 7 million deaths were expected by the year 2010. Most deaths occur amongst people who are economically active which results in many families losing their main wage earners. It is estimated that 96 per cent of HIV positive individuals are within the working age population of 15-65, placing a catastrophic burden on families and dependents (Vachani, 2004). The epidemic has also transformed itself from a social issue to a business issue due to the direct implications on human capital. The current and also future workforces are now placed at increasingly high risk as the epidemic disproportionately affects people during their most productive years. It, therefore, makes

business sense for companies to respond to the epidemic. HIV/AIDS directly affects the business through increased costs, loss of productivity, and threatens the foundations of the economies in which they operate. The epidemic, therefore, has a clear impact on a company's profitability. Studies carried by the UN predict the epidemic could cost South Africa as much as 17% in GDP growth alone by 2010 ([www.unaids.org](http://www.unaids.org)).

Over the years the South African government received criticism for a lack of involvement in dealing with the epidemic, however, more recently the government has introduced several policies including laws that permit compulsory licensing that enable the manufacture of low cost anti-retroviral drugs. Increased domestic resources also continue to be invested in national prevention and treatment programs with around \$927 million committed in 2006-7 ([www.unaids.org](http://www.unaids.org)).

As a result of apartheid a 'two economies' scenario exists in the country, a concept first introduced by the former President Thabo Mbeki (Gqubule, 2004). The first economy is modern and produces the bulk of the country's wealth, and is integrated into the global economy. The second is underdeveloped, contributes little to the country's GDP and remains disconnected from both the first economy and the global economy. Gqubule (2004) explains that within the modern economy, black South Africans are highly marginalized and as research indicates black investors control only 3 percent of the stock market whereas whites account for 90 percent of management positions and a further 98 percent of executive director positions in private listed companies. The World Bank suggests that South Africa's income aggregates hide extreme differences in wealth between whites and non-white population, with

around 13% of the population living in 'first world' conditions while at the other extreme, about 45% living in developing country conditions ([www.worldbank.org/southafrica](http://www.worldbank.org/southafrica)).

Since the country's first democratic elections in 1994 the South African government has taken various attempts to tackle these problems. One of the earlier initiatives introduced was the GEAR (Growth, Employment and Redistribution) policy in 1997. The policy set the goals of achieving a real GDP growth of 6% by the year 2000, creating at least 400,000 jobs every year and boosting the investment climate in order to attract foreign investment. What was considered an overly ambitious policy produced mixed results. Although it brought greater financial discipline and macroeconomic stability it failed to deliver in areas such as employment and did little to redistribute wealth across racial lines ([www.info.gov.za](http://www.info.gov.za)).

In 1994 the first King Report was published by the King Committee on Corporate Governance, headed by the former High Court judge Mervyn King. The report incorporated a Code of Corporate Practices and Conduct for directors and was the first of its kind in the country aimed at promoting the highest standards of corporate governance in South Africa ([www.iodsa.co.za](http://www.iodsa.co.za)). At that time the report was considered groundbreaking because it went beyond financial and regulatory aspects of corporate governance. According to auditing firm Deloitte, the report advocated an integrated approach to governance by including principles of good social, ethical and environmental practice. The King report also successfully formalized the need for companies to recognize that they no longer operate independently from the societies in which they function ([www.deloitte.com](http://www.deloitte.com)).

The second King Report (King 2) was published in 2002. The second report was deemed necessary to reflect changes in relevant legislations. In addition, thinking in corporate governance internationally and the increasing reliance on technology in driving business strategy suggested that an update was required ([www.deloitte.com](http://www.deloitte.com)). The report provided guidelines to South African companies who were seeking to improve their disclosure practices and recognize the importance of the relationship between an enterprise and the community in which it exists ([www.cliffedekker.com](http://www.cliffedekker.com)). A key guideline in the report asked for a shift from the 'single bottom line' (i.e. financial) towards the 'triple bottom line' approach, a term first coined by the consultancy firm SustainAbility that referred to economic, social and environmental considerations ([www.sustainability.com](http://www.sustainability.com)).

Two new areas: risk management and non-financial sections were also added to the report. Risk management asked business leaders to consider whether they addressed any potential areas of risk as well as non-financial matters that affected the business. This included various topics such as stakeholder engagement, social and ethical issues, health & safety and the environment. Notably issues such as Black Economic Empowerment and human and intellectual capital were also asked to be considered ([www.deloitte.com](http://www.deloitte.com)).

In 2004 the government enacted the Black Economic Empowerment (BEE) Act. This Act requires private companies to set targets for black participation in equity ownership, management and procurement, and the upgrading of skills. The strategy behind the Act is based on the acknowledgement that not only is change politically and socially necessary, but for the South African economy to continue growing none of its citizens can be excluded from the economy ([www.info.gov.za](http://www.info.gov.za)).

Southall (2007) notes that critics have argued that the Act serves to block foreign investment, reverse discrimination and encourages a re-radicalisation of the political economy by promoting the growth of a small but remarkably wealthy politically-connected 'empowerment' elite. He adds that the policy requires businesses to look at the social background of any potential employees instead of making decisions purely based on qualifications and experience.

#### **4. Research Methodology**

To examine the ICD practices of South African companies we have focused on top 20 companies identified by the Financial Mail (FM). The FM is considered as South Africa's leading weekly business publication and is the Financial Times equivalent in South Africa. The winners are chosen through a rigorous vetting process that firstly compares quantitative analysis of their past financial performance. Secondly, FM's internal writers scrutinize the companies based on qualitative criteria, with each criterion given a different weighting. Factors such as corporate governance, strength of management and commitment to empowerment are also considered to select the ultimate winners. The results are then reviewed by the independent auditors before rankings are published. Previous winners of the award for best company include mining companies Impala Platinum and Mvelaphanda Resources. Most recently the Edcon Group which owns a host of retail clothing stores won the 2006 award ([www.topcompanies.co.za](http://www.topcompanies.co.za)). The list of top 20 companies is shown in Table 1.

TABLE 1 ABOUT HERE

The FM ranking is considered distinct because it does more than merely indicating the richest or wealthiest companies in South Africa. As FM suggests it attempts to identify companies that have done well but are likely to outperform the market ([www.topcompanies.co.za](http://www.topcompanies.co.za)). Moreover, our sample contains a good cross section of firms with different sizes and different industries. This is in contrast with the previous studies which mainly focused on the largest companies. These leading edge companies are more likely to provide examples of best practices in ICD. Finally, most of the previous studies in the ICD literature used similar sample size.

This paper looks at how the level of intellectual capital disclosure has changed in the annual reports of the top 20 South African companies over a period of 5 years (2002-2006). The timeframe chosen for this longitudinal study is relevant for 2 main reasons. Firstly, it considers ICD levels from a longitudinal perspective. Secondly, it becomes more significant in terms of the implementation of government policies such as the Black Economic Empowerment (BEE) Act in 2004 that affect elements of ICD. The two sets of annual reports can therefore be viewed to represent a before and after BEE scenario.

Most of the previous ICD studies used annual reports for the examination of ICD practices in different countries. In terms of disclosure of information, both financial and non-financial, it is generally agreed that published annual reports remain the most important sources of information for many stakeholders. They comprehensively and compactly represent the views and concerns of individual firms (Bontis, 2003). Guthrie et al (2004) explain that annual reports also have the advantage of being regularly produced and offer the opportunity for a comparative analysis of management attitudes and policies across reporting periods. This

means they can be accepted as a barometer of a company's attitude towards corporate reporting because a company has complete editorial control over the document (except the audited financial section) and it is the most widely distributed public document produced by the company. They are also required by legislation in many countries including South Africa, and produced on a regular basis by all companies (Guthrie et al., 2004).

To examine the nature and extent of ICD practices in South Africa we have applied content analysis method in this paper. The method remains popular amongst ICD researchers because it seeks to analyse public information systematically, objectively and is considered a reliable approach to determine the content of written publications and to make replicable and valid inferences (Guthrie et al., 2004). Its extensive use in intellectual capital disclosure research, as Abeysekera & Guthrie (2005) suggest, demonstrate that it is a very popular research procedure in ICD studies.

For the purpose of carrying out the content analysis we have adapted the instrument used by Abeysekera & Guthrie (2005). Their instrument was chosen for two reasons. Firstly, their study remains one of the few undertaken in an emerging economy context. Secondly, we considered it as a suitable benchmark for further studies in emerging economies. Finally, their framework is based on, and improves, one of the earlier frameworks in ICD research by Guthrie & Petty (2000).

Abeysekera & Guthrie's (2005) content analysis instrument consisted of intellectual capital items that were categorized into human, internal and external capital. However, their study was conducted from the Sri Lankan context. We have added three new items to ensure this

study fits the South African context. The new items Black Economic Empowerment (BEE), Disadvantaged and HIV/AIDS have been included under the sub category Equity Issues in the Human Capital category. These items were included to reflect both the political and social context of South Africa. Although their inclusion would affect comparisons of the results across countries, the researchers felt they were important considerations that could not be excluded.

Majority of the terms included in Abeysekera & Guthrie's (2005) instrument are generally more or less straightforward to understand. However, they did not report any definitions or 'coding rules'. Some of the items in their framework were difficult to understand, and came across as very abstract. This meant coding and identification of these terms in the annual reports would be inconsistent. The terms included 'entrepreneurial spirit', 'know-how' and 'financial relations'. For this reason it was decided to remove these categories in order to eliminate potential ambiguity and misunderstanding. As Beattie & Thomson (2007, p.11) suggest, 'in the absence of explanation and transparency, interpretations of the findings across studies are potentially meaningless.' After necessary modifications our instrument included 39 items in total. These items together with the decision rules are shown in Table 2.

#### TABLE 2 ABOUT HERE

As Table 2 shows our content analysis framework includes 39 items in total divided into three broad categories of human capital (25 items), internal capital (4 items) and external capital (10 items). The items have also been divided into 15 subcategories (shown in *italics* in Table 2) to bring more rigor to the analysis. We believe this instrument is rigorous enough to capture the ICD practices in South African companies for the reasons noted above. For

analytical purposes, we have used two measures: frequency count (number of times a particular item was mentioned) and line (sentence) count (volume of disclosure). Frequency count was carried using a scale of 0 and 1. 0 was recorded for no disclosure and 1 for disclosure of a particular item. For measurement of volume of ICD other measures such as number of words or pages can be used. We have used line count because line counts give us an opportunity to infer from the narrative statements. Word count would not serve this purpose. Given the lower level of ICD in South Africa page count was not considered appropriate in this study. In addition to the frequency count and line count we have also analyzed the location of ICD under eight sections, viz. Vision, Mission and Goals, Chairman's Report, Directors' Report, Operations, Financial Statements, Audit Report, Corporate Governance and Others.

Like all other methods reliability of the content analysis carried out is of particular significance. There are two reliability related concerns (Milne & Adler, 1999) which are particularly noteworthy here.

The first concern is related to the skills and experience of the coders. In this case one of the authors is quite experienced in content analysis and has used it extensively in his previous studies. He trained the other author and engaged in significant discussions to resolve issues before, during and after the content analysis. In addition, the data recorded was reviewed after multiple time intervals to ensure they were coded objectively and consistently. In conducting manual content analysis on a significant number of annual reports a practical threat to reliability was 'coder fatigue', described by Neuendorf (2002). This is due to the high level of attention to detail required in analysing each report. The potential threat became

apparent particularly when analysing the much larger reports made up of over 200 pages. To overcome this threat, sufficient breaks were taken between analysing the various sections of the annual reports as well as repeated coding to ensure accurate results. Several pilot attempts at coding were also undertaken to establish a good initial reliability, as suggested by Neuendorf (2002).

The second concern is related to the reliability of the coding instruments. We have used an instrument which has already been tested in the previous studies. By modifying it we have further improved the instrument. Our well specified categories should help consistent coding decisions across time and achieving fewer discrepancies in coding. Explicit decision rules (see Table 2) were used to reduce degree of subjectivity in the coding exercise and to help distinguish between the relevant items.

## **5. ICD Practices in South Africa**

The overall results reported in Table 3 indicate an increase in the amount of ICD by the South African companies over the study period of five years (2002-2006), and this was recognized across all 3 categories. Total ICD had almost doubled in 2006 as compared to 2002 both in terms of frequency and line counts.

TABLE 3 ABOUT HERE

The proportion of ICD categories in terms of frequency is shown in Figure 1. From the Figure 1 it is evident that human capital was by far the most reported category and represents over 60% of total ICD in both years. Human capital is the only category which has increased

in percentage terms. External capital was the second most reported category, with the least reported category being internal capital.

FIGURE 1 ABOUT HERE

We now examine the results one level further by analysing the results according to the sub-categories shown in Table 2. The sub-category wise results are shown in Figure 2.

FIGURE 2 ABOUT HERE

Once again the majority of the disclosure is found in the sub-categories towards the left of the Figure 2 indicating the dominance of sub-categories related to human capital. In terms of sub-category disclosure, 'Equity Issues' stood out as the most reported sub-category in terms of both frequency and line counts. This sub-category is made up of the items: Black Economic Empowerment, HIV/AIDS, Disadvantaged, Gender, Disability and Religion. However, as the item wise rankings (in terms of frequency) in Table 4 illustrates Black Economic Empowerment dominates this sub-category and by 2006 it is the most frequent item and had the highest volume of disclosures.

TABLE 4 ABOUT HERE

Table 4 helps us to dig further into the findings of Figure 2 which indicates the dominance of equity issues. Within this sub-category BEE was the most frequently reported category in 2006 while its rank was 5 in 2002. Some examples of BEE disclosures are provided below:

*Our transformation committee, established last year with me as Chairman, has the task of driving the group's BEE strategy into the future. Various internal transformation subcommittees have been formed in order to tackle the various pillars of BEE and to ensure that our group plays its rightful role in the development of historically disadvantaged communities. (Foschini Annual Report, 2006, P. 15)*

*The committee has established a broad-based BEE strategy aligned to the Broad-based Black Economic Empowerment Act...Clear guidelines have been defined for each of the seven elements of broad-based BEE...The committee's ongoing responsibilities are to monitor and review all aspects of the group's broad-based BEE strategies and to ensure the achievement of its stated targets. (Foschini Annual Report, 2006, P. 49)*

Within equity sub-category another frequently occurred item was HIV/AIDS. One typical example is given below for illustration purposes:

*Key staff health and welfare initiatives include the operation of a 24-hour, seven days a week health and wellness helpline and the implementation of a comprehensive HIV/Aids programme that includes the provision of free antiretrovirals to our permanent staff and their spouses. (MassMart Annual Report 2006, P. 84)*

However, remaining items within this sub-category were not much popular and mostly feature at the bottom of the rankings. Another two most frequent items within the broader human capital category were that of community involvement and training programs. In terms of the line per unit frequency ratio the volume of disclosures on community development nearly doubled by 2006 (2006: 6.01 and 2002: 3.5) and appears to be much higher than the overall average for the human capital category (2006: 2.93 and 2002: 3.29). 'Systems' and

'brands' were the most frequently disclosed item across the study period within the internal capital and the external capital categories respectively.

The location where ICD is made can also be very important as it can provide additional insights regarding the significance attached to various ICD. Table 5 captures the location of ICD in South African reports.

#### TABLE 5 ABOUT HERE

From the Table 5 it appears that most of the ICD is being disclosed (nearly 60% in 2006) in corporate governance and directors' report section of the annual report. Very little was disclosed in the financial statements section.

Table 6 exhibits the individual company rankings in terms of frequency of ICD. It shows that Telecommunication Company MTN and Leisure Sector Company Don were the best and worst performers across the study period in terms of their ICD profile. Another observation is that subject to certain exceptions most of the firms made more disclosures in 2006 as compared to 2002. Don was one of the exceptions where ICD went down in 2006. Finally, we found that there were variations in the level of ICD made by various companies belonging to different sectors.

#### TABLE 6 ABOUT HERE

## **6. Discussion and conclusion**

The above results show that total overall ICD has increased over the study period and across the three categories. However, increase is particularly noticeable in the human capital

category where it has doubled both in terms of frequency and line counts during the study period. This is also observed in the comparison of this study's findings with those of prior studies conducted from the emerging economy context. The comparison has been shown in Table 7.

#### TABLE 7 ABOUT HERE

Table 7 shows that like most of the previous studies this study also found internal capital as the least popular category. However, this study differs from the previous studies in that it reports human capital as the most popular category as opposed to external capital which was found by most of the previous ICD studies (including April et al's (2003) previous South African studies). The proportion of human capital disclosures has increased from 30% in the previous South African study (April et al., 2003) to 69% in the current study. This is a remarkable change in the pattern of ICD in general and South Africa in particular which needs to be explained further. It must be noted here that most of the human capital sub-categories and items are related to various employee related issues. Amongst the 15 sub-categories 'equity issues' attracted the top rank. This might be attributed to the strong political and social emphasis placed on 'equity issues' in South Africa. The South African government has taken several steps to ensure these issues are taken into consideration by the companies. Introduction of King Report 2 (2002) and BEE Act in 2004 is part of that initiative. These contextual factors have been discussed in section three to help us interpret the findings of this study. According to the legitimacy theory it can be argued that increased disclosures in the human capital category could be part of a corporate strategy to align with the societal expectations by demonstrating that they are adequately addressing these issues.

It is observed that there are variations in ICD practices of different companies in different sectors which echoes the findings of Bozzollan et al (2003) and Striukova et al (2008). The previous South African study by April et al (2003) indicated that mining companies had a lower propensity to ICD relative to other companies. This is confirmed by our study as well. The only two mining companies (Petmin and Schamin) included in our study did not perform very well in terms of their ICD and features at the bottom of the rankings shown in Table 6.

Similar to Bozzollan et al (2003) and Striukova et al (2008) we also observe variations between companies due to size effects. Bozzollan et al (2003) argued that larger companies undertake more activities with different business units, different critical success factors and different long term value-creating potential. They tend to disclose more information to provide stakeholders with a complete picture of the company. In this study this argument can be backed up using the MTN Group as an example. MTN is not only the largest company in our top 20 companies it is also ranked first for its ICD. On the other hand, the smallest company Don received lowest ranking.

In this study we have also captured the location of ICD. We have found that most of the ICD is located in the corporate governance and directors' report section of the annual report which indicates the level of importance attached to these disclosures by the South African companies. It could be due to these firms coming under a lot of pressures not only from stakeholders such as government and employees but also due to the increasing competition in the regional and global market place where more attention is paid to the non-financial factors that affect business. Very little has been disclosed in the financial statements section which

implies that there are rare attempts to quantify ICD in financial terms. This could be due to difficulties involved in putting precise figures into the various ICD items. The knowledge in this area is still very limited and evolving in nature.

Our study contributes to the ICD literature on two counts: it provides an insight from the under researched African perspective and it provides a rare longitudinal perspective of ICD practice as opposed to previous studies which mainly concentrated on a single year. However, like all other research the method adopted in this research has some limitations. For example, there are subjectivities involved in the coding procedures used. To minimise this we have used various measures explained in the methodology section. Moreover, it is not possible to interact with the data generated within the annual reports due to its fixed nature. To overcome this future research might use interview method combined with content analysis to understand the corporate motivations behind ICD. Given the dearth of longitudinal research in ICD future research might involve a longer time period with more companies. Such longitudinal studies could also be undertaken within the context of a single organisation. For this purpose case study would be an appropriate approach.

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**Table 1**

FM's Top 20 Companies in 2006.

FM Ranking	Company	Industry
1	Edcon	Retail Clothing
2	MTN	Telecoms
3	Aspen	Pharmaceuticals
4	Schamin	Mining
5	MassMart	Retail Consumer Goods
6	EOH	IT
7	Petmin	Mining
8	Don	Leisure
9	Digicore	IT
10	PPC	Industrial
11	Pinnacle	IT
12	Woolworths	Retail Clothing
13	CMH	Motor Vehicles
14	Omnia	Industrial
15	Brandcorp	Retail Consumer Goods
16	AME	Media
17	Netcare	Healthcare
18	AMAPS	Retail Appliances
19	Reunert	Industrial
20	Foschini	Electronics

**Table 2**  
Content Analysis Framework.

<b>Items</b>	<b>Decision Rules</b>
<b>Human Capital: Training &amp; Development</b>	
1. Vocational qualifications	Additional qualifications held by employees & directors
2. Career development	Any management initiatives that encourage career development amongst employees
3. Training programs	Any mention of training programs
<b>Equity Issues</b>	
4. Race	Any steps mentioned or confirmation of the position on race
5. Gender	Any steps mentioned or confirmation of the position on gender
6. Disability	Any steps mentioned or confirmation of the position on disability
7. Religion	Any steps mentioned or confirmation of the position on religion
8. Black Economic Empowerment (BEE)	Any discussion of corporate BEE initiatives
9. Disadvantaged	Measures aimed at employees from disadvantaged background
10. HIV/AIDS	In regards to treatment of employees with HIV as well as company initiatives
<b>Employee Safety</b>	
11. Health and safety	Health and safety standards
<b>Employee Relations</b>	
12. Union Activity	Trade union relations
13. Employees thanked	Thanks given to the employees
14. Community Involvement	Company & employee involvement in community based activities
15. Employees Featured	Any 'named' employees in report, employees that have won awards earned, this excludes directors.
<b>Employee Welfare</b>	
16. Employee S&O Scheme	Share & Option Schemes
17. Compensation (executive)	Reference to remuneration
18. Compensation (employee)	Reference to remuneration
19. Employee Benefits	Additional non-financial benefits such as health insurance
<b>Employee Related Measurements</b>	
20. Education levels	Reference to organisational learning different from vocational qualifications
21. Expert Seniority	Technical & management skills in production, operations
22. Employee Numbers	Clear detail of total number of employees
23. Professional Experience	Number of years worked, previous experience- Particularly with directors
24. Age	Includes directors whose age is identified also look out for average age of employees.
25. Value added statements	Clear discussion of employees usually in terms of remuneration (wages & salaries)
<b>Internal Capital</b>	
26. <i>Systems</i>	Information on systems or networking
27. <i>Processes</i>	Management or technical processes implemented

28. <i>Philosophy &amp; culture</i>	Specific reference to working culture
29. <i>Intellectual Property (IP)</i>	Any mention of IP particulars (focus on high tech industries and pharmaceuticals)
<b>External Capital: Brand Building</b>	
30. Brands	Description of brands owned/bought by the firm
31. Customer Satisfaction	Reference to overall satisfaction of customers
32. Quality Standards	includes ISO accreditations, reference to quality initiatives
<i>Corporate Image building</i>	
33. Company name	Reference to business collaboration. Any named companies involved in agreements
34. Favourable contracts	Favourable contracts signed
<i>Business Partnering</i>	
35. Business collaboration	Reference to informal collaborations with business partners which did not lead to formal agreement
36. Licensing agreements	Any partnership or collaborative agreements with other firms
37. Franchising agreements	Any franchise agreements signed
38. <i>Distribution Channels</i>	Reference to supply chain management & distribution
39. <i>Market Share</i>	Any mention of product/division market share or competitive position

**Table 3**

Overall Results Ranked by ICD Categories.

	Frequency 02	Line Count 02	Frequency 06	Line Count 06
Human Capital	414	1189	865	2848
External Capital	184	533	278	877
Internal Capital	83	230	119	312
<b>Total</b>	<b>681</b>	<b>1952</b>	<b>1262</b>	<b>4037</b>

**Table 4**  
ICD Items Rankings (in terms of frequency).

Rankings	Item	Freq 2002	Line 2002	Rankings	Item	Freq 2006	Line 2006
1	Brands	81	224	1	Black Economic Empowerment	152	467
2	Community Involvement	40	140	2	Brands	92	319
3	Systems	37	124	3	Community Involvement	78	469
4	Training programs	36	118	4	HIV/AIDS	75	215
5	Black Economic Empowerment	34	80	5	Training programs	69	282
6	Age	27	194	6	Systems	62	171
7	Employee Share & Option Scheme	27	67	7	Business Collaboration	52	159
8	Business Collaboration	27	61	8	Age	49	196
9	HIV/AIDS	26	60	9	Compensation (executive)	45	136
10	Customer Satisfaction	23	65	10	Employee S&O Scheme	39	138
11	Employee Benefits	22	79	11	Employee Benefits	39	124
12	Compensation (executive)	22	53	12	Employee Safety	39	123
13	Employees thanked	21	66	13	Race	38	95
14	Philosophy & culture	21	42	14	Processes	38	89
15	Quality Standards	19	64	15	Employees thanked	36	126
16	Processes	19	46	16	Quality Standards	34	103
17	Professional Experience	19	34	17	Employees Featured	34	59
18	Compensation (employee)	18	39	18	Customer Satisfaction	32	85
19	Value Added Statements	18	0	19	Career development	31	98
20	Employee Safety	17	51	20	Distribution Channels	25	88
21	Career development	17	40	21	Market Share	25	83
22	Market Share	16	72	22	Disadvantaged	24	58
23	Disadvantaged	14	28	23	Professional Experience	24	45
24	Race	12	37	24	Compensation (employee)	20	73
25	Employees Featured	11	23	25	Union Activity	17	43
26	Employee Numbers	9	32	26	Value Added Statements	17	0
27	Distribution Channels	9	16	27	Philosophy & culture	15	42
28	Vocational qualifications	7	12	28	Education	13	41
29	Intellectual Property	6	18	29	Employee Numbers	11	29
30	Gender	5	9	30	Company Name	7	19
31	Licensing Agreements	4	17	31	Vocational qualifications	6	17
32	Education	4	13	32	Licensing Agreements	6	14
33	Favourable Contracts	4	13	33	Intellectual Property	4	10
34	Expert Seniority	4	8	34	Gender	3	6
35	Union Activity	3	6	35	Favourable Contracts	3	5
36	Disability	1	1	36	Expert Seniority	2	4
37	Company Name	1	0	37	Religion	2	2
38	Religion	0	0	38	Disability	2	2
39	Franchising agreements	0	0	39	Franchising agreements	2	2
<b>Total</b>		<b>681</b>	<b>1952</b>	<b>Total</b>		<b>1262</b>	<b>4037</b>

**Table 5**

Total ICD Ranked (line count) according to location in the Annual Reports.

<b>Section</b>	<b>Line Count 2002</b>		<b>Line Count 2006</b>	
Corporate Governance	707	36%	1843	46%
Directors' Report	423	21%	514	13%
Vision, Mission, Goals	219	11%	231	5%
Chairman's Report	264	13%	386	9%
Operations	210	11%	807	20%
Financial Statements	93	5%	215	5%
Other	34	1.7%	40	0.9%
Audit Report	2	0.1%	1	0%
<b>Total</b>	<b>1952</b>		<b>4037</b>	

**Table 6**

Company Rankings based on ICD Frequency.

	<b>Company</b>	<b>FREQ 02</b>	<b>COUNT 02</b>		<b>Company</b>	<b>FREQ 06</b>	<b>COUNT 06</b>
1	MTN	99	276	1	MTN	178	505
2	PPC	58	187	2	EDCON	108	426
3	REUNERT	56	156	3	ASPEN	104	342
4	EDCON	54	162	4	MASSMART	103	385
5	NETCARE	51	150	5	PPC	96	322
6	ASPEN	46	119	6	FOSCHINI	93	297
7	MASSMART	37	120	7	REUNERT	68	211
8	AME	34	59	8	OMNIA	60	214
9	OMNIA	32	109	9	NETCARE	57	298
10	WOOLWORTHS	28	98	10	AMAPS	56	180
11	DIGICORE	24	73	11	WOOLWORTHS	52	137
12	CMH	23	91	12	PETMIN	44	114
13	EOH	23	59	13	AME	44	80
14	FOSCHINI	23	50	14	DIGICORE	42	115
15	AMAPS	20	69	15	CMH	40	112
16	BRANDCORP	20	58	16	EOH	34	80
17	PINNACLE	16	39	17	PINNACLE	33	61
18	SCHAMIN	14	37	18	SCHAMIN	25	63
19	PETMIN	12	14	19	BRANDCORP	18	79
20	DON	11	26	20	DON	7	16
	<b>Total</b>	<b>681</b>	<b>1952</b>		<b>Total</b>	<b>1262</b>	<b>4037</b>

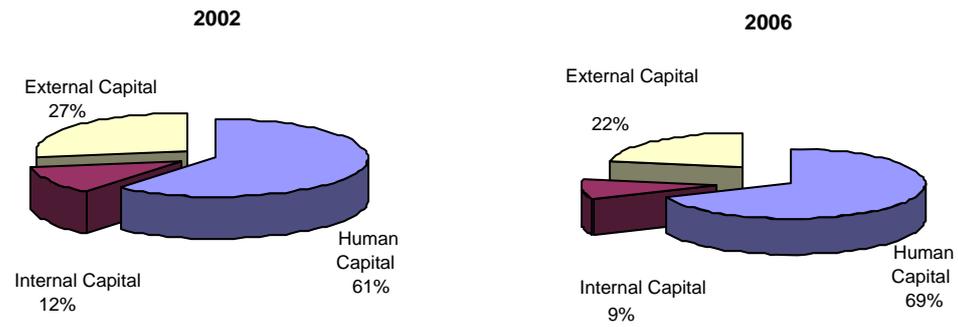
**Table 7**

Comparison of ICD Categories by Proportion of Frequencies.

ICD Categories	This study (2006 data )	April et al (2003)	Abeysekera & Guthrie (2005)	Goh & Lim (2004)	Guthrie, Petty, & Ricceri (2007)
Country	South Africa	South Africa	Sri Lanka	Malaysia	Hong Kong
Human Capital	69	30	36	22	35
External Capital	22	40	44	41	37
Internal Capital	09	30	20	37	28
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Figure 1**

Relative Proportion (%) of ICD Categories by Frequency.



**Figure 2**

Total ICD by Sub-Categories.

