Intellectual Capital Disclosures

The effect of mandatory Integrated Reporting
Abstract

Purpose – The purpose of this thesis is to investigate how mandatory obligation to follow the International <IR> Framework while producing the corporate reports influence the intellectual capital disclosures in the reports.

Research design – The study uses a disclosure scoreboard to score a selected sample of annual reports depending on whether it disclose intellectual capital information or not. The sample consists of companies listed in South Africa were it is mandatory to follow the integrated reporting framework and companies listen in Sweden where it is not mandatory to produce an integrated report.

Empirical results and conclusion – The results of this thesis indicates that the mandatory use of the International <IR> Framework have an impact on the amount of intellectual capital disclosures. Further it concludes that higher level of compliance with the framework further increases the intellectual capital disclosure.

Contribution – This study has been an early step towards concluding whether the use of integrated reporting has any effect on the amount of intellectual capital information disclosed in companies’ annual report.
### Definitions

<table>
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<th>Abbreviation</th>
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<tr>
<td>IC</td>
<td>Intellectual capital</td>
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<td>ICD</td>
<td>Intellectual capital disclosure</td>
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<tr>
<td>&lt;IR&gt;</td>
<td>Integrated reporting</td>
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<td>IIRC</td>
<td>International integrated reporting council</td>
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<td>IRCSA</td>
<td>Integrated reporting committee of South Africa</td>
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<td>SWE LC</td>
<td>Swedish listed companies</td>
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<td>ZAF LC</td>
<td>South african listed companies</td>
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<tr>
<td>JSE</td>
<td>Johannesburg Stock Exchange</td>
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<td>GRI</td>
<td>Global Reporting Initiative</td>
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1 Introduction

The first chapter of this thesis will give an explanation to the background of the studied topic. It will also explain why the chosen topic is interesting to study. The first chapter will also present the research questions and the purpose of the thesis together with the delimitations.

1.1 Background

The trust in businesses has been under great pressure since the latest financial crisis. As the corporate scandals, that to some extent was the starting point of the crisis, unraveled it became clear that some corporations had been “doing well by being bad”. These events took place at a time where globalization and instant communication has equipped both customers and other stakeholders with the tools to compare and evaluate products and services from anywhere at any second. This lack of trust together with the increasing globalization of the 21st century has forced corporations to be increasingly responsive to stakeholder demands and the stakeholders demanded a higher level of transparency (Eccles, 2010). From this sprung the International Integrated Reporting Council (IIRC, called International Integrated Reporting Committee at the time). In their first discussion paper they used the headline “The world has changed- reporting must too” (IIRC, 2011, p.4).

The IIRC was created by Global Reporting Initiative, the International Federation of Accountants, and the UK Prince of Wales' Accounting for Sustainability Project as a joint project and was formally instituted in 2010. Since its creation it has attracted a wide range of participants from standard setters, corporate leaders, academics, accounting professionals, investors, regulators and the civil society (Soyka, 2013). The IIRC’s goal is to combine the financial report with other non-financial capitals. The integrated report should explain how the interaction between the organization and its external environment and the different capitals, financial and non-financial, works and how it creates value in the long, medium and short term. In December 2013 the IIRC released the International <IR> Framework. In the fundamental concepts of the framework it is stated that the different capitals that enables an organization to create value are: financial, human, nature, social and relationships, manufactured and intellectual capital (IIRC, 2013).

The usage of various capitals to explain how value is created is not a new method. It is the way that the integrated reporting combines the capitals to achieve economies-of-scale like
relationships, to paint a holistic picture of a company that is new (IIRC, 2013). The focus of this study is intellectual capital, which various researchers have tried to interpret for well over 15 years (Dumay, 2014). The importance of intellectual capital has increased in phase with the increasing focus on intangible assets (which is a component of intellectual capital). In the traditional financial reporting material, financial- and to some extent intangible assets are used to present a true and fair picture of the organization. However, studies have shown that in some cases almost as much as 75-90% of the total value of listed companies is derived from intangible assets (Dumitrescu, 2012). Due to the recognition criteria that exist, most of the intellectual capital still goes undisclosed. Consequently, this often leads to the observation that the market value of organizations is higher than the book value (Branswijck & Everaert, 2012).

Many attempts have been made to produce a framework that in a truthful and comprehensive way report intellectual capital (Abhayawansa, 2014). One pioneer within the subject of intellectual capital, with one of the first attempts to incorporate non-financial information within the annual report was the Konrad Group (Sveiby, 1997). The early researchers mainly focused on establishing a framework for reporting and defining intellectual capital (Bontis, 2001, 2002; Guthrie & Petty 2000). Numerous studies have been carried out with these frameworks however researchers have failed to present an established framework (Abhayawansa, 2014). More recent attempts to create a framework or a model for reporting on intellectual capital include Secundo, Elena-Perez, Martinaitis & Leitner (2015) who propose a flexible framework for defining and implementing intellectual capital measurements at universities.

“Intellectual capital has been considered by many, defined by some, understood by a select few, and formally valued by practically no one” (Bontis, 1998, s.63).

This citation gives a picture of how intellectual capital has been perceived. However, as mentioned, one of the fundamental concepts of the International <IR> Framework is intellectual capital which implies that the implementation of the <IR> Framework might enhance the level of intellectual capital disclosures (ICD) in organizations reports, but there is no guarantee (Melloni, 2015).
1.2 Problem

As mentioned earlier, has the subject of ICD received increasing attention over the past decades as companies have shifted from fixed asset capital intensive industries towards more knowledge based or service based industries (Guthrie & Petty, 2000). In the early 1980s traditional accounting assets (financial capital) made up about 80% of the S&P 500 companies market value. In 2000, this measurement had fallen to 15% (Ballow, Burgman, & Molnar, 2004). With the increasing focus on non-financial assets, companies experience substantial pressure to communicate how their capital is being managed. However, past research has found that the level of intellectual capital related disclosures in annual reports is limited (Beattie & Thomson, 2007).

Previous research has pointed out the lack of an established framework and criticized the existing frameworks as they almost exclusively propose a separate intellectual capital report (Abhayawansa, 2014; Guthrie & Petty, 2000). A separate intellectual capital report is not optimal according to Abhayawansa (2014), as his research argues that intellectual capital is only one part of a company’s value creation process and the complete process cannot be interpreted in several different reports. Integrated reporting has sought to resolve this issue and can be seen as an attempt to correct previous failure (Abhayawansa, 2014). The IIRC framework explains that:

“An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organisation’s ability to create value over time” (IIRC, 2013, p. 5).

Few disclosure guidelines regarding intellectual capital are mandatory, implying that it is almost exclusively up to the companies themselves to decide what to disclose (Whiting & Woodcock, 2011). South Africa became in February 2010 the first and so far only country to implement integrated reporting into its mandatory reporting by implementing requirements for publicly listed companies to produce an integrated report. This was implemented by incorporating the principles of The King Code of Governance Principles for South Africa 2009 (King III), which recommend integrated reports, into the Johannesburg Stock Exchange’s Listings requirements (IRCSA 2016a; Eccles & Krzus, 2014). Swedish companies have historically been in the forefront of voluntary intellectual capital reporting with Skandia standing out as an industry leader (Jacobsen, Hofman-Bang, & Nordby, 2005 Saleh, Hassan, Jaffar & Shukor, 2010). Furthermore, pioneers within intellectual capital
reporting such as the Konrad Group further supports the notion that Swedish companies
was early started in the reporting of intellectual capital (Sveiby, 1997).

In relation to this Vergauwen & van Alem (2005) locate accounting regulation as the most influential determinant of the level of intellectual capital disclosures and Striukova, Unerman & Guthrie (2008) finds that companies in the UK only disclose about one third of their intellectual capital information in their annual reports. Therefore it is of interest to investigate if South African listed companies with a mandatory obligation to issue an integrated report disclose more voluntary information about intellectual capital or other voluntary intellectual capital information in their corporate reports than similar companies listen in Sweden. This would give an indication whether Swedish listed companies would disclose more information if they were obliged to issue an integrated report in accordance with the International <IR> Framework.

1.3 Research questions
The main question this thesis investigates is:

- How does mandatory use of the International <IR> Framework influence the intellectual capital disclosures in the corporate reports?

In order to answer the main question 2 sub-questions were formed. The sub-questions should indicate which differences that can be perceived of mandatory use of the International <IR> Framework. The term “successful implementation” in the second sub-question refers to a report by EY (2015) that evaluate South African listed companies on their implementation of the International <IR> Framework into their corporate report.

- How are the intellectual capital disclosures in the corporate reports of Swedish listed companies and South African listed companies differentiating?

- How are intellectual capital disclosures in the corporate reports of South African companies varying dependent on their success in implementing the International <IR> Framework?
1.4 Purpose
The purpose of this thesis is to investigate how mandatory obligation to follow the International <IR> Framework while producing the corporate reports influence the intellectual capital disclosures in the reports.

1.5 Delimitations
The investigation of this thesis is limited to annual reports issued for the year 2014 and the sample consists of twenty companies listed on NASDAQ OMX Stockholm and the Johannesburg Stock Exchange. Financial companies such as insurance companies and banks were excluded from the thesis sample due to their special nature. This thesis will only take voluntary intellectual capital disclosures in consideration when investigating whether an integrated report enhance the amount of information within a report. Further this thesis will only take the amount of disclosures into account. No judgments regarding the quality of the disclosures will be considered.
Theoretical framework

In this chapter the theoretical framework will be presented. The concept of intellectual capital will be explained together with the background and fundamentals of International Integrated Reporting Council. Further an historical overview of integrated reporting in South Africa and Sweden. In the end previous research will be presented together with most relevant theories connected to intellectual capital disclosures and integrated reporting.

2.1 Intellectual capital

The description of intellectual capital vary between authors, researchers and cultures. Terms as “intangibles”, “intangible assets”, “intellectual knowledge”, “intangible property”, “intangible resources” and “intellectual capital” often refers to the same things (Kwee, 2008). Several researchers conclude that intellectual capital is the difference between an organization's book value and its market value (Edvinsson & Malone, 1997; Mouritsen, Larsen, & Bukh, 2001a; Sveiby, 1997). However some researchers consider this gap between the book- and the market value only as goodwill (Holthausena & Wattsb, 2001). While other researchers believe that goodwill, as an intangible asset is not sufficient to explain intellectual capital as the term goodwill is too vague and broad (Kwee, 2008).

As organizations can not recognize intellectual capital in their balance sheets its value remains hidden. Hence it can cause this mentioned gap between market and book value (Mouritsen et al., 2001a). This is in line with how most researchers define intellectual capital. The most common way of defining intellectual capital is that it is something that possesses some kind of value to the company or will generate income or benefits in the future. Also intellectual capital is without physical substance and a non-monetary asset (Kwee, 2008).

Researchers often divide intellectual capital into 3 categories to further explain what the term refers to. These categories are:

- Internal (structural) capital
- External (relational) capital
- Employee benefits (human) capital

The first author to divide intellectual capital this way was Karl Erik Sveiby in 1997. Since then numerous researchers have accepted, added or renamed these categories but in general they remain the same (Edvinsson, 1997; Kwee, 2008; Rimmel, 2001; Sveiby, 1997). The internal structure refers to the value in for example organizations management,
research and development, legal structures, patents, technology and software. The external structure emphasizes the relationships with customers and suppliers, branding, trademarks and reputations. Employee competences (or human capital as many later researchers after Sveiby choose to name it) focus on the skills, level of education and training and the experience of the organization's workforce (Petty & Cuganesan, 2005; Rimmel, 2001).

Figure 2.1 Breakdown of intellectual capital (Petty & Cuganesan, 2005).

Figure 2.1 describes the basic divisions of intellectual capital as Petty & Cuganesan (2005) describe and name them. However different studies have divided these into a number of different sub-categories. According to Whiting & Woodcocks (2011) the number of sub-categories can range between 18 and 25. Beattie & Thomson (2007) however counted to a total of 128 different sub-categories across the literature they studied, suggesting that the concept of intellectual capital is rather broad.

Intellectual capital as a research field is argued to contain 3 stages of development. The first 2 stages of development, first to raise awareness and understanding of intellectual capital and secondly to establish intellectual capital as a research field, was outlined by Petty and Guthrie (2000). This research then led to a great amount of different guidelines, theories and models being developed during the first decade of the 20th century to improve ICD (Abhayawansa, 2014; Chiucchi & Montemari, 2016; Sveiby, 2010). However no individual
framework became especially widespread in practice despite the amount that were
developed (Chiucchi & Montemari, 2016; Dumay, 2009). Because of the lack of a
widespread framework these first stages has since then evolved into a third stage were
intellectual capital research focuses on critically examining the practise of intellectual capital
reporting (Guthrie, Ricceri & Dumay, 2012).

It is unclear how intellectual capital research will develop in the coming years and decades.
Edvinsson (2013) and Dumay (2013) argues that we might see a fourth stage of intellectual
capital research were the focus moves from the intellectual capital in organizations to a
bigger ecosystem. However most researchers seems to agree that the possibilities and
opportunities is broad and wide open (Edvinsson, 2013; Guthrie et al., 2012).

The first model for corporate reporting of intellectual capital was the Skandia Navigator in
1994 (Edvinsson, 2013). Some researchers argue that intellectual capital reporting began in
a good way but lost its momentum after the early reporting in the 1990s to other reporting
“trends” such as corporate social responsibility and sustainability reporting (Dumay, 2016).
However the latest “trend” that aims to become international reporting norm is the
integrated reporting, which is why the International <IR> Framework is the basis for this
investigation.

Intellectual capital is one of the 6 capitals emphasized in the International <IR>
Framework (IIRC, 2013) which will be further presented in coming sections. Scholars
argue in both directions regarding if <IR> will turn out to be international reporting norm
in the future. Flower (2015) argues that <IR> is already doomed to fail while Adams
(2015) encourage support for the <IR> framework and its goals. However <IR> will
develop in the future is going to affect the reporting of intellectual capital as well.
Abhayawansa (2014) even goes so far to suggest that the future research could benchmark
other intellectual capital models against the International <IR> Framework for
comparison.

2.2 Integrated Reporting

The IIRC (2013) proclaims that the primary target with the International <IR> Framework
and the integrated report is the organizations financial investors. The purpose of an
The IIRC expects the integrated report to evolve to the primary report for all companies (IIRC 2011). The development that can be observed over the last decades has been increasing mass of information which has presented itself in longer and longer annual reports that often are complemented by separate sustainability reports. An integrated report should include both mandatory and voluntary information in a way that reduce the clutter to a minimum. To make this possible one of the fundamental building blocks of integrated reporting is “materiality”. The definition of materiality in the International <IR> Framework is matters that can affect the short, medium or long term ability to create value in an organization. Which parts of an organization’s operation that should count as material in the International <IR> Framework might be difficult to determine, hence the IIRC and the International Federation of Accountants (IFAC) has released a full publication with guidance to organizations in the materiality question (IIRC & IFAC, 2015). Supporters of this shortening of reports conclude that the compromised reports should contain clear and easy references to information sources outside the integrated report that contain more detailed information; for example on company websites, to enable certain relevant and interested users to gain access to more depth in matters they deem interesting (Eccles & Krzus, 2010).
2.3 The development of <IR>

In the 1960s the traditional financial reports were all there was to find (IIRC, 2011). Between that point in time and today a couple of ideas developed that would turn out to be the background to what is developing as integrated reporting today. The first thing was that companies should report other nonfinancial information that the shareholders found of interest. These voluntary disclosures would increase the value of the report to the shareholders by providing explanations to why company’s market value often exceeds the book value by disclosing intangible assets that the balance sheet does not capture. Further it would give indications of the company’s future prospects and financial performance and hence balance the fact that the traditional financial reports only disclose an image of the past and nothing of the more interesting future. The second idea was that even if most of the usual shareholders of a company are not interested in social, governance and environmental disclosures, companies should still be obligated to disclose this type of information to other stakeholders (Eccles & Serafeim, 2011).

In the last 20 years the interaction between reporting systems and performance measurement, company’s control systems and managements’ strategic positions have been analyzed and 4 different frameworks has developed: Balanced Scorecard, Triple Bottom Line, Sustainability Disclosures and Integrated Reporting (de Villiers, Rinaldi, & Unerman, 2014). The first other framework that emerged was the Balanced Scorecard that mainly measures internal performance that integrated internal financial- and non-financial measures. After the Balanced Scorecard the focus on external reporting increased in popularity at the end of the 1990s. The Triple Bottom Line brought in external disclosures of social and environmentally regarded information together with the financial performance (Elkington, 1997). In more recent times the tendency is to mention social and environmental disclosures as Sustainability Disclosures instead of using the Triple Bottom Line (de Villiers et al., 2014; Eccles & Serafeim, 2011).

When disclosures of environmental and social matters became increasingly common at the end of the twentieth century it was for the most part disclosed in the corporate annual report (de Villiers et al., 2014). Social and environmental reporting spread and became extensively practiced. Much due to the Global Reporting Initiative (GRI) that was created at the time when the Triple Bottom Line was invented in 1997. When the GRI broke lose into an individual organization in 2001 it had the goal “To make sustainability reporting standard
practicing by providing guidance and support to organizations” (Eccles & Serafeim, 2011, p.75). However as the practice of social and environmental reporting amplified, so did the amount of information that was reported in the matter. This lead to many organizations moving social and environmental information into other media such as a separate sustainability report instead of the annual report (de Villiers et al., 2014) The annual report then turned into a medium reserved to communicate the most relevant information to the financial stakeholder (mainly shareholders). Whereas information the organization judged more relevant to other stakeholders was published in greater detail either in the separate sustainability report or through for example a company website (de Villiers & van Staden, 2011).

As the GRI released their guidelines for sustainability reporting, the complexity of social, environmental and governance increased and there was a situation with a growing page number in 2 different reports. This leads to a situation where the tendency was that only professionals had enough expertise to understand the corporate reports due to the information overload that many readers experienced. Integrated Reporting was a reaction to this problem. As many regulatory bodies and reporting organizations tried to find solutions to the problem of disconnected readers by providing a more universal picture in the sustainability and financial reports, the first steps towards the IIRC was taken. One of the early pioneers was 2 Danish companies, Novozymes in 2002 and Novo Nordisk in 2004 who released amongst the first integrated reports. This lead to the creation of the IIRC and the mission to develop integrated reporting to a global level (de Villiers et al., 2014; Eccles & Serafeim, 2011; IIRC, 2011).

2.4 The International Integrated Reporting Council

The International Integrated Reporting Council (IIRC) was formally registered in August of 2010 (Fowler, 2015; IASplus, 2016). Most notable of the new organization was the incorporation of several influential individuals in the governing body of the council. The chairman of the IIRC, who has chaired the council from the start, is the former chairman of the GRI and the chairman of the King Committee who issued the King 1, 2 and 3 reports, Mervyn King (IIRC, 2016a). Other representatives in the committee was the heads of organizations like the Financial Accounting Standards Board, the International Accounting Standards Board, the International Federation of Accountants, the CEOs of the “Big Four” accounting firms and a number of CFOs of multi-international companies.
for example HSBC and Nestlé. Many of these are still members of the IIRC (Fowler, 2015; IASplus, 2016; IIRC, 2011).

The mission of the IIRC is to put integrated reporting and thinking into the everyday business norm of both public and private sectors on a global scale. The vision is that this cycle of thinking and reporting would lead to a capital allocation that will support both financial stability and sustainability. (IIRC, 2016b). The International <IR> Framework is a tool that is supposed to spread the <IR> worldwide (IIRC, 2016c).

2.5 The International <IR> framework

After the formation of the IIRC the discussion paper “Towards Integrated Reporting” was released in September 2011. The paper explained the reasoning behind the creation of the IIRC and suggested a change towards Integrated Reporting. It also contained the fundamental ideas for the International <IR> Framework (IIRC, 2011). The discussion paper was designed with questions for companies, institutions, regulators and investors to answer together with any other comments to give feedback to the IIRC. (IIRC, 2016d). The framework was released in December 2013 (IIRC, 2013).

![Figure 2-2 The value creation process (IIRC, 2013)](image)

As shown in figure 2.2 above, the International <IR> Framework is based on the existence of 6 different capitals. One of them is Intellectual capital which is the focus of this study.
The center of the framework is the idea of value creation, meaning how an organization takes various inputs, in the form of capitals, into the business model and convert them to outputs and outcomes (Soyka, 2013).

The framework also consists of a chapter of content elements. This chapter is designed with 8 content elements which include a number of questions that should be answered in order to create an integrated report. The questions are then followed by a number of guidelines in order to assist the organization to answer the question (IIRC, 2013).

One example of a content element is “An integrated report should answer the question: What does the organization do and what are the circumstances under which it operates?” (IIRC, 2013 p. 24). The guidelines in how to answer that question is then “An integrated report identifies the organization’s mission and vision, and provides essential context by identifying matters such as:

- The organization’s:
  - culture, ethics and values
  - ownership and operating structure of principal activities and markets
  - competitive landscape and market positioning (considering factors such as the threat of new competition and substitute products or services, the bargaining power of customers and suppliers, and the intensity of competitive rivalry)
  - position within the value chain

- Key quantitative information (e.g., the number of employees, revenue and number of countries in which the organization operates), highlighting, in particular, significant changes from prior periods
- Significant factors affecting the external environment and the organization’s response” (IIRC, 2013 p.24).

2.6 Integrated reporting in South Africa

By implementing the principles of The King Code of Governance Principles for South Africa 2009 (King III) into the JSE listing South Africa became the first country to implement mandatory application of integrated reporting. Listed companies are obliged to either apply the recommendations of the code or explain the reasons of their deviations (apply-or-explain) (Atkins & Warren, 2015; Eccles & Krzus, 2014; IRCSA 2016a). The Code states that companies should report on governance, strategy and sustainability in an integrated way rather than producing separated reports. It states that risk, strategy,
governance and sustainability has become inseparable and should therefore be integrated into one report (Rensburg & Botha, 2013).

King III is the third version of The King Code of Governance Principles for South Africa. The first version, King I, was published in 1994 and surpassed the existing corporate governance code of best practice, the Cadbury report, by advocating total transparency. King I included topics such as board composition and the role of non-executive directors, all being areas which had previously been untouched in the history of South African business. King II was released in 2002 and the first indication of integrated reports emerged through the notion of an “integrated sustainability report”. King I and its successor King II operated on a comply-or-explain basis meaning that companies had to comply with the principles or explain possible deviations; This was as earlier mentioned restated in the King III version to apply-or-explain in order for a more flexible approach (Eccles & Krzus, 2014).

The Integrated Reporting Committee of South Africa (IRC of SA) was founded in May 2010 with the core purpose to develop guidelines for good practice and raise awareness for Integrated Reporting in South Africa (IRCSA). In January 2011, their “Framework for Integrated Reporting and the Integrated Report Discussion Paper” was released. This was before the IIRC released their discussion paper and hence the work of the IRC of SA was used in the IIRCs later paper. The Discussion paper took a principle-based approach to integrated reporting, offering practical direction on how to develop the integrated report. It covers the objectives and principles that should be included in the integrated report. However the International <IR> Framework was endorsed in March 2014 (IRCSA, 2016b).

2.7 The development of intellectual capital reporting in Sweden

Swedish listed companies have no legal liability to produce integrated reports or to follow the recommendations from the IIRC. However, companies are starting to adapt and take in the concept of integrated reporting. Swedish companies have a long history of various methods for producing ICD. In the mid-1980s research and practical efforts were conducted to attempt to measure knowledge in which was known as the Swedish Community of Practice (Sveiby, 1997). The so called Konrad group, which was composed of members from several Swedish knowledge companies. The group worked on
highlighting non-financial indicators with the purpose to improve the external communication and internal monitoring. They introduced “The intangible assets monitor” which was composed of indicators measuring External Structure (Customers and Suppliers), Internal Structure (Organization) and People’s Competence. They also aspired to encourage knowledge-based companies to improve their non-financial reporting. In 1994, 43 Swedish companies reported at least some of their intangible assets using the Konrad model. These included WM-data and Skandia, which moved on to becoming international leaders in the field (Sveiby, 1997).

In 1994, Leif Edvinsson was Intellectual Capital Manager at Skandia and worked with Intellectual Capital Statements. He then became the “brain of the year” in 1998 for his groundbreaking work in the field (Mouritsen, Larsen, & Bukh, 2001b). Skandia was the first company in the world to establish an Intellectual Capital function and to appoint a Director of Intellectual Capital. The reason for Skandia’s heavy investment was the changing investment schemes where companies nowadays are investing heavily in competence development or into the development of IT-systems etc. However one paradox that emerges from these investments is the short-term profits deteriorate, decreasing the book value of the company. The heavier you invest in knowledge, the less is the value of the company (Edvinsson, 1997).

2.8 Previous research
Many studies have been performed regarding voluntary disclosures of intellectual capital the last twenty years. The most common way to conduct these studies is to do a content analysis of the information disclosed in companies’ annual reports. Annual reports are mainly used because they are easy to obtain and seen as reliable since the organization have complete control over what is published and the information is intended to be spread publicly (Whiting & Miller, 2008).

Most researchers have found that internal (structural) capital is the most reported category of intellectual capital (Guthrie & Petty, 2000; Bozzolan, Favotto & Ricceri, 2003; Melloni, 2015) however different results occasionally occur. Cinquini, Passetti, Tenucci & Frey (2012) find employee competences (human capital) disclosures to be the most frequently disclosed category.
Striukova et al. (2008) finds that UK companies use annual reports for less than one third of all their intellectual capital reporting. They found that the web page is where most of the intellectual capital information is disclosed. They conclude that the information disclosed in the annual reports cannot be taken as a representation of a company's full intellectual capital reporting.

Vergauwen & van Alem (2005) found in their study that the amount of voluntary disclosures on intellectual capital strongly vary between countries. They investigated French, Dutch and German companies and found that the level of voluntary disclosures were significantly higher in French companies than Dutch companies. Bontis (2002) studied Canadian companies using the exact same research method and found that Canadian companies made fewer intellectual capital disclosures than the European companies. Further Vergauwen & van Alem (2005) locate accounting regulation as the most influential determinant of the level of ICD.

There has been previous studies conducted with the same disclosure scoreboards as this thesis. The previous results from these have varied between 20.5% to 12.6% of the total possible disclosures. These studies have been conducted on companies in Denmark, Japan and Australia. However these studies have been conducted with some variance in focus. The Australian study investigated only biotechnology companies (White, Lee & Tower, 2007). The studies on Japanese and Danish companies were conducted on IPO’s (Rimmel, Nielsen & Yosano, 2009; Nielsen, Rimmel & Yosano, 2015; Bukh, Nielsen, Gormsen & Mouritsen, 2005). The result of these previous uses of the disclosure scoreboard will give an indication whether the results of this study is high or low. It is relevant for the comparison to notice that it is expected that IPOs should disclose a higher amount of intellectual capital in their reports than already listed companies (Branswijk & Everaert, 2012). However it is also expected that the Swedish listed companies will get a high score in these tests because of the historical tendency for Scandinavian companies to disclose intellectual capital information (Saleh et al., 2010; Rimmel et al., 2009).

2.9 Relevant theories
The following sections will present theories and concepts which are relevant for the topic and will be used in the analysis of the empirical findings.
2.9.1 Disclosure theories
The meaning of a disclosure when it comes to accounting is when a company publish and spread certain information. This can for example be done through the annual report to reach the stakeholders of the company (Rimmel, 2016).

It is mandatory for most companies to disclose their financial information such as cash flow, balance sheet and earnings forecast. This is enforced by states and stock exchanges through laws and regulations. Voluntary disclosures however is the management's option to add or not. Hence it is the information disclosed beyond what is legally required and it tends to complement the mandatory statements and enhance the transparency in the company report. Some researchers have found that regulation is the most effective way to affect the amount of disclosure (Vergauwen & van Alem, 2005). Hence to turn what was voluntary disclosures into mandatory disclosures instead. But other researchers claim that the use of regulations should be minimized to specific areas were the market is not performing desirably on its own (Rimmel, 2016).

The expected result of relevant voluntary disclosures is mainly to reduce information asymmetry and reduce the firm's cost of capital. Pressure from investors and other stakeholders have led to organizations disclosing information about their intangible assets, hence intellectual capital to a great extent. Furthermore, this information explains and shows evidence for the company's ability to create value in the future (Nielsen et al., 2015; Prince & Dwivedi, 2013; Dammak, Triki, & Boujelbene, 2010). Hence voluntary disclosures concerning intellectual capital can help close the gap between book value and market value of a firm that was previously mentioned. This could then act as motivation to develop frameworks concerning voluntary disclosures (Melloni, 2015).

2.9.2 Legitimacy theory
According to the legitimacy theory organizations continually consider the expectations from society to make sure that their operations are considered to be within the different norms and bonds the society sets. The theory is built upon the notion that the organization has to be accepted by the communities in which it operates to survive and be successful. If the expectations is not meet society and consequently a big part of the organizations stakeholder will not perceive the organization as legitimate (Rimmel, 2016). Hence the organization's management makes sure to disclose information to be considered legitimate.
This perspective has been used in several studies to explain why organizations would release voluntary disclosures (Guthrie & Parker, 1989, 1990; Rimmel, 2016). However the expectations from the society are not fixed but can change over time and place. This forces the organization to be aware and responsive of its surroundings to stay legitimate in case the norms and expectations would change (Deegan, 2000).

Legitimacy theory is closely tied to reporting of intellectual capital since companies are more likely to only disclose intellectual capital information if they have to (Guthrie, Petty & Yongvanich 2004). The amount of disclosures also depend on the state of a company's' legitimacy. If a company wants to repair and gain legitimacy they are more likely to disclose more than if they only want to maintain their legitimacy (Setia, Abhayawansa, Joshi & Huynh, 2015; O'Donovan, 2002).

2.9.3 Stakeholder theory
The classic definition of a stakeholder was put forward by Freeman (1984). He looked at stakeholders as someone who can affect or is affected by the achievement of the organizations objectives. Broadly speaking this interpretation redefined the definition of what an organization should be. Some stakeholder, top managers, should be seen as a group with the role of stakeholder management. This was elaborated on by Evan and Freeman who proposed that corporations should be managed for the benefit of its stakeholder and that managers have a fiduciary relationship to the stakeholders and the corporation (Friedman & Miles, 2006). Different stakeholder will have different expectations and different power and this will vary over time and depend on the external environment (Porter, Smith, Fagg & Winfield, 2006).

The stakeholder theory emphasizes that an organization has an obligation to be accountable to all stakeholders and not solely the shareholders. The interest group the theory includes are for example: NGOs, employees, communities and financiers. More than just the traditional reporting about the shareholders’ interests, according to the stakeholder theory organizations are expected to undertake and report on activities that the stakeholders find relevant. More so the stakeholders has a right to be informed by the organization about activities that might affect them, even if the stakeholder will not act on the information and is of minor or no importance to the organization’s survival. Hence the
organization will disclose voluntary information above what is mandatory to satisfy stakeholder expectations (Dammak et al., 2010).

Deegan & Unerman (2011) state that voluntary disclosures potentially are driven by corporate stakeholders. The managerial branch of the stakeholder theory suggests that corporations attend to those stakeholders that are most important to the organization. The organization will respond to those stakeholders they deem more powerful to a higher extent than those of less importance (Deegan & Unerman 2011). The voluntary disclosures reported by companies are a response to the most important or powerful stakeholders. The ethical part of the stakeholder theory suggests that all stakeholders has the right to receive information and to be treated equally. Stakeholder power or economic importance should not affect the received attention from an organization. The voluntary disclosures should from this viewpoint be equal towards all stakeholders (Deegan & Unerman 2011). Beattie & Smith (2012) found in their study greater support for the managerial branch of the stakeholder theory regarding the communication of intellectual capital disclosures.
3 Method

In this chapter the methods used for sampling, data collection and analysis will be discussed. The different approaches will be discussed and motivated to explain the selection of method used to carry out the study.

3.1 Study Design

One of the reasons for choosing integrated reporting as the subject of this thesis was that integrated reporting is a new phenomenon and little established theory or widespread research has been conducted on the effect on intellectual capital disclosures. By observations this study is aimed at theorizing whether or not mandatory application of the integrated reporting guidelines influence the level of voluntary ICD. This way of conducting research, where observations lead to theory, is known as an inductive approach (Bryman, 2012). The opposite approach is known as the deductive approach which starts with general and broad assumptions and narrows it down by reasoning. By applying theory or research to new situations a conclusion of something new is deduced. Deductive reasoning is seen as taking a top-down approach to reasoning (Fawcett, 2007).

The study can take either a quantitative or qualitative approach. Quantitative methods use structured research from a sample of the population to deduce quantifiable insights. Quantitative research aims at producing data that can be analyzed numerically (Bax, 2013). Qualitative methods are mostly used for exploratory research and contains observations and fieldwork. It broadens the context, allowing the researcher to make interpretations (Myers, 2009). This study used a quantitative research to answer the research questions. The quantitative part of this thesis is data collected by using a voluntary intellectual capital disclosure scoreboard which was analyzed to answer the research questions.

3.2 Sample Selection

This thesis used a sample consisting of equal parts from the South African stock exchange in Johannesburg and the Swedish stock exchange in Stockholm. Companies listed in South Africa were used because of its unique enforcement of the International <IR> Framework. The South African sampled companies were the basis of the conclusion whether the use of integrated reporting enhances intellectual capital disclosures or not. The sampled companies listed in Sweden, where the use of the International <IR> Framework is not mandatory, were used as counterpart. Further the study used a rating published by EY (2015) to answer one of the sub-questions. The publication by EY evaluates the top 100
JSE companies, based on market capitalization, on their successfulness in producing integrated reports. The companies were divided into 4 categories (“excellent”, “good”, “average” and “progress to be made”). The companies were evaluated using a mark plan based on the guiding principles and the content elements in the International <IR> Framework. The mark plan was developed by 3 adjudicators at University of Cape Town (UCT) in collaboration with EY’s Professional Practice Group. The companies were evaluated by each of the adjudicators separately. Using this rating allowed the study to evaluate whether the successfulness in developing the integrated report affect the amount of ICD in the corporate reports.

As mentioned the study encompassed the JSE top 100 and companies listed on NASDAQ OMX Stockholm. The sample size of this study was limited to 10 companies on each stock exchange to get as much data as possible in the available time frame. The main focus of the sample design was to avoid bias as much as possible while yielding comparable samples. To do so, random sampling methods are desired. However, random sampling can often times be inefficient and yield impractical samples (Smith, 2003). The sampling method used therefore varied between the Swedish and South African companies. The companies in South Africa were selected using stratified random sampling, using the external classification (EY, 2015). Equally numbered samples were randomly drawn from companies evaluated as excellent and those classified with progress to be made. The companies drawn from the excellent pool is presented in table 3.1 together with the corresponding industry in which the companies operate.

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>AngloGold Ashanti</td>
<td>Materials</td>
</tr>
<tr>
<td>Life Healthcare</td>
<td>Health Care</td>
</tr>
<tr>
<td>SABMiller PLC</td>
<td>Consumer Staples</td>
</tr>
<tr>
<td>Vodacom</td>
<td>Communication</td>
</tr>
<tr>
<td>Aspen Pharmacare</td>
<td>Health Care</td>
</tr>
</tbody>
</table>

*Table 3.1 Sample companies rated as excellent (EY, 2015)*

As this study exclude financial companies and the companies in the category progress to be made only contained 4 non-financial companies 1 company (Naspers) had to be randomly sampled from the closest available rating category average (EY, 2015). The results from this part of the sampling is presented in table 3.2 below and in presented in the same fashion as the “excellent” part of the sample.
The Swedish companies listed on the NASDAQ OMX Stockholm were divided into industries matching the companies sampled from the JSE top 100. Matching companies were located and drawn to match the South African listed companies leaving us with comparable and equal samples. Similar methods have been used in previous research by Bozzolan, O'Regan & Ricceri (2006). Table 3.3 presents the total sample together with the industry that the companies were sorted into which were used to get a similar sample from both stock markets.

<table>
<thead>
<tr>
<th>Johannesburg listed companies</th>
<th>Industry</th>
<th>Stockholm listed companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglogold Ashanti</td>
<td>Materials</td>
<td>Boliden</td>
</tr>
<tr>
<td>Aspen Pharmacare</td>
<td>Health Care</td>
<td>Meda</td>
</tr>
<tr>
<td>Life Healthcare</td>
<td>Health Care</td>
<td>AstraZeneca</td>
</tr>
<tr>
<td>SABMiller PLC</td>
<td>Consumer Staples</td>
<td>Black Earth Farming</td>
</tr>
<tr>
<td>Vodacom</td>
<td>Communication</td>
<td>Tele2</td>
</tr>
<tr>
<td>EOH</td>
<td>Technology</td>
<td>Hexagon</td>
</tr>
<tr>
<td>Famous Brands</td>
<td>Travel and Leisure</td>
<td>Rezidor</td>
</tr>
<tr>
<td>Naspers</td>
<td>Communication</td>
<td>Comhem</td>
</tr>
<tr>
<td>Shoprite</td>
<td>Consumer Staples</td>
<td>ICA-Gruppen</td>
</tr>
<tr>
<td>Tiger Brands</td>
<td>Consumer Staples</td>
<td>Axfood</td>
</tr>
</tbody>
</table>

*Table 3.2 Sample companies rated as progress to be made (EY, 2015)*

*Table 3.3 The total sample with the industry division*
3.3 Data Collection

The study is built on information extracted from the corporate reports produced by companies for the fiscal year 2014. The corporate report from 2014/2015 was used for companies with a broken financial year. The year 2014 was used because it is the most recent available corporate reports during the time frame of this thesis. All of the studied corporate reports have been downloaded from the sample companies’ websites.

To capture all communication by a company, ideally all reports should be monitored as all data released to the public should be considered part of the accountability-discharge activity of an organization, however reducing the focus to corporate reports offer a good proxy. Corporate reports are good sources as managers often use them to communicate what is important (Guthrie et al., 2004). Furthermore the focus of integrated reporting is to produce one report, the integrated report (Eccles & Krzus, 2010). Including other reports would therefore counteract the purpose of the study.

In order to quantify the amount of ICD in the corporate reports this study used a disclosure scoreboard. Numerous researchers have previously applied this method (Adrem, 1999; Vergauwen & van Alem, 2005: Guthrie & Petty, 2000). The method of using a disclosure scoreboard consist of calculating the amount of items mentioned in the various reports based on a pre-set index of varying size. The scoreboard this study used was originally put forward by Bukh et al. (2005). It has previously been applied in various other studies (Cordazzo, 2007; Rimmel et al., 2009).

The scoreboard used in this study is presented in table 3.4 below and consists of 78 items within 5 segments. The reports then received either 0 or 1 points for each of the disclosures regarding the 78 different items to create the quantitative data. Both authors of this thesis scored all of the sampled companies independently to ensure reliable result since there are some subjective judgments included when scoring the disclosures with the disclosure scoreboard. This approach to ensure reliability has been used in previous research with disclosure scoreboards (Nielsen et al., 2015).
The items in the scoreboard have been kept as original. There are no widespread theoretical guidelines for the selection of items. As the focus of the scoreboard is voluntary disclosures the items are selected by extensive research on literature regarding corporate disclosures and intellectual capital reporting (Bukh et al., 2005). The reason for adopting a previous scoreboard as a whole instead of developing it to fit this study in particular was to avoid influences from integrated reporting. As this study examine how the use of integrated
reporting changes the level of ICD, influences from integrated reporting could jeopardize the findings of the study.

ICD has previously been investigated in many different ways, using many different designs with various disclosure scoreboards (Bozzolan et al., 2003; Bukh et al., 2005; Cinquini et al., 2012; Cordazzo, 2007; Oliveira, Rodrigues & Craig, 2010; Sujan & Abeysekera, 2007; Vergauwen & van Alem, 2005). Many researchers have used a disclosure scoreboard that divides items into different types of intellectual capital (Bozzolan et al., 2003; Sujan & Abeysekera, 2007; Vergauwen & van Alem, 2005). These scoreboards are often vague and contain broad definitions such as “Employee skill” or “Customer capital”. This makes the research hard to replicate and objectively judge what can be perceived as a disclosure. The more detailed scoreboards (Cinquini et al., 2012; Cordazzo, 2007; Oliveira et al., 2010) divide the items into deeper segments such as “Strategy” or “Customers”. These scoreboards are similar to each other and they are all derived from a combination of the scoreboard developed by Bukh et al. (2005) and one or more other sources. As this study’s interest is to keep one scoreboard intact to maximize the objectivity, the scoreboard developed by Bukh et al. (2005) became the target of choice.

To browse through the annual reports in search of disclosures the authors originally used a list of keywords to ease and increase the effectiveness of the search. However, this caused a lot of disclosures to be overlooked, leaving a faulty result. The authors found that the language of the companies in the study varied, most notably between the ZAF LC and the SWE LC. This has also been noted by Beattie & Thompson (2007) who conclude that the lack of a common language makes it very difficult to determine the extent and nature of the intellectual capital related disclosures reported in the annual reports. The usage of a checklist ensure comparability between the companies as each company receive the same treatment so the solution became to use a checklist as starting point and from there navigate the reports with the language used by the individual company. In order to compensate for the potential lack of comparability that this solution brings the authors set a time limit of 4 hours for each company's annual report. This ensures that the comparability remains as well as providing the study with a more accurate result than solely using one set of predetermined keywords.
3.4 Data presentation & Analysis
To give a clear analysis and presentation of the results the items of the scoreboard was divided into different intellectual capital categories. In order to divide the items of our scoreboard into structural, external and human capital this study uses an intellectual capital framework developed by Guthrie, Petty, Ferrier & Wells (1999). The framework was originally put forward by several professional opinions within intellectual capital (IFAC, 1998; SMAC, 1998). The framework has after that been changed by Guthrie et al. (1999).
As this study only use this to classify the items rather than collecting data no alterations are required. The framework uses 24 variables (9 relating to internal capital, 9 external capital, and 6 human capital). The entire list is shown in table 3.5. The full list of the 78 items divided into variables can be found in appendix 1.

<table>
<thead>
<tr>
<th>Internal (Structural) Capital</th>
<th>External (Customer/Relational) Capital</th>
<th>Employee Competence (Human Capital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual Property</td>
<td>Brands</td>
<td>Know-how</td>
</tr>
<tr>
<td>Patents</td>
<td>Customers</td>
<td>Education</td>
</tr>
<tr>
<td>Copyrights</td>
<td>Customer loyalty</td>
<td>Vocational Qualification</td>
</tr>
<tr>
<td>Trademarks</td>
<td>Company Names</td>
<td>Work-related knowledge</td>
</tr>
<tr>
<td>Infrastructure Assets</td>
<td>Distribution channels</td>
<td>Work-related competencies</td>
</tr>
<tr>
<td>Management Philosophy</td>
<td>Business Collaborations</td>
<td>Entrepreneurial Spirit</td>
</tr>
<tr>
<td>Corporate Culture</td>
<td>Licensing Agreements</td>
<td></td>
</tr>
<tr>
<td>Management Processes</td>
<td>Favourable Contracts</td>
<td></td>
</tr>
<tr>
<td>Information Systems</td>
<td>Franchising Agreements</td>
<td></td>
</tr>
<tr>
<td>Networking Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Relations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.5 The different types of intellectual capital categories
3.5 Validity
The mentioned sampling technique were the companies listed in Sweden was arranged to match the random sample from South Africa was used to ensure the validity of the study. To conduct the research, this study uses a disclosure scoreboard. The choice of using a disclosure scoreboard was developed by examining previous research where disclosures scoreboards showed to be the most common approach. The disclosure scoreboard this study used was created by Bukh et al. (2005). This disclosure scoreboard has been used in a number of previous studies i.e. Rimmel et al. (2009), Nielsen et al. (2015) and White et al. (2007). The fact that previous studies has used the scoreboard alone does not prove that it is valid however previous users of the scoreboard has been able to identify differences and statistically seek out dependent variables using the scoreboard by Bukh et al. (2005). This indicates that this scoreboard is a valid approach to measure the quantity of voluntary intellectual capital disclosures in corporate reports.

3.6 Reliability
The selected companies’ annual reports were scrutinized and scored by both authors as a test-retest method to increase the reliability of the study (Bryman, 2012). This procedure was used to ensure consistency since there is a risk of subjectivity when doing such a content analysis as in this thesis. The correlation between the different observations is expected to be high to label a study as stable. There is no absolute number of what level of correlation a study has to reach but it is suggested in Malcolm Smith’s book Research methods in accounting (2015) that the level of consistency should be above 80%. This study reached a level above 80% when the scores were compared and hence it can be judged satisfactorily reliable.
In this chapter the results of the empirical work will be presented.

4.1 Comparison of total disclosure score SWE LC – ZAF LC

Figure 4.1 and figure 4.2 below shows the total amount of disclosures scored in each segment, ranked by the total amount of disclosures scored by each company.

![Number of disclosures by Swedish listed companies](chart)

**Figure 4.1 Number of disclosures by Swedish listed companies**

The results in figure 4.1 corresponds to a total average disclosure score of 23.4 points. The figure shows that AstraZeneca is the highest scoring SWE LC with 40p and Black Earth Farming together with Rezidor is in the bottom with 10 respective 9 points. Thought it is noticeable that AstraZeneca score 10 points higher than the second highest score of 30 points scored by ICA-Gruppen.

The results from the ZAF LC in presented in figure 4.2 below and corresponds to a total average score of 24.9 points. Life Healthcare got the highest score of the ZAF LC with 37 points. However Tiger Brands and Vodacom close to the top scorer of the South African part of the sample with 35 and 33 points. The lowest scoring company of the ZAF LC is EOH with 13 points.
Amongst the 78 items in the disclosure scoreboard, 27 are employee disclosures and 15 are strategic statement disclosures. These are the largest of the 6 segments. These are also the segments where companies disclose most information in absolute numbers. Boliden and Comhem are the only 2 companies in the study that does not have the employee and strategic statement disclosures as their top 2 highest scoring segments. Boliden and Comhem both had the employee segment in their top 2, however instead of strategic statement disclosures they had customer disclosures as their best or next best scoring segment.

Out of the 78 disclosures, “staff breakdown by level of education” and “working from home” were the 2 items which no company disclosed. There was no individual item that all companies disclosed however all the SWE LC disclosed “staff breakdown by gender” and “pensions”. 50% of the ZAF LC disclosed “staff breakdown by gender” and 60% disclosed “pensions”.

The following sections will continue to break these results down into the different segments of the disclosure scoreboard. The order of the companies in the following figures will follow the order as the ranking in figure 4.1 and 4.2 with the highest total scoring company furthest to the left in each listing country.
4.1.1 Employee breakdown

In figure 4.3 below are the amount of employee disclosures displayed.

![Bar chart showing employee disclosures by companies](chart)

**Figure 4.3 Breakdown of employee disclosures by all companies in the study**

The segment employees contained 27 items and consequently this is also the maximum amount of points that can be obtained. Most companies disclose around 10 items with Meda (14p) disclosing most items. The companies EOH, Black Earth Farming and Rezidor that was earlier mentioned to overall disclose the least items are also found in the bottom of the employees segment in figure 4.3.

![Pie chart showing percentage of total disclosures](chart)

**Figure 4.4 Percentage of total employee disclosures attributed by Swedish- and South African listed companies**

<table>
<thead>
<tr>
<th></th>
<th>Swedish</th>
<th>South-African</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosures</td>
<td>51%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Figure 4.4 above shows that there is only a minimum discrepancy between companies listed in Sweden or South Africa if you look at the total amount of disclosures. However, by observing individual items some trends can be spotted. “Absence” is disclosed by 50% of the Swedish listed companies however only one of the South African companies disclose this item. The companies listed in Sweden failed to disclose any of the following items: “Value added/employee”, “Revenue/employee”, “Employee expense/employee” and “Education and training expenses/number of employees. These items were a rare occasion amongst South African listed companies as well, however 1-2 companies disclosed information about each mentioned item.

4.1.2 Customer Breakdown

Figure 4.5 shows the amount of disclosures in the customer segment by each company in the study.

![Breakdown of customer disclosures by all companies in the study](image)

Figure 4.5 Breakdown of customer disclosures by all companies in the study

The customer segment contained 14 items and Vodacom (9p) and Comhem (8p) are the 2 highest scoring companies in this segment. The companies that are disclosing the most disclosures overall are also disclosing most in the customer segment, apart from Life Healthcare which was the highest scoring company amongst the ZAF LC. In the Customer segment Life healthcare disclosed 3/14 items. 50% of the companies listed in South Africa disclosed one or zero items compared to 10% of the companies listed in Sweden.
Figure 4.6 Percentage of total customer disclosures attributed by Swedish- and South African listed companies

Figure 4.6 above further support the notion that the SWE LC outperformed the South African listed companies in the customer segment. 57% of the total customer disclosures were scored by the companies listed in Sweden. Within the 3 items concerning market share the SWE LC score a total amount of 11/30 points compared to the SAF LC who score 3/30 within these 3 items.

4.1.3 IT breakdown

Figure 4.7 show the amount of IT items disclosed by each company in the study. The IT segment contained only 5 items. Hence it is the segment with the least items.

Figure 4.7 Breakdown of IT disclosures by all companies in the study
This segment follows the previous pattern that the overall good performers are strong within this segment. Worth noticing from the IT segment is that 3 of the SWE LC disclose information regarding IT, compared to 8 of the ZAF LC. However, the SWE LC that disclose information in this segment disclose at least 2 items compared to the ZAF LC where 7 of the companies disclose 1 item and only Life Healthcare (4p) disclose more than 1 item. This is shown in figure 4.8 as the ZAF LC disclose 58% of the total disclosures in this segment.

![Percentage of total IT disclosures attributed by Swedish- and South African listed companies](image)

**Figure 4.8** Percentage of total IT disclosures attributed by Swedish- and South African listed companies

### 4.1.4 Processes breakdown

Figure 4.9 displays the score received within the processes segment. This segment contains 8 items and this was the second most reported segment with 45% of all potential items reported.

![Breakdown of processes disclosures by all companies in the study](image)

**Figure 4.9** Breakdown of processes disclosures by all companies in the study
As seen in figure 4.9 the SWE LC follow the pattern that the overall good performers score the highest within the individual segment. However the ZAF LC score differently with overall low scorers like Famous Brands and Aspen Pharmacare scoring average in this segment.

As seen in figure 4.10 this was an overall even segment as ZAF LC disclose 55% of the total items disclosed by all companies in the study.

The individual item “fringe benefits and company social programs” differ in score as 0 of the SWE LC and 7 of the ZAF LC disclose this item. “External sharing of knowledge and information” was disclosed by 6 of the SWE LC and 3 of the ZAF LC. “Internal sharing of knowledge and information” was disclosed in the exact opposite way as 3 of the SWE LC and 6 of the ZAF LC disclosed this item.

4.1.5 R&D breakdown
Figure 4.11 show the number of disclosed items by all companies in the study within the segment R&D. There were 9 items within this segment. This was the least reported of the 6 segments as 11% of all potential items were disclosed.
AstraZeneca (6p) alone scored as much as all ZAF LC combined. Hexagon (4p) and Meda (3p) came second and third in this segment, both those companies were average scorers when looking at the total amount of disclosures in figure 4.11. Few of the companies who failed to disclose any item even mentioned R&D in their annual report. Some ZAF LC mentioned development and disclosed development costs of varying kind however as these were not of the nature of a R&D expense these disclosures has not generated any points in this study.

The results shows in figure 4.12 that the SWE LC disclosed 70% of the items that were disclosed. This was the segment with the largest percent discrepancy in number of disclosed items between SWE LC and ZAF LC.
4.1.5 Strategic statements breakdown

Figure 4.13 illustrate the amount of disclosures by all companies within the segment Strategic Statements. This segment contained 15 items and was the second most reported segment with 42% of all potential items disclosed.

The overall highest scoring companies continued to perform well in this segment with Life Healthcare leading the list with 12 points. The individual items “Utilization of energy, raw materials and other input goods” and “Description of community involvement” contained a large discrepancy in the amount of companies that disclosed these items as 4 SWE LC and 9 ZAF LC disclosed these items. The item “best practice” was disclosed by 1 SWE LC and 7 ZAF LC. The only individual item where SWE LC outperformed ZAF LC was “Description of the network of suppliers and distributors” as 5 SWE LC and 2 ZAF LC disclosed this item.
These results is further shown in figure 4.14 as 59% of the total disclosed items were done by ZAF I.C.

4.1.6 Breakdown into different categories of intellectual capital

Figure 4.15 represents the total scores from all of the companies in the study divided into the different categories of IC. The intellectual capital categories contains the results from the earlier mentioned segments of the disclosure scoreboard according to the division in appendix 1. The figure shows that the structural capital contains the biggest difference in total score while there is only one point’s difference in the human capital category.
4.2 Comparison between companies deemed “excellent” and those with “progress to be made”

Figure 4.16 shows a comparison of total amount of disclosures between the ZAF LC evaluated as excellent and progress to be made in the ranking performed by EY.

![Number of disclosures by ZAF LC rated excellent compared to progress to be made.](image)

**Figure 4.16 Number of disclosures by ZAF LC rated excellent compared to progress to be made.**

The average score of the excellent companies were 27,4 and the companies with progress to be made had an average score of 22,4, hence a difference in score of 5 points. Tiger Brands stood out among the companies with progress to be made scoring 10 points more than the second best scoring company of the 5 companies in this category. In this category the 2 companies with the least amount of overall disclosures, Famous Brands and EOH are located. The excellent companies disclosed 55% of all disclosed items and they disclosed 35% of all potential items. The companies with progress to be made stood for 45% of all disclosed items and disclosed 28% of all potential items.

![Segment breakdown by ZAF LC](image)

**Figure 4.17 Segment breakdown by ZAF LC**
Figure 4.17 shows a segmental breakdown of the score of the ZAF LC divided into categories. Overall, we can observe that the excellent companies are outperforming the companies with progress to be made within all segments but the R&D segment where they have an equally high score. Both the excellent companies and the companies with progress to be made are scoring the highest in the employee- and strategic statements segment.

The employee segment is in absolute terms where the discrepancy between the excellent companies and those with “progress to be made” is the largest. The individual item “Rate of staff turnover” has the highest difference in amount of disclosures as 4 excellent companies and 1 company with progress to be made. No obvious pattern can be spotted in the other segments separated. However, the excellent companies disclosed the items in Table 4.1 below to a higher extent. All these items have in common that they require additional work and calculations for the companies to disclose them.

<table>
<thead>
<tr>
<th>List of calculative items</th>
<th>Progress to be</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and training expenses/number of employees</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Employee expenses/number of employees</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Revenues/employee</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Value added/employee</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Education/training of customers</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Customers/employees</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>R&amp;D expenses/sales</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Table 4.1 List of calculative items*
5 Analysis

In this chapter the results of the empirical investigation will be analysed.

5.1 Difference between mandatory and non-mandatory integrated reporting

Vergauwen and van Alem (2005) point at accounting regulation as potentially the largest determinant of the level of intellectual capital disclosures. They found that the 3 European companies in their study produce much more intellectual capital related disclosures than the Canadian companies in a study by Bontis (2002). In contradiction to these results Bozzolan et al. (2006) did not find country of origin a significant factor for the level of intellectual capital related disclosures in their study on UK- and Italian companies. This study finds that the ZAF LC on average disclose 1,5 item more than the SWE LC. With a scoreboard consisting of 78 items this results in a trend showing that ZAF LC disclose 1,9% more voluntary ICD than SWE LC. Hence this study tends to agree with the results of Bozzoloan et al. (2006) even though the companies in this study have the different regulation for preparing the reports.

As previously stated the results of this thesis show a 1,9 % increase of ICD when using the International <IR> Framework. However 24,9 points for ZAF LC corresponds to 31,9% of the total points available on the disclosure scoreboard and 23,4 points for SWE LC corresponds to 30%. Comparing these results to the previous research conducted with this disclosure scoreboard indicates that these results are high compared to earlier research. The companies in the study conducted by Bukh et al. (2005) scored on average 20,5%. Even though the mentioned report were based on IPOs whom are expected to disclose more intellectual capital information in their reports than regular company reports (Branswijk & Everaert, 2012). A more recent study using the same disclosure scoreboard was conducted on Japanese IPOs by Nielsen et al. (2015) were the average score was 12,8%. Hence even if the difference between this study’s sample was only 1,9% the result compared to other studies can be 9,5% or more.

When dividing intellectual capital disclosures into the 3 different categories: structural capital, customer/reational capital and human capital previous research has found that structural capital has been the most reported category of intellectual capital related disclosures (Guthrie and Petry, 2000; Bozzolan et al., 2003). The scoreboard used in this
study only has 19 items with the characteristics of structural capital which is the least of the capital categories (structural, relational, human). Melloni (2015) finds that integrated reports also most frequently disclose structural capital related disclosures. The total points scored in this thesis also favors the structural capital category with 187 total points. However when measuring the amount of items disclosed in each capital category in relation to potential disclosures, the human capital disclosures showed to be the most reported capital in this study in contradiction to the previous research results.

This result can be explained with the International <IR> Framework for the ZAF LC. The content element 4.7 (IIRC, 2013) propose that e.g. societal issues and environmental challenges should be reported. Societal issues include e.g. human rights, health, population and educational systems which results in points for items in the disclosure scoreboard like e.g. “staff health and safety”, “education and training expenses” and “recruitment policies”. However the SWE LC keeps up with the results of the ZAF LC and even scored one point more with 91 point to 90. But the SWE LC get points from other items e.g. “staff breakdown by gender” and “pensions” in which all of the SWE LC disclosed information and scored a point.

The largest discrepancy between the disclosures of ZAF LC and SWE LC could be found in the structural capital disclosures. ZAF LC scored 105 points and SWE LC 82 points. The guidelines of the International <IR> Framework accord well with the discrepancy between ZAF LC and SWE LC. A scoring difference of 20 points were observed in the individual items “fringe benefits and company social programs”, “description of community involvement”, “utilization of energy, raw materials and other input goods” and “information on corporate social responsibility and objective”. Within these 4 elements the ZAF LC score 32 points and the SWE LC score 12 points. These scores can be derived to the previously mentioned guidance point, social issues, together with another guidance point in the International <IR> Framework content element 4.7 called environmental challenges which concerns resources and environmental changes (IIRC, 2013).

The third category, Customer/Relational capital, yielded the least points and consists of the fewest items. The division of the points in this category was even through the items in the disclosure scoreboard. Hence the study cannot point to any effect of the International <IR> Framework regarding these types if ICD.
Companies cannot solely focus on shareholders in their communication. Stakeholders come in different shapes and the organization needs to be accountable to more than just the providers of financial capital. Beattie & Smith (2012) find greater support for the managerial branch of the stakeholder theory than the ethical branch in companies reporting on ICD. Deegan and Unerman (2011) further suggest that voluntary disclosures may be affected by the stakeholders. Interpreting the managerial branch and translating it into this study would suggest that companies would disclose different items depending what part of the world they exist in. The economy and politics of the surrounding environment could suggest that different things are important to a stakeholder and that different stakeholders are of varying importance. If the ethical branch were true then no difference would be spotted, consequently to the importance of the stakeholder to the company. Another theory that could be used to explain the result is the legitimacy theory. The theory suggest that in order to be accepted by the stakeholders, companies must disclose information that meet the expectations of the society (Rimmel, 2016). A legitimacy approach to the results of this study would mean that differences in the types of disclosures by the ZAF LC and the SWE LC indicate that different types of disclosures are important in order to be perceived as legitimate by the stakeholders of the ZAF LC and the SWE LC.

Porter et al. (2006) explain that stakeholder expectations vary depending on time and the macro environment. This study found that ZAF LC disclosed employee- safety and benefits to a higher degree than the SWE LC. They also scored higher within the items connected to CSR and the local communities. The SWE LC stood for 70 % of all the disclosed R&D disclosures that was reported. The result could point towards the notion that the stakeholders in the ZAF LC value employee disclosures to a higher extent than the SWE LC. With this mindset one could also deduce that SWE LC’s stakeholders value R&D disclosures more than the stakeholders of the ZAF LC. It is however hard to judge whether stakeholders vary in importance, between the ZAF LC and the SWE LC, i.e. if employees are of greater importance to ZAF LC and they therefore have a higher degree of employee safety disclosures. Contrarily, by using the ideas of the ethical branch of stakeholder theory it could be reasoned that stakeholders should be of similar importance or treated as such by the companies. However, the results of this study lack support of this notion as a discrepancy can be observed between the types of disclosures by the ZAF LC and the SWE LC. As proposed earlier the legitimacy theory would suggest that different
types of disclosures indicate that there is a difference in what the stakeholders of the ZAF LC and the SWE LC deem as legitimate. Using the earlier reasoning legitimacy theory would support the notion that ZAF LC are expected by the society to disclose these items in order to be perceived as legitimate. The society’s and stakeholders’ expectations of the SWE LC would by applying the ideas of the legitimacy theory require more disclosures regarding R& D in order to be accepted and perceived as legitimate. Both the managerial branch of stakeholder theory and the legitimacy theory could be used to explain the difference in the types of disclosures in this study.

5.2 Difference between successful and unsuccessful implementation of integrated reporting

South Africa is the first country to impose mandatory production of integrated reports. However the introduction of such a system takes time and many ZAF LC still have a lot of progress to make in order to present a fully integrated report (EY, 2015). The integrated report is trying to show a holistic picture of the companies (IIRC, 2013). By connecting various types of capitals into one report the integrated report attempts to create an “economies of scale” like situation. Companies that are successful in its implementation of integrated reporting should disclose items in accordance with the International <IR> Framework. If the International <IR> Framework must lead to more ICD is difficult to say however the framework explicitly request some types of disclosures. Some examples of such disclosures are: “Key quantitative information” (number of employees, revenue etc.) and “Significant factors affecting the external environment and the organization’s response” (IIRC, 2013, p. 24-25).

This study found that companies ranked as excellent disclose on average 5 points more than those with progress to be made. This difference is very hard to derive to some explicit part of the integrated framework as companies still choose to which extent they disclose items. It is however probable that the clear definition and division of various capitals and the integration of these into one report bring more multifaceted disclosures. As many of the capitals are integrated (Abhayawansa, 2014), it can be anticipated that some items that would be overlooked in a company with a poor integrated report would be reported in a company with an excellent integrated report. The notion that that the International <IR> Framework affect the disclosures is further supported by the items which require some further calculation (see Appendix 1) and the individual item “Rate of staff turnover”. These
are items that are explicitly requested by the framework and these items are where the discrepancy between the companies ranked as excellent and those with progress to be made is the largest.
6 Conclusion and discussion

In this last chapter the conclusions drawn in accordance with the purpose and the research questions of this thesis will be presented followed by a general discussion. Further the ethical and social impact of the findings will be discussed together with suggestions for future research.

6.1 Conclusion

The purpose of this thesis was to investigate how mandatory obligation to follow the International <IR> Framework while producing the corporate reports influence the intellectual capital disclosures in the reports.

The main question this thesis tried to answer was how mandatory use of the International <IR> Framework influences the intellectual capital disclosures in the corporate reports? 2 sub-questions were formed and investigated to answer this main question. Firstly how intellectual capital disclosures are differentiating between Swedish listed companies and South African listed companies were studied. And secondly how intellectual capital disclosures were differentiating between South African companies depending on their success in implementing the International <IR> Framework.

The empirical results of this thesis showed little difference in the total amount of ICD between the mandatory constructed integrated reports from South Africa and the annual reports from SWE LC. However the result from this study is around 10 percentage points higher or more compared with earlier results from other countries with the same disclosure scoreboard. This leads us to draw the conclusion that the use of the International <IR> Framework can have a positive effect on the absolute amount of ICD.

The division of disclosure items into categories and scrutinization of the actual items disclosed further supports this statement. Only the customer/relation capital category of ICD gave similar results in both the SWE LC and the ZAF LC. In the other categories, structural capital and human capital, the results were higher in either the SWE LC or the ZAF LC. Moreover the actual item disclosed in these categories was differently spread. Much of the disclosures in the ZAF LC could be directly derived to what the International <IR> Framework suggest that an organization should disclose in their integrated report. This indicates that the SWE LC score could possibly be enhance by implementation of
mandatory use of the International <IR> Framework even though the overall score was even in our sample.

The thesis also investigated a second sub-question to further investigate the effects of integrated reporting. In the sample a rating presented by EY, (2015) was used to include both companies that they deemed as excellent users of the International <IR> Framework and companies were progress could be made. The results from this research showed that excellent rated companies disclosed more information than the others and that a big difference in disclosers were derived from items which required more calculations. These results leads to the conclusion that continued work and development regarding how companies use the International <IR> Framework after it has been implemented could further enhance the amount of ICD.

6.2 Discussion and suggestions for future research
There are some weaknesses to the work of this thesis that has arisen though the process. Firstly, this thesis used the companies listed in South Africa to show the results of mandatory use of the International <IR> Framework. Although it has been mandatory for the ZAF LC to construct integrated reports since 2010, the <IR> Framework was not released and endorsed until 2014. Hence the integrated reports this thesis have examined are the first reports the ZAF LC has released with the International <IR> Framework as basis.

Secondly, the results of this thesis have been compared to some previous studies which have used the same disclosure scoreboard on companies in different countries than this thesis, however for slightly different purposes. These comparisons have indicated that both the ZAF LC and the SWE LC in this thesis has scored high results. It is however difficult to conclude how well these results stand compared to studies conducted with other scoreboards.

These mentioned discussion points leads to the suggestions for future research that would be relevant in relation to this study. As this thesis was limited to 1 year of corporate reports it was unable to draw any conclusion regarding the development of ICD over the time. As mentioned 2014 was the first year with the International <IR> Framework, however since the companies have issued integrated reports since before that it would be interesting to
see the development over a longer time span by conducting a similar study over several years. Also since the framework was newly finished and endorsed it will be all the more interesting to see how it develops in the future to conclude if <IR> is here to stay, at least from an intellectual capital perspective.

Further it would be of interest to see how similar studies of other stock markets that NASDAQ OMX Stockholm would stand against the integrated reports of the Johannesburg Stock Exchange. As mentioned in the report companies listed in Sweden and Scandinavia has a history of being in the forefront of intellectual capital reporting, hence investigation against other countries and stock markets are needed to conclude if the results of this thesis is applicable in a broader sense.

6.3 The findings effects on ethics and society
This study has been an early step towards concluding whether the use of integrated reporting has an effect on the amount of intellectual capital information disclosed in companies’ annual report. The result of the findings in this thesis is one piece of evidence from an intellectual capital point of view that the work of the IIRC and the International <IR> Framework could improve corporate reporting in the sense of more information reaching all of the companies’ stakeholders. Hence if Integrated Reporting continuous to develop towards both becoming an international norm when it comes to corporate reporting, as well as keep striving towards its today stated goals of leading to sustainability and financial stability, then in the future we might observe less companies “doing good by being bad”. 
References


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<th>External (Relational) Capital</th>
<th>Employee Competence (Human Capital)</th>
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