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Handtekening

Anton de Kom University of Suriname

Faculty of Social Sciences

The impact of integrated reporting (IR) on the firms' performance of publicly listed financial services companies during the period 2011 - 2015

Thesis to obtain the degree of Master of Science in Accountancy

Department **:** Accountancy

Student **:** Sjaïsta Moertabat BSc.

Thesis supervisor : drs. M. M. Loswijk – Keerveld RA

Paramaribo, February 2022

Statement of Originality

This thesis is written by Sjaïsta Moertabat, who declares to take full responsibility for the contents of this document.

I declare that the text and the work presented in this document is original and that no sources other than those mentioned in the text and its references have been used in creating it. The Anton de Kom Universiteit van Suriname is responsible solely for the supervision of completion of the work, not for the contents.

Acknowledgments

As part of completing the Master of Science program in Accountancy at the Faculty of Social Sciences of the Anton de Kom Universiteit van Suriname (AdeKUS), it is a requirement for every student to submit a thesis related to the relevant field of study. The title of this thesis is as follows: ***"The impact of integrated reporting (IR) on the firms' performance of publicly listed financial services companies during the period 2011 – 2015".***

On this journey, with the focus on the accounting field of study, I discovered IR as a corporate reporting standard which has the ability to add value to a firms' value creation process and contribute to attracting investors. The ability as mentioned has charmed my interest in this standard of corporate reporting and drove me to scrutinize this within the financial branch. Since I am part of the financial branch in Suriname and proudly working within the banking sector of which the company is also publicly listed, it is an honor for me to add value to this subject which can be used to implement this form of corporate reporting in the near future.

First of all, I would like to express my gratitude to my thesis supervisor, mrs. drs. Magalie M. Loswijk – Keerveld RA, for her critical and professional guidance on this journey. Despite her crucial role as Chief Financial Officer, she adequately gave me professional guidance and useful feedback and made it also possible for me to complete this thesis. I would also like to thank my co – supervisor, mr. Shifayed Oemar MSc., for the guidance and support during this process of graduating. Sincere thanks to the coordinator of Economics, mr. Varun Ramdin MSc. and the coordinator of the Master Accountancy program, mr. drs. A. Sheoratan RA, for their valuable time and useful guidance. Furthermore, I would like to thank all my lecturers and fellow students for sharing their knowledge and support to the success of my research and the completion of my thesis.

This study was a challenge for me as a working wife and student, but with help and motivation of several people close to me I took on and succeeded on this challenge. Sincere thanks to my family, especially my husband and my parents for keeping me motivated from the beginning until the end of my study.

"The balance you have between drive and patience may be your master key to success" – David Allen

Wanica, February 2022

Sjaïsta Moertabat.

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Abstract

The purpose of this study is to examine the impact of Integrated Reporting on firms' performance of publicly listed financial services companies during the period 2011 – 2015. The independent variables used in this study are the disclosure indexes IRCE and IRC, where a score was given regarding the disclosure of the IR content elements and the IR capitals which is built up based on the IIRC Framework. The indexes used gives an indication of the extent to which IR is implemented by these firms. The dependent variables of this study are return on equity ratio and the solvency ratio, which are used as parameters for the firms' performance. These variables are used to respectively measure firms' financial performance and firms' financial health. The hypothesis in this study were developed based on prior research regarding IR. The data for this study is manually collected from annual and integrated reports, which are available on the webpage of these firms. The multiple linear regression is used to test the hypotheses and determine whether IR has an impact on the performance of these firms. The results state that there is a positive significant impact on firms' financial performance and a negative or no impact on firms' financial health.

Key words: Integrated Reporting, firms' performance, ROE, Solvency, IR Capitals, IR Content Elements

1. Introduction

1.1 Background

The purpose of this research is to determine the impact of integrated reporting (IR) on the firms' performance of publicly listed financial services companies during the period 2011 – 2015. Over the last years, companies are accountable to their stakeholders that want to evaluate a company's impact on the world. The marketplace is continuously evolving and the demand from various stakeholders and financial professionals, to understand these trends and to be able to integrate these trends into business decision making, is increasing (Deloitte, 2015). Nowadays business depends on more than financial and manufactured capital to make its profit. Besides financial information investors also consider non-financial information useful in their decisions (Akisik & Gal, 2020). Creating a single report which combines both financial and non-financial measures has been supported by the International Integrated Reporting Council (IIRC) (IIRC, 2013). In this context the IIRC developed, promoted and now implemented worldwide, integrated reporting (IR). They have been aiming to embed integrated thinking (IT) in mainstream business practice since 2010 and facilitated this vision by introducing a set of IR principles in a framework as the corporate reporting norm. According to Busco et al. (2013) IR has the potential to transform financial reporting, as well as firms' performance. Furthermore, El Deeb (2019) states that IR could lighten information asymmetry, thereby reducing the borrower's possible risk of default, in turn decreasing the cost of capital. In other words, IR may be aimed at acquiring capital at a minimum cost. Preliminary investigation has shown mixed results on the association between IR and financial performance (Smith, 2016). Furthermore Bijlmakers (2018) states that current literature about the effects of IR is scarce. The fact that further work is still needed to better understand these relationships is being highlighted. In line with this, Roth (2014) found that the specific problem is that organizations are investing in IR research and implementation without knowing if it improves firms' performance. According to van Zijl et al. (2017) IR is the most recent advance in the sustainable business practice and reporting movement. An effective integrated report is not just an aggregation of an annual and sustainability report and should therefore provide users with a detailed explanation of how an organization manages financial and non-financial risks in order to generate sustainable returns (IIRC, 2013). In addition to this, an integrated report shifts the historical focus of financial statements to a forward-looking account of the value creation process (Smith, 2014). It is mandatory for the reporting entity to illustrate how management uses financial,

manufactured, human, intellectual, natural and social relationship capitals in the value creation process (IIRC, 2013). Tanasă (2020) stated that companies providing financial services have an important role in the financial stability of the global economy and therefore are crucial for economic development, providing the financial infrastructure with different social, environmental and economic initiatives undertaken by their customers. It is therefore important that these companies set the tone for responsible investment and corporate reporting (Zijl van, Wostmann, & Maroun, 2017).

1.2 Research question and sub questions

As mentioned earlier, the concept of IR was developed and promoted by the IIRC and now implemented worldwide. Although Busco et al. (2013) states that IR has the potential to transform financial reporting, as well as firms' performance, there has not been any research done on the impact of this concept on firms' performance of publicly listed companies registered as IR reporters at the collaborative database of the Value Reporting Foundation and Black Sun Plc. Due to the fact that companies providing financial services have an important role in the financial stability of the global economy and therefore are crucial for economic development, this study focuses on this sector. It is important for the stakeholders and investors that these listed companies should improve their public image by adequately carrying out financial and non-financial information, useful for their corporate decision-making. To determine the impact of IR on these publicly listed companies, the orientation of financial services companies towards the implementation of IR practices and how IR affects their firms' performance is examined in this study.

Based on the information above the following research question is developed:

"What is the impact of Integrated Reporting (IR) on firms' performance of publicly listed financial services companies?"

Sub questions

In order to answer the main research question the sub questions are as follows:

1. What are the characteristics of IR reporting?
2. Are there current IR reporting standards?
3. What are the determinants of firms' performance?

1.3 Purpose of the thesis

The aim of this study is to gain insights of IR practices and the impact it has on firms' performance, specifically the firms' financial performance and the firms' financial health. In this extent, this research also shows whether these firms, using the issuance of an integrated report are able to achieve superior financial results. Finally, a purpose of this thesis is to identify the trends of IR by publicly listed financial services companies since the IR framework was released. This relation between IR and firms' performance is analyzed over the period 2011 – 2015.

1.4 Relevance

This master's thesis contributes to the field of research because it provides more specific insights in the relation between IR and firms' performance of publicly listed companies that provide financial services. Based on my orientation on this subject there is limited prior research done on the subject of IR for this branch. Where Van Zijl et al (2017) focused on strategy disclosures by listed financial services companies and examined integrated reports to identify their reporting challenges within only a single industry in South Africa, this master's thesis examines all the IR reporters within the collaborative database of the Value Reporting Foundation and Black Sun Plc. Other than this study there has been minimal research found on the subject of IR within this branch, where the impact of IR on firms' performance is emphasized. Further this master's thesis is relevant, because the results will give insights to the stakeholders on how listed companies within the financial sector handled the implementation. Also, the information obtained in this study can be relevant for management of companies within the financial sector that plans to implement IR in the future and can be used as a source to collect information for future research.

1.5 Methodology

In this master's thesis the following research methods are used:

1. Literature review: the literature research consists of the study of different relevant theories regarding IR that can contribute to this research. Furthermore, research on the agency, stakeholders' and legitimacy theory in relation to IR is done.

2. Empirical research: the empirical research is done by examining the available data obtained from annual reports and integrated reports of all the 46 publicly listed firms providing financial services from the collaborative database of the Value Reporting Foundation and Black Sun Plc out

of 496 IR reporters. The data regarding the impact of IR on firms' performance is analyzed through a regression analysis during the period 2011-2015. In total data from five years has been observed.

1.6 Structure of the thesis

The structure of the thesis is organized in the following five chapters:

1. Chapter 1 is an introduction of the research problem;
2. Chapter 2 provides the theoretical background regarding IR and firms' performance;
3. Chapter 3 gives an overview of the selected firms for this study;
4. Chapter 4 explains the hypotheses development;
5. Chapter 5 focuses on the research design used to conduct this research;
6. Chapter 6 provides an overview of the research findings;
7. Chapter 7 provides the conclusion, recommendations, limitations and suggestions for future research.

2. Literature review

2.1 Introduction

In this chapter the fundamentals regarding the theory of IR and firms' performance will be discussed extensively. Since the agency, stakeholder and legitimacy theory have an important role in the implementation of IR, these financial accounting theories will also be discussed in this chapter.

2.2 Defining IR: Integrated Reporting

IR is the process based on integrated thinking, applied by organizations worldwide, resulting in periodic integrated reporting on value creation over time and related communication on aspects of value creation (IIRC, 2013). IR makes it possible to easily access both the financial and non-financial information to the company stakeholders, whilst it also focuses on the future prospects of the company (Bernardi & Stark, 2018; Cohen et al., 2012). To place IR in a broader context, first the organization and policy of the IIRC is discussed.

IIRC

The IIRC, emerged from the International Integrated Reporting Committee, was formed in August 2010 by the Prince of Wales' Accounting for Sustainability Project, the Global Reporting Initiative and the International Federation of Accountants, and aims to create a globally accepted framework for a process that results in communications by an organization about value creation over time (IIRC, 2013). This initiative has been taken in order to help businesses to make more sustainable decisions and enable investors and other stakeholders to understand the true nature of an organization's performance (IIRC, 2013). The Committee is a global organization that consists of representatives from corporate, investment, accounting, securities, regulatory, academic and standard-setting sectors as well as civil society. They share the opinion that communication about value creation, preservation or erosion is the next step in the evolution of corporate reporting (IIRC, 2013).

According to the IIRC (2013) financial and non-financial information should not be provided in separation. Instead, they share the opinion that this information should be combined in a single report which reflects a cohesive approach for managing diverse types of capital to create an acceptable return for capital providers (IIRC, 2013). Furthermore, they state that an organization

must improve its identifiable business model and strategy, permitting them to stimulate changes in systems, procedures and processes, which contribute to enrich the organization's sustainability. Previous study showed that this requires a brief clarification of the connection between the diverse factors influencing how the organization creates value including environmental, social and economic factors, which give rise to consequences on the sustainability of the business model (Raemaekers, Maroun, & Padia, 2016).

IIRC Developments

After a consultation process, the IIRC published the first version of its IR Framework in December 2013 which brings together financial, environmental, social and governance information in a clear, concise, consistent and comparable format (IIRC, 2013). Sierra-Garcia et al (2015) showed that this idea has been widely supported as there is a need for corporations to offer information that cannot be found in traditional reporting models. They also state that the objective is hence to provide information on the results of the companies in the following dimensions: financial, social, environmental, and corporate governance, also contemplating the risks and opportunities inherent in the strategy and business model (Sierra-García, Zorio-Grima, & García-Benau, 2015). In February 2020 the IIRC launched a revision process of the consultation draft of 2013. In this revision three key themes were identified: a) business model considerations, b) responsibility for an integrated report, and c) charting a path forward (IIRC, 2021). In January 2021, the IIRC published revisions of the Framework which consists of a simplification of the required statement of responsibility for the integrated report, improved insight into the quality and integrity of the underlying reporting process, a clearer distinction between outputs and outcomes, and a greater emphasis on the balanced reporting of outcomes and value preservation and erosion scenarios (IIRC, 2021).

IR

Throughout the world principles and concepts, regarding the way organizations report their annual performances, are extensively outdated as they tend to only focus on the financial part of business performance (Villiers, 2014). As a result of this, previous study showed that the reason for this is the presence of key notions such as capital employed, value creation, and accountability that are redefined in practice throughout the years (Busco C. , Frigo, Riccaboni, & Quattrone, 2013). Therefore, the demand for additional reporting has increased which demonstrates the main

financial and non – financial measures affecting the performance and sustainability of a business (El Deeb, 2019). In the process of corporate reporting, it is important to emphasize that organizations demonstrate their responsibility towards the global economy and the three major stakeholders: shareholders, society and the environment (Roman, Mocanu, & Hoinaru, 2019).

As stated by Busco et al (2013) a possible response to this critical evolution is offered by IR. IR has rapidly gained considerable prominence since the formation in 2010 of the IIRC, with the aim of preparing a conceptual framework for the preparation of a concise, user-oriented corporate report entitled an "integrated report" (Cheng, Green, Conradie, Konishi, & Romi, 2014). According to the IIRC (2013) IR is defined as follows:

"A process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation".

As for an integrated report, the IIRC (2013) states the following definition:

"An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term".

As these definitions show, it is important to also scrutinize Integrated Thinking (IT) which is defined by the IIRC (2013) as:

"The active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects".

As can be derived from the definitions, it shows that IR consists of communicating, through an annual integrated report, how organizations create value over time, and their impact from an economic, social and environmental point of view. The definitions also imply that it is about the shift from a traditional retrospective financial account to a holistic and cohesive explanation of the strategy, business model and value proposition (IIRC, 2013). Furthermore, it has the ability to emphasize these critical issues, due to the fact that it brings together material information about an organization's strategy, governance, performance and prospects in such way that reflects the commercial, social and environmental context within which it operates (Busco C. , Frigo, Riccaboni, & Quattrone, 2013). It also turned out that IT is important in the process of the implementation of IR and leads to integrated decision making and actions that consider the creation of value over the short-, medium- and long-term horizon (IIRC, 2021).

Furthermore, El Deeb (2019) underlines that IR includes two important matters. The first one is IT, which is defined previously and is referred to as the internal business management. According to his research, enhancing the value of IR requires adequate implementation of IT which can be challenging (El Deeb, 2019). The second matter is the external opportunities, which is referred to as the external periodic report. Long – term investors' interest is beyond the financial facts and figures only. In line with this, El Deeb (2019) states that IR is the logical and necessary next step in corporate reporting, due to the fact that environmental, governance and social information already is of great importance for measuring the performance and prospects of companies, and for the significant stewardship part that investors both want and need to use. In this context, IR is recognized as the latest reporting framework, that explores the new avenue of corporate reporting philosophy. Moreover, it is recognized as a solution to the concerns and limitations of traditional financial reporting (Busco, Malafronte, Pereira, & Starita, 2019). The focus in these matters is thus important due to the fact that key opportunities and risks can adequately be identified and reported to stakeholders who will get the possibility to gain valuable financial, - and non-financial information regarding the ability of the company to survive in the future.

2.3 IR disclosure

As previously shown, the process of IR leads to disclosing both financial and non – financial information that is material to stakeholders in a so-called integrated report. According to Smith (2014) the focus of traditional financial reporting is exclusively on backward-looking financial information. Reporting templates of this kind are shown to be inadequate in a rapidly evolving marketplace, which is incorporating increasing elements of sustainability, stakeholder requirements, and intangible assets (Smith, 2014). On this journey, Akisik & Gal (2020) share the view that there is growing evidence that investors also consider non-financial information useful in their decisions. Regarding the disclosure of this information the IIRC (2013) states that an effective integrated report should consist of detailed explanation of how the organization manages financial and non – financial risks in order to generate sustainable returns rather than just a composition of an annual and sustainability report (Villiers, 2014). In line with this, the reporting entity should illustrate how management uses financial, manufactured, human, intellectual, natural and social & relationship capitals in the value creation process (IIRC, 2013). Raemaekers et al (2016) states that these categories should be linked clearly to the entity's strategy, business model and key risks.

2.3.1 Voluntary IR disclosure

IR is a form of voluntary corporate reporting (Tanasă, 2020). Disclosing voluntary means that any financial and non – financial information is disclosed by a company's management beyond mandatory financial reports (Dhaliwal, Li, Tsang, & Yang, 2011). Voluntary disclosures can consist of the following information (Li & Yang (2016); Meek, Roberts, & Gray, (1995); Rezaee, (2016)):

1. Strategic information, which emphasizes product, competition and customers;
2. Financial information, which indicates management earnings forecast, stock price;
3. Non – financial information, which presents the environmental, social and governance sustainability performance.

As for IR, the integrated reports contain both mandatory as well as voluntary corporate disclosures where the mandatory disclosure is composed in accordance with accounting standards with the aim to protect the interests of shareholders with a direct financial interest in a company (Roman, Mocanu, & Hoinaru, 2019). Voluntarily issuing an integrated report indicates that at the level of each company the decision is made by a company's management and IIRC admits that they still fulfill an important role in the disclosure of strategic information and prospective information, as they expose potential costs of litigation and risks losing the competitive advantage of the company (Tanasă, 2020). Study showed that the voluntary disclosure theory underlines the value relevance of non-financial information to capital providers (Orlitzky, Schmidt, & Rynes, 2003). In line with this, Zhou et al (2017) states that voluntary social and environmental performance and disclosing this information affects investor behavior. The foregoing is in accordance with the aim of IR to enhance corporate reporting that elevates the decision usefulness of investors.

2.3.2 Benefits and limitations of voluntary IR disclosure

Benefits

Due to the fact that the disclosure of the integrated report is voluntary, it is important to take a closer look at the benefits and limitations in this context. From this point, firms' management can consider whether this adds value to implementing IR. The following benefits have been identified from preliminary research as well as from the IIRC:

1. Enhancing accountability and stewardship for the capitals as mentioned earlier, such as financial, manufactured, intellectual, human, social and relationship, and natural. And promoting understanding of their interdependencies (IIRC, 2013);

2. Better internal collaboration between departments, due to the fact that they do not operate ad hoc, which results in better productivity and efficiency (Singh, Sadiq, & Kaur, 2019);
3. Better refined Key Performance Indicators (KPI) to material issues, which helps improving performance and contributes to IT and reflecting on a well – integrated strategy (Singh, Sadiq, & Kaur, 2019);
4. Improvement of insights into the business model and value creation taking into account deeply thinking on inputs, outputs and outcomes which comes along with staying focused on redefining dialogues between management and the Board of Directors (BOD) (Singh, Sadiq, & Kaur, 2019);
5. Supporting IT, decision-making and actions that focus on the creation of value over the short, medium and long term (IIRC, 2013). In this case, clear understanding of the link between material financial and non-financial information is a leading indicator of financial performance (Singh, Sadiq, & Kaur, 2019);
6. Enabling a more efficient and productive allocation of capital by the improvement of the quality of information available to providers of financial capital (IIRC, 2013). In line with this, trust that is enhanced, is critical to stakeholders, which reduces investment risk (Bernardi & Stark, 2018);
7. Achieving superior performance relative to that of other firms, which creates the possibility to attract more shareholders (Verrecchia, 2001);. Thus, in this context IR can be considered a business card both externally and internally for the firm;
8. Combining information traditionally presented in the annual report, the corporate governance report, and the sustainability report into one standalone document (IIRC, 2013). A cohesive approach to corporate reporting makes it possible to draw on different reporting strands and communicates all factors that materially affect the ability of an organization value creation (IIRC, 2013);
9. Reducing asymmetry about the impact of non-financial information on financial performance, mitigates uncertainty and therefore reducing the borrower's possible risk of default with the result of decreasing the cost of capital (Busco C. , Frigo, Riccaboni, & Quattrone, 2013).
10. Fostering IT which would lead to more efficient capital allocation resulting in improved financial allocation, financial stability and sustainability (Buallay, Al Hawaj, & Hamdan, 2020).

Limitations

As well as the benefits, it is important to consider the challenges that the implementation of IR can pose. Supported by preliminary study, the limitations are as follows:

1. Figuring out the key risks and opportunities of IR and establishing how it can be incorporated as part of the existing reporting requirements (Izma, 2014);
2. Convincing the BOD to adopt IR and convincing that the benefits are greater than the costs (Izma, 2014);
3. Assigning a regulatory body that will be in charge of establishing and enforcing IR standards and the potential extension of directors' liability (Izma, 2014);
4. To persuade various actors involved in the organization to embrace an IT approach. For this to succeed it is important to convince and motivate all organizational members, such as stakeholders, employees and other implementers and facilitate and empower them to adopt IR so that the maximum impact of IR can be attained (Singh, Sadiq, & Kaur, 2019). In this case IT in the role of top management is crucial for the drive and enthusiasm at lower levels;
5. Integrated reports are not always comparable and reduce usefulness to certain stakeholders (Villiers, 2014);
6. The challenge faced to appropriately set organizational KPIs, on the operational level, identifying appropriate organizational risk indicators, lack of measurement of non-financial data — such as strategy, environmental and societal impacts — and lack of market prices for many natural capital assets and services (Singh, Sadiq, & Kaur, 2019);
7. Due to the fact that IR is market driven, regulatory enforcement will not work. Therefore, the government must empower its relevant agencies to encourage IR adoption by providing incentives and education on IR (Singh, Sadiq, & Kaur, 2019);
8. Non – financial information is commonly unregulated and not homogenous, because of the absence of reporting criteria and the absenteeism of guiding legislation (Sierra-García, Zorio-Grima, & García-Benau, 2015);
9. Improving disclosure through publishing an integrated report, is a costly process and remains voluntary in most jurisdictions (Landau, Rochell, Klein, & Zwergel, 2020).

2.4 IR framework standards and guidelines

To assist organizations with adequately implementing IR, the IIRC released a Consultation Draft (CD) in April 2013, of the first IR Framework (IIRC, 2013). Although a revised version of the

framework was recently published in 2021, the focus of this study will be on the first version due to the fact that the latest version applies for reporting periods commencing 1 January 2022. In order to better understand the content of this framework, it is discussed in more detail in the following sections.

2.4.1 The Objective of the IR framework

The aim of this framework is establishing guiding principles and content elements that govern the overall content of an integrated report and explaining the fundamental concepts that underpin them, which will help organizations determine how to express their value creation in a transparent way (IIRC, 2013). Furthermore, the framework helps to identify information to be included in an integrated report for use in assessing the organization's ability to create value and does not set benchmarks for the quality of an organization's strategy or the level of its performance (IIRC, 2013). The framework is primarily written in the context of private sector and for profit companies of any size but it can also be adopted by the public sector and non-profit organizations (IIRC, 2013).

Principle based approach

Due to the fact that its intention lies in offering an appropriate balance between flexibility and prescription, the IR Framework is principles based rather than rules-based (IIRC, 2013). The idea is to recognize the wide variation in individual circumstances of different organizations and at the same time enable a sufficient degree of comparability across organizations to meet relevant information needs (IIRC, 2013). This has ensured that the framework's focus is not on rules for measurement, disclosure of individual matters, or even the identification of specific KPI's. Preferably, the framework is driven by IT, which, as illustrated in the CD, should lead to integrated decision making and execution toward value creation. Stimulating the active consideration by organizations of the relationships between their various operating and functional units and the kinds of capital that they use and have an effect on, lies in the purpose of this approach (Busco C. , Frigo, Quattrone, & Riccaboni, 2013).

2.4.2 Application of the IR framework

Referring to applying the framework, it prescribes specific points that an organization should take into account. It is mandatory for any communication claiming to disclose an integrated report and

referring to the framework, that the organization should apply all the requirements identified in bold italic type unless (IIRC, 2013):

1. The inability to disclose material information is because of the unavailability of reliable information or specific legal prohibitions;
2. Significant competitive harm would be caused when disclosing material information.

In cases where the unavailability of reliable information or specific legal prohibitions are an obstacle to the publication of material information, the framework prescribes that this should be substantiated on the basis of the following points (IIRC, 2013) :

3. Give an indication of the nature of the information that has been omitted;
4. Give an explanation of the reason why it has been omitted;
5. In the case of the unavailability of data, identifying the steps being taken to gather

the information and the expected time frame for doing this.

Responsibility

Regarding the responsibility for the integrated report, the framework prescribes that an integrated report should include the following from those charged with governance (IIRC, 2013):

1. A recognition of their responsibility to ensure the integrity of the report;
2. A recognition that they have applied their collective mind to the preparation and presentation of the report;
3. Their conclusion about whether the report is disclosed in accordance with the framework and if not, it should explain (IIRC, 2013):
    1. The role those charged with governance played in its preparation and presentation;
    2. The steps that are being taken to include such a statement in future reports;
    3. The time frame for doing so, which should be no later than the organization's third integrated report that references this framework.

2.4.3 The Fundamental concepts

For the implementation of IR, it is also important to examine the fundamental concepts underlined in the framework. The first thing that is emphasized is 'value creation'. In the framework this concept is typified as transformations of the capitals caused by the organization's business activities and outputs, which has two interrelated aspects (IIRC, 2013):

1. Value created on behalf of the organization itself, which enables financial returns to the

providers of financial capital;

2. Value created for others, especially externally such as the stakeholders and society at large.

In response to value creation which is created over different time horizons, regarding different capitals and for different stakeholders, it is unlikely to be created through the maximization of one capital while disregarding the others. Moreover, all organizations depend on various forms of capital for their success. In this context, the IR framework comprise and describes the following capitals (IIRC, 2013):

3. *Financial capital*: this consists of the funds available to the reporting entity for its production of goods or the provision of services and is obtained through financing;
4. *Manufactured capital*: this capital contains manufactured physical objects available to an organization for use in the production of goods or the provision of services, including buildings, equipment and infrastructure. Furthermore, the framework prescribes that this capital is created by other organizations, but includes assets manufactured by the reporting organization for sale or when they are retained for its own use;
5. *Intellectual capital*: this includes organizational, knowledge-based intangibles, consisting of intellectual property, such as patents, copyrights, software, rights and licenses. Further "organizational capital" such as tacit knowledge, systems, procedures and protocols are also part of this capital defined in the framework;
6. *Human capital*: this consists of people's competencies, capabilities and experience, and their motivations to innovate taking into account their alignment with and support for an organization's governance framework, risk management approach, and ethical values. For this capital the ability to understand, develop and implement an organization's strategy has to be taken into account. Furthermore, loyalties and motivations for improving processes, the production and providing services, including the ability to lead, manage and collaborate are mandatory;
7. *Social and relationship capital*: for this capital the focus has to be on institutions and the relationships within and between communities, groups of stakeholders and other networks, and its ability to share information to enhance individual and collective well-being;
8. *Natural capital*: this capital consists of all renewable and nonrenewable environmental resources and processes that provide goods or services which contribute to the support of the past, current or future prosperity of an organization. The elements for this capital are air, water, land, minerals, forests, biodiversity and eco-system health.

The role of the capitals

Although the framework highlights various capitals and dictates how to deal with them, not all capitals are equally relevant or applicable to all organizations. The categories of capitals mentioned above, solely serves to be used as a guideline to ensure that organizations do not overlook a capital when using or affecting it. Therefore, according to the framework, organizations should not lose sight of the following reasons when including the capitals (IIRC, 2013):

1. the capitals serve as part of the theoretical underpinning for the concept of value creation as mentioned above;
2. the capitals serve as a guideline for ensuring organizations include all the forms of capitals they use or affect.

2.4.4 The Guiding Principles

The IR framework also consists of guiding principles which will assist in preparing and presenting an integrated report. The guiding principles are as follows (IIRC, 2013):

1. *Strategic focus and future orientation*: this principle prescribes that the integrated report should provide insight into the organization's strategy, how it relates to the organization's ability to create value in the short, medium and long term, taking into account the use of and effects on its capitals;
2. *Connectivity of information*: this principle prescribes that the integrated report should reflect a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time;
3. *Stakeholder relationships*: this principle prescribes that the entity's report should provide insight into the nature and quality of the organization's relationships with its key stakeholders, including how and to what extent the organization understands, takes into account and responds to their legitimate needs and interests;
4. *Materiality*: this principle prescribes that the reporting entity should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term;
5. *Conciseness*: this underlines that the integrated report should be concise;
6. *Reliability and completeness*: this principle prescribes that the entity's report should include all material matters, both positive and negative, in a balanced way and without material error;
7. *Consistency and comparability*: this principle emphasizes the importance of the information in

an integrated report which should be presented on a basis that is consistent over time and in a way that enables comparison with other organizations to the extent it is material to the organization's own ability to create value over time.

2.4.5 The Content Elements

The IR Framework also underlines the section Content Elements, which are categories of information that are required to be included in an integrated report. The integrated report should include eight content elements that are fundamentally linked to each other and are not mutually exclusive. The content elements are as follows (IIRC, 2013):

1. *Organizational overview and external environment*: the reporting entity should check what it does and shed light on the circumstances under which it operates;
2. *Governance*: the entity should evaluate how the governance structure of the organization supports its ability to create value in the short, medium and long term.
3. *Business model*: the entity should focus on what its business model consists of taking into account the inputs, business activities, outputs and outcomes;
4. *Risks and opportunities*: the entity should identify the specific risks and opportunities that affect the organization's ability to create value over the short, medium and long term, and how the organization deals with it;
5. *Strategy and resource allocation*: it has to be clear where the organization wants to go and how it tends to get there;
6. *Performance*: the entity should evaluate to what extent it has achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals;
7. *Outlook*: the entity should focus on the possible challenges and uncertainties to encounter in pursuing its strategy, and the potential implications for its business model and future performance;
8. *Basis of presentation*: the entity should check how it determines what matters to include in the integrated report and how such matters are quantified or evaluated.

On the basis of the foregoing and in line with preliminary study (Cheng, Green, Conradie, Konishi, & Romi, 2014) the IR structure covers content fundamentals, controlling principles and major concepts. It shows that the formulation and arrangement of the IR system is backed by seven managerial ideologies: strategic focus and future orientation, connectivity of information,

stakeholder relationships, materiality, conciseness, reliability and completeness, and consistency and comparability (IIRC, 2013). These principles are related to the content elements of an integrated report, shown by the IIRC: the organizational overview and external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook and the basis of presentation. According to the framework, with this approach the organization has to focus on the capitals it uses and affects. As figure 1 illustrates, with these elements from the IR framework, the process of value creation remains guaranteed.

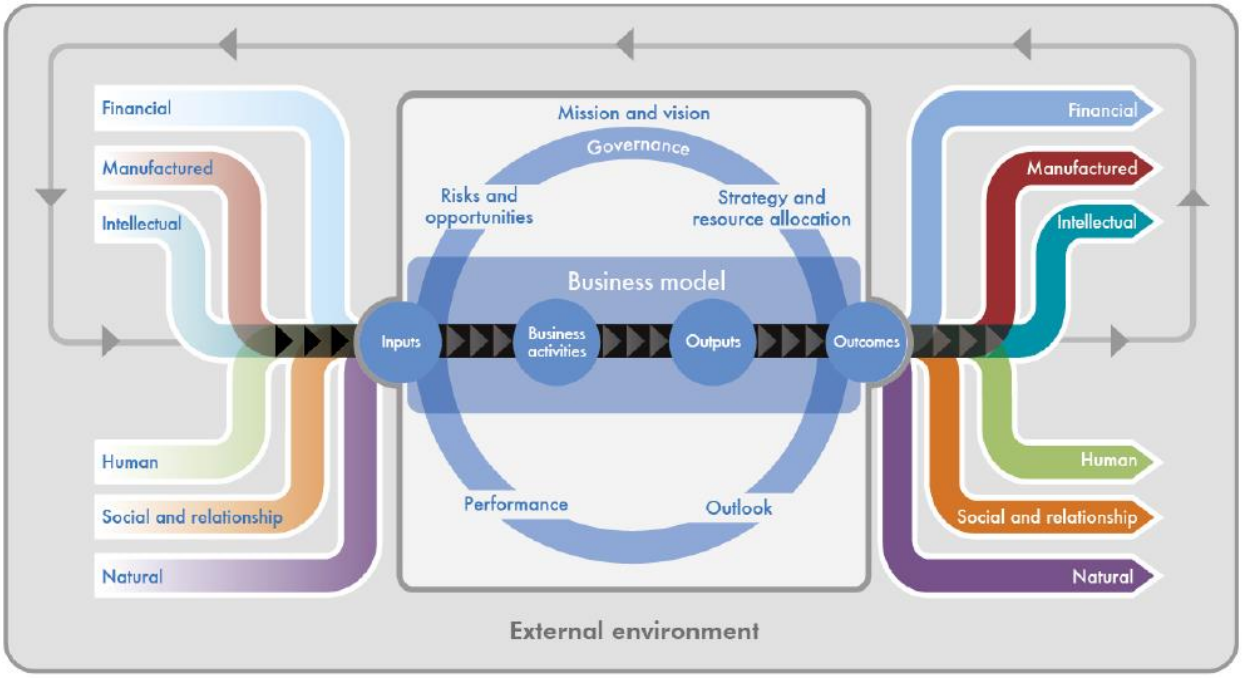


Figure 1. The value creation process (IIRC, 2013)

2.5 Firms' performance

As mentioned in the introduction, this study also sheds light on the concept of firms' performance. Cheng et al (2014) states that this concept is about the degree of achievement of a company's strategic objectives and the outcomes pertaining to its capitals. In line with this, several empirical studies define firms' performance as follows (Katz & Kahn, (1978); Cherrington, (1989); Robbins, (1987)):

'a business potential and ability to efficiently utilize the available resources to achieve targets in line with the set plans of the company, keeping in mind their relevance to the users'.

In line with this definition, Taouab & Issor (2019) states that a well performing firm can bring high and long-term profits, which will lead to generating employment opportunities and improving the income of individuals. They have also shown that a firms' financial profitability will enhance

its employees' returns, have better production units, and have the ability to bring products of higher quality for its customers. To make this process possible and to ensure effective management, it is important to measure the firms' performance. Shown by Lebas (1995), people have the ability through this measurement to create simplified numerical concepts by translating the complex reality to how well the firm is performing. Supported by Atkinson et al (1997), a performance measurement system must comply with the following:

1. Should provide insight whether the firm is receiving expected contribution of employees and suppliers;
2. Should provide insight whether each stakeholder group is supporting the firm to achieve its main objectives;
3. Contributes to building and implementing processes which supports achieving the strategic objectives;
4. Assists the firm to assess and monitor strategic planning according to the agreements negotiated with key stakeholders.

As these listed points reflect, performance measurement has the ability to identify management strategy, predicting future internal and external circumstances, and to make several decisions in different periods. Apart from the fact that performance measurement depends on the firm's efficiency, it also depends on the market where it operates (Munir, 2015). As mentioned earlier, Lebas (1995) states that the firms' complex reality can be expressed in measurable terms by using numerical concepts. In the financial sector, the firms' performance indicator is also known as a reflection of the financial stability or financial health of the firm (Munir, 2015). To evaluate firms' performance there are different financial ratios that can be used. In this study the focus will be on return on equity (ROE) and the solvency ratio. The choice of these indicators is supported by Akisik & Gal (2020) who state that these ratios are an accounting-based measure of performance, used as proxies for support by a broader group of stakeholders. These performance indicators were also used as dependent variables in different regression models (Buallay, Al Hawaj, & Hamdan, 2020).

In relation to IR, Adams (2015) states that IR provides environmental, social and governance (ESG) information in an integrated way to portray a company's performance. Although IR does not prescribe guidelines regarding reporting performance indicators, it is expected that the increasing level of IR disclosure as it refers to elements that make up performance, should lead to

increased performance. In order to put the chosen performance indicator in this context, it is discussed in more detail.

2.5.1 Firms' performance operationalization

Return on Equity

As mentioned earlier, ROE is a measure of performance, specifically it indicates the firm's financial performance (Fernando, 2021). This ratio measures how efficient a company is generating its profit and is calculated by dividing net income by shareholders' equity (Fernando, 2021). A good or bad ROE depends on what is normal among a stock's peers (Fernando, 2021). Furthermore, ROE is recognized as a two – part ratio in its derivation, due to the fact that it brings together the income statement and balance sheet by comparing net income or profit to the shareholder's equity (Corporate Finance Institute, n.d.). Shown by Hagel et al (2010) Most Wall Street analysts and investors tend to focus ROE as a fundamental metric of company performance and recognize this as the one that gets the most attention from investors.

Solvency ratio

In this study, the solvency ratio is also a crucial metric which is used by prospective business lenders to assess an organization's capacity to satisfy long-term debt obligations (Hayes, 2021) . This ratio is a measure of a company's financial health that determines if its cash flow is sufficient to cover its long-term liabilities (Hayes, 2021). As shown by Hlaciuc et al (2016) solvency represents the company's ability to deal with long- and medium-term maturities, which is the main goal of any entrepreneur who wants to maintain financial autonomy and management flexibility. Furthermore, Karzaeva et al (2019) states that the solvency characteristics of the economic entity, whose support is the foundation of an enterprise's financial health, are the crucial link in financial diagnostics. In line with this, Svetlana et al (2020) shows that the adoption of IR can undoubtedly lead to an improvement in liquidity and reducing insolvency risk. Due to the fact that stakeholders emphasize on the financial diagnostic before doing investments, this ratio is also important for this study.

2.6 Legitimacy theory

As mentioned in the paragraphs before there is some expectation that the increase in the level of disclosure may increase a company's performance. As the focus is on the character of IR in this

research, where organizations show their responsibility towards their stakeholders, the explanation of this relationship can be derived from the legitimacy theory. According to Albetairi et al (2018) this theory dictates that companies tend to disclose more information when their legitimacy is threatened which results in gaining a better reputation and communicating differently to their stakeholders (Palazzo & Scherer, 2006). In line with this, Deegan and Unerman (2011) states that this theory could be used to offer a societal perspective, reflecting different views of stakeholders, industry standards or institutional norms.

Furthermore, preliminary study by Magness showed that legitimacy theory acts as a social contract between the firm and society (Magness, 2006). In conformity with this, management has the ability to influence societal perception by disclosing information that might change the users' opinion of the company's performance (Cormier & Gordon, 2001). In line with this, Khasharmeh & Suwaidan (2010) showed that firms are motivated to disclose social responsibility initiatives in order to gain legitimacy, acceptance and interest from shareholders. Therefore, IR is considered as an important source for legitimation (Cadiz Dyball, 1998).

2.7 Stakeholders' theory

As the explanation of the IR framework has emphasized, firms have the ability to clarify in what way they generate value over time. Not only the internal organizational efforts but also the relationship with its stakeholders is important when it comes to value creation (El Deeb, 2019). In this context, IR is responsible for monitoring the nature and quality of a firm's relations with its important stakeholders, by explaining the way and to what degree the firm comprehends and taking into consideration the needs of stakeholder (IIRC, 2013). Therefore, the stakeholder's theory has the ability to enhance the IR disclosure practices.

According to Smith (2014) stakeholder theory supports the requirement for businesses to report adequate information to meet the needs of all stakeholder groups, including financial shareholders. In line with this, Smith (2014) showed that stakeholder theory and the increases in stakeholder engagement are driving a new type of financial reporting in the form of an integrated reporting template. Reflecting on this, this theory also suggests that there are ways to measure performance other than financially and to support many views of the firm's role in society (Freeman, 1984). Freeman (2004) also states that this theory explains the accountability of the BOD to both its shareholders and other interested parties, and therefore is providing both social and economic

values and a consideration of ethics and morality, which is shown to be important for estimating the firm's value.

2.8 Agency theory

As indicated in the section regarding Stakeholders theory, there is a relationship between management and stakeholders when it comes to disclosing firms' corporate information. A reflection of this relationship appears to flow from the agency theory. This theory, introduced by Stephen Ross and Barry Mitnick (Mitnick, 2013), deals with solving problems as a result of agency relationships. Due to the fact that IR reflects the conflict between the interest of the agent, in this case a firm's management and the principal, which are in this case the stakeholders, it is important to also take a closer look at this theory in relation to IR.

Jensen and Meckling (1976) found that the problem of informational asymmetry occurs as a result of agency, because managers have more access to firms' information than shareholders do. Preliminary study showed that IR has the potential to mitigate this agency problem through reducing information asymmetry (Barth, Cahan, Chen, & Venter, (2017); García-Sánchez & Noguera-Gámez, (2017); Lee & Yeo, (2016)). To substantiate this, they found that there is a positive association between stock liquidity and IR. In line with this, Leuz & Wysocki (2016) found that disclosure quality and stock liquidity are strongly linked. Furthermore, it has shown that IR can also mitigate the problem of information asymmetry by reducing agency costs (Barako, Hancock, & Izan, 2006). Also, El Deeb (2019) states that highly leveraged firms disclose more information to decrease agency costs and accordingly, the cost of capital. Moreover, some empirical studies have shown that firms with higher leverages might tend disclosing more information in integrated reports with the aim to satisfy creditors' information needs, which comes along with reducing risk premiums in required rates of return on equity, and to comfort their shareholders (O'Sullivan, Percy, & Stewart, (2008); Wang & Hussainey, (2013)).

3. The publicly listed financial services companies

In this chapter the focus is on the publicly listed companies in the financial sector that are part of this study. A short description of the different stock exchange markets where these firms are participants from and an overview of the listed firms, is given. Before the explanation of the foregoing is given, the database from which these firms are extracted is discussed in detail.

3.1 Database IR reporters

The database that is used to extract the research units of this study, is established by the Value Reporting Foundation and Black Sun Plc. The Value Reporting Foundation is a non-profit organization that globally provides a comprehensive suite of resources to business and investors. The foundation's intention is contributing to the development and preservation of enterprise value creation and how it is eroded (The Value Reporting Foundation, 2021). The Black Sun Plc. is known as a stakeholder communications agency that globally contributes to businesses by helping them with authentic communication to their stakeholders regarding its value creation (Black Sun Plc., n.d.). These organizations intended to provide an online resource as a lead for organizations who intend to develop and are developing an integrated report (IR examples database, n.d.). The IR reporters in this database have also been suggested by these organizations and the reports are a selection of publicly available reports from firms who are subject to a disclosure requirement under applicable local laws and regulations and are listed at different stock exchange markets worldwide. Furthermore, the examples in this database have either released a report referring to the IR Framework or are influenced by this framework due to its participation in IR networks (IR examples database, n.d.). In this study, the focus is only on the firms within the financial services industry.

3.2 Stock Exchange Markets

As the majority of the research units are listed companies, it is important to consider the importance of stock exchange markets. As Wanjawa and Muchemi (2014) underline, stock markets are trading institutions that offer the possibility to trade stocks and other financial instruments such as bonds. These markets are characterized as major players in financial sectors of many countries (Wanjawa & Muchemi, 2014). In line with this, Zhou et al (2017) found that market participants rely on high quality and value relevant information to ensure the efficient and effective allocation of resources, the ability to encourage a vibrant climate for investment, and facilitating transparent, ethical, and

sustainable business practices. As mentioned in the foregoing chapter, there is evidence that IR has a crucial role in improving analyst forecast accuracy (Zhou, Simnett, & Green, 2017). In this study, the firms extracted from the database are listed on the following stock markets:

1. Australian Securities Exchange;
2. B3 S.A. - Brasil, Bolsa, Balcoa Stock Exchange;
3. Colombo Stock Exchange;
4. Dhaka Stock Exchange;
5. EURONEXT;
6. Istanbul Stock Exchange;
7. Johannesburg Stock Exchange;
8. London Stock Exchange;
9. New York Stock Exchange;
10. Singapore Exchange Limited;
11. Tokyo Stock Exchange;
12. Zimbabwe Stock Exchange.

3.3 Publicly listed firms

In this study the following publicly listed firms are extracted from the database within the financial services industry:

1. ABN AMRO;
2. ABSA Bank;
3. Achmea;
4. AXA;
5. Aegon N.V.;
6. Bank of Ceylon;
7. Banca Fideuram;
8. Bankmecu;
9. Brazilian Development Bank;
10. Banco Bradesco;
11. British Land;
12. Capricorn Group;
13. CCR S.A.;
14. DBS Bank;
15. Development Bank of Southern Africa;
16. Direct Line Group;
17. Eurazeo;
18. FMO Development Bank;
19. FNB Corporation;
20. Garanti BBVA;
21. Generali Group;
22. Hammerson plc;
23. HSBC Holdings plc;
24. IDLC Finance Limited;
25. ING Groep N.V.;
26. Itau Unibanco Holding S.A.;
27. LB Finance;
28. Liberty Holdings;
29. Lloyds Banking Group;
30. MS&AD Insurance Group;
31. National Australia Bank;
32. Nedbank;
33. Old Mutual Limited;
34. Peoples Leasing & Finance plc;
35. Redefine International
36. RSA Insurance;

37. Sanlam ltd;
38. Standard Bank;
39. Stockland Corporation ltd;
40. Strate;
41. Triodos;
42. TSKB bank;
43. UBS bank;
44. Unicredit;
45. Unipol;
46. Vancity.

Appendix A gives an overview of these firms by sector and the market on which they trade their shares.

4. Hypotheses development

4.1 Introduction

In this chapter the hypothesis development is emphasized. In order to conduct the multiple linear regression analysis, the hypotheses are formulated and explained with substantiated theory.

4.2 Hypotheses development

Before proceeding to the development of the hypotheses, it is important to examine the definition in more detail. Babbie (2013) defines a hypothesis as follows:

"a specified testable expectation about empirical reality that follows from a more general proposition; more generally, an expectation about the nature of things derived from a theory".

As this definition shows it thus involves an explanation of an aspect that would have to be observed in the real world in order to establish that the theory is correct. The focus of the hypotheses for the multiple linear regression analysis is to test whether IR, which is operationalized in a self-developed index, affected firms' financial performance and the financial health of publicly listed financial services companies statistically significantly. By performing this analysis, the relationship between the operationalized variables, Return on Equity ratios, Solvency ratios and the disclosure index for IR is tested.

As mentioned earlier, the focus in this study is on the financial sector. According to Harker and Zenios (1998) this sector is the most significant economic sector in modern societies, due to the fact that it offers the possibility to deal with economic uncertainties. This sector is also known as the one that facilitates the flow of funds from lenders to borrowers, which leads to improving the quantity and quality of real investments, and thereby increasing income per capita and raising the standards of living (Harker & Zenios, 1998). In their study, Herring and Santomero (1995) give a comprehensive contemporary analysis of the role of the financial sector in economic performance and state that these firms are obliged to adapt in order to survive due to increased international rivalry, quick innovation in new financial instruments, changing consumer needs, the explosive rise of information technology and firm-level innovation which brings about additional change in the competitive environment. In line with this and as emphasized in chapter 2, a new trend was born in the reporting field which is developed, promoted and implemented worldwide by the IIRC: the concept of IR. As Busco et al. (2013) states, it has the potential to transform financial reporting,

as well as firms' performance. Employees, customers, investors, and all other stakeholders, according to research, would reward organizations that demonstrate openness and accountability by reporting on relevant financial and non-financial data (Dam & Scholtens, (2015); Li, Gong, M., Zhang, & Koh, (2018)). As a result, if there is a reward, high-quality integrated reports should lead to improved financial performance and financial health, as measured by ratios (Matemane & Wentzel, 2019). The effectiveness of IR, on the other hand, is determined by the quality of the integrated report, and more precisely, how well the IR principles are followed. Analysts are likely to benefit more from integrated reports that are more closely aligned with the IR concepts (Zhou, Simnett, & Green, 2017). To promote comparability and reliability, the IIRC published an IR Framework as mentioned earlier. Due to the fact that preliminary study showed that the effectiveness of IR is based on the alignment with the IR principles, the hypotheses in this study focus on the presentation of the Content Elements and the Six Capitals, which are presented based on the Guiding Principles in the IR Framework. The limited studies that have been done on this subject, have found that they are positively associated. According to Churet et al (2014) there is no compelling evidence that IRs are connected with enterprises obtaining higher returns on invested capital. However, when the results are analyzed by sector, they discover a link between IRs and financial performance in the health-care and information-technology industries. Knauer & Serafeim (2014) find that firms engaged in integrated thinking and reporting, attract long-term investors. In line with this IR is a more effective manner of communicating a company's capabilities which could result in improved performance (Serafeim, 2015). In this study the firm's financial performance is measured by its Return on Equity ratio and the firm's financial health is measured by the Solvency ratio.

4.2.1 Multiple linear regression analysis hypotheses

IR Content Elements

According to the IR framework, an integrated report is required to consist of the eight key content elements (IIRC, 2013): Organizational overview and external environment, Governance, Business model, Risks and opportunities, Strategy and resource allocation, Performance, Outlook and Basis of preparation and presentation. Although these aspects are mentioned, it is not mandatory to arrange this according to the Framework (IIRC, 2013). However, an organization must provide the content in such a way that it is evident how the various elements interact (IIRC, 2013). Bek-Gaik (2015) mentions the following benefits from the structure presented by the IIRC: substantial

transparency, the ability to reveal how all types of capital are managed, an integrated approach to business, a reader's attention on previous events while referring to the future, and the conciseness and materiality of information given in an integrated report are all factors to consider. When assessing the content of IR, the literature points to well-structured and consistent data, transforming the most essential financial and non-financial facts into a coherent whole (Bek-Gaik, 2015). As Matemane & Wentzel (2019) state, high-quality integrated reports should lead to improved financial performance. In contrast with this, Akisik & Gal (2020) suggest that some decisions need to be made regarding the content of integrated reports. They find a significant relationship between these reports and financial performance which indicates the need to refine the set of standards concerning their contents. In light of these views, the following hypothesis is formulated:

H_{1a}: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' return on equity

H_{1b}: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' solvency ratio

IR Capitals

As mentioned in the IR framework, the integrated report requires the interrogation of different capitals, such as (IIRC, 2013): financial, manufactured, intellectual, human, social and relationship, and natural. An integrated report's main goal is to explain to financial capital providers how a company develops value over time and to do so is to use a mix of quantitative and qualitative data, which is where the six capitals come in (IIRC, 2013). Emphasizing these six capitals also enables more efficient capital allocation by using this in the business model and shows how activities transform them into outputs (IIRC, 2013). Supported by El Deeb (2019), when forming an opinion on the extent to which integrated reporting is organized, it was suggested that integrated reporting handlers must also rely on value judgments for the organization's capitals, according to the IIRC outline's Content Elements and Guiding Principles. According to Grassmann et al (2019) the level of reported capital connectedness is positively related to the non-financial and financial firms' performance, as well as the role of strategic owners and debt suppliers. In line with this, Mans-Kemp & Lug van der (2020) state that to obtain substantive legitimacy, companies must ensure that information about the interdependence of their capitals is effectively explained. Instead of focusing solely on financial capital, they should pressurize corporations to improve their

openness, decision-usefulness, and accountability in relation to the six capitals (De Villiers, Hsiao, & Maroun, 2017). In contrast, preliminary study showed that changing a company's business practices to become more socially responsible would diminish its financial performance and financial health (Griffin & Mahon, 1997). In light of these views, the following hypothesis is formulated:

H_{2a}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' return on equity

H_{2b}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' solvency ratio

5. Research Design

5.1 Introduction

In this chapter the focus is on the population size, sample size, data collection technique, data analysis, control variables, test of significance and research ethics used in this study.

5.2 Population size and sample size

According to Babbie (2013) the population for a study consists of a group about whom the researcher will draw conclusions to. The population of this study is publicly listed companies that are providing financial services and are considered integrated reporters by the Value Reporting Foundation and Black Sun Plc. from the period 2011 - 2015. The sectors of which this consists are the banks, investment companies and insurance companies. The listing of these firms is extracted from the database, which is a collaborative project between IIRC and Black Sun Plc. and provides an online resource for organizations that are developing, or planning to develop, an integrated report. The study population casu quo sample consists of 46 listed companies. As Bartlett et al (2001) states, although researchers might have different opinions on how the sample size should be determined, it is important that the steps used in this process are reported to allow readers and audiences to make their own judgments on accepting the researcher's assumptions and procedures. The sample size and the method by which it is selected will have implications for the confidence in the data and the extent to which it can be generalized (Saunders, Lewis, & Thornhill, 2003). Due to the fact that out of the 496 companies, all the 46 financial services companies are included in the sample it can be considered representative enough to generalize characteristics of the phenomenon being studied for the financial sector.

5.3 Data collection

Before zooming in on the data collection of this research, it is important to examine this aspect in more detail. According to Orodho (2003) data collection is the process of collecting evidence in order to gain new insights about a certain topic, which makes it possible to answer the main research question. In this study the data of the independent variables consists of a disclosure index to measure IR. The first independent variable is IR Content Elements, which will be measured with a score between zero and five. The extent to which the eight content elements are disclosed will be given a score of 0, if none of the elements are disclosed;1, if limited disclosed; 2, if partially

disclosed; 3, if adequately disclosed; 4, if well-defined disclosed and 5, if extensively disclosed. The scoring method of this variable is adapted from Zijl van et al (2017). In this research, the determination of the score will be based on the guideline questions included in the IR framework regarding content elements. The second independent variable is IR Capitals, which is measured as a binary variable: 0, if the capitals are not disclosed extensively and 1, if the capitals are disclosed extensively. For these independent variables the annual and integrated reports are examined. The data of the dependent variables, Return on Equity and Solvency Ratio, is manually collected from the firms' annual reports.

5.4 Data analysis

The focus of this study is on evaluating data from the study population. The data examination period is 2011 – 2015. The annual and integrated reports of publicly listed firms providing financial services are analyzed. In order to determine in which extent, the Content Elements and Capitals are disclosed it is important to examine the integrated reports of the sample firms, which means that content analysis is used to analyze these variables. To identify the trend of IR disclosure a trend analysis is also conducted using the statistical data program Statistical Package for the Social Sciences (SPSS). This is accomplished through a graphical presentation of the disclosure index scoring, which makes it possible to observe the movement and any changes. Albetairi et al (2018) and Dey (2020) also used this method of analysis to gain insights in the changes associated with IR. Furthermore, the multiple linear regression analysis is conducted to gain insights if adequately disclosing the content elements and the capitals, which are part of the guiding principles according to the framework, affect the fluctuations of the firms' performance and solvency ratios. The assumption is that due to the issuance of the IR framework the disclosure regarding the content elements and capitals will be more adequate and therefore will obtain an increase in firms' financial health and performance. For the regression analysis information of the annual and integrated reports is collected in a Microsoft Excel file and then transferred to the statistical data program SPSS.

Libby boxes

The predictive validity framework named the "Libby boxes" is created by Cornell Accounting Professor, Robert Libby, which offers the possibility to examine the distinction between underlying constructs of strategic objectives and their proxy measures to illustrate causal models

(Libby, Bloomfield, & Nelson, 2002). This framework allows one to measure and analyze how the execution of one objective, integrated reporting, affects the desired performance, firms' performance in this case. These two variables are respectively operationalized through proxy measures. In this study the independent variable is the impact of IR, which is an abstract idea and is not directly observable, also called a construct. This construct is operationalized for empirical testing in a self-developed index: the extent to which IR Content Elements and IR Capitals are disclosed. The dependent variable is firms' performance, which is also a construct. This construct is operationalized for empirical testing in two ratios: Return on Equity ratio, which measures firms' financial performance and Solvency ratio which measures the firms' financial health. By looking, on the one hand, at the extent to which an organization adopts IR and, on the other hand, the level of the ratios measuring financial performance and financial health, it is expected to derive the correlations between the two constructs better. The Libby box for this research is presented in Appendix B.

Research Model

The multiple linear regression analysis attempts to model the relationship between the extent of IR disclosure and firms' performance (Akisik & Gal, (2020); Albetairi, Kukreja, & Hamdan, (2018); Bijlmakers, (2018); Buallay, Al Hawaj, & Hamdan, (2020); Dey, (2020); El Deeb, (2019); Zhou, Simnett, & Green, (2017)). To conduct the study the following model is used:

FIRMPERF= $\beta 0+ \beta 1$ IRCE + $\beta 2$ IRC + $\beta 3$ SIZE + E, where:

FIRMPERF= Firm's performance based on the Return on Equity ratio and Solvency ratio;

IRCE= Disclosure index. Rating the integrated reports on a scale of 0-5, based on the eight Content Elements mentioned in the IR framework;

IRC= Disclosure index. Binary variable on a scale of 0-1, based on whether or not the firms disclosed the six Capitals mentioned in the IR framework;

Control variable

SIZE= Total assets of the firms;

E= Error term.

IR disclosure

Zijl van et al (2017) measured IR disclosure through content analysis by assigning a score to what extent the companies disclosed IR information as a whole. In this research instead of measuring

IR disclosure as a whole, this concept is separated in the extent to which the content elements and capitals are disclosed according to the IR framework. By using this approach, the extent of IR disclosure is measured by using content analysis where each disclosure item is equally important. This method is used by Hurghis (2015). To gain sense in the extent of which the IR contents is published, the data is extracted from integrated reports.

Firms' performance

Prior research from El Deeb (2019) indicates that the return on equity ratio is increased for firms that have a higher level of compliance to IR, which reflects a higher trust of the investors and creditors in the companies. In line with this, Svetlana et al (2020) shows that the adoption of IR affects the improvement in liquidity and the solvency ratio. Focusing on the fact that stakeholders and investors emphasize on the financial diagnostic before doing investments, these ratios are important for this study. For this research, as used by other researchers, the firms' performance is operationalized in return on equity ratio and solvency ratio. Data for these dependent variables is collected from the annual reports. With regard to the solvency ratio of banks, the capital adequacy ratio has been used.

5.5 Control variables

The proposed independent factors are unlikely to explain the entire variance in the dependent variable. Therefore, it is important to add control variables in the analysis to eliminate interfering factors and increase the model's explanatory power. In the context of South Africa, Lee & You (2016) suggest firm size as one of the main determinants of IR. In line with this, Busco et al (2019) identified the determinants of IT and IR in the different levels of integration and state that firm size is one of the determinants that is a driving force for higher quality integrated reports. Furthermore, Ghani et al (2018) found that firm size has a positive impact on IR practices although they do not suggest any significant relation between leverage, profitability or liquidity, and IR disclosure. Kansal et al (2014) showed that larger firms must disclose more, due to the fact that they receive more public attention, their greater impact on society, and therefore they need to exhibit greater social responsibility and constantly improve their corporate image. It is also shown that these entities experience more pressure from stakeholders to disclose their social activities (Buitendag, Fortuin, & Laan de, 2017). According to Bijlmakers (2018), the chance that large companies issue an integrated report is higher than small companies. It can be thus concluded that

the size of the firm will have an impact on the corporate social responsibility disclosure, which forms part of the integrated report. Firm size can be measured by total assets, net sales or market capitalization and is used in previous studies to determine the relationship between firm size and the disclosure level in corporate annual reports (Wallace & Naser, 1995). In this study this control variable is measured by total assets.

5.6 Test of significance

As mentioned before, this study uses SPSS to determine the relationship between IR and firm's performance of publicly listed financial services companies. The test of significance that is used in this research is the multiple linear regression analysis, in which tests with an expected adjusted Coefficient of Determination (adjusted R2) and the Analysis of Variance along with relevant P-values are performed. Statistical techniques are done at 95% Confidence Level (α=0.05), which means that all the p-values under 5% will be identified as statistically significant.

5.7 Research ethics

In this research the annual and integrated reports of the publicly listed financial services firms are analyzed. The information obtained out of these reports of these companies will not be used in a way that can bring harm or damage to these companies and will strictly be used for research purposes only. Since the information used for this research is publicly disclosed on the website of these companies, the names of these companies are displayed in this master thesis.

6. Research findings

6.1 Introduction

In this chapter the research findings are presented. These findings establish whether the operationalized variables for IR, which are the IR disclosure index IR Content Elements and IR Capitals, affect the extent of firms' performance and health of publicly listed financial services firms. In this chapter the focus is also on the development of IR over the time period 2011 – 2015. With the research design outlined in chapter 5, the results are established in this chapter.

6.2 Research findings

6.2.1 Regression analysis

To test whether disclosing IR Content Elements and Capitals influence the firms' Return on Equity and Solvency, a multiple linear regression analysis is conducted. In this research the software statistical package for social sciences, SPSS version 20, is used to code, enter and compute the measurements of the regressions. The data which is used as input is displayed in Appendix C. Based on the performed regression analysis in SPSS, the following tables are presented:

Table 1: presents the descriptive statistics in paragraph 6.2.2;

Table 2A&B: gives an overview of the coefficients of this research in paragraph 6.2.3;

Table 3: shows the Pearson correlations in paragraph 6.2.3;

Table 4: demonstrates the ANOVA results in paragraph 6.2.4;

Table 5: shows the Model summary in paragraph 6.2.5.

6.2.2 Descriptive statistics

In this subparagraph the descriptive statistics of the dependent and independent variables are explained.

Table 1 Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
IRCE	230	3	5	3.83	.701
IRC	230	0	1	.93	.262
TA	230	1000.97	970914.40	157730.3063	258960.9713
ROE	230	.20	52.60	14.1765	8.10617
SOLVENCY	230	2.00	80.39	18.6238	10.86328
Valid N (listwise)	230				

Source: Research findings SPSS

The results in table 6.1 indicate the differences in the means of all the variables that are analyzed to test whether IR influences a firm's financial performance and its solvency. The positive values reflect the significance of the variables under the model in determining the effect of IR on firms' performance and solvability. Whereas the columns minimum and maximum imply the lowest and highest values for each variable. ROE shows that the lowest Return on Equity ratio of a firm is 0.2 and the highest 52.6. Furthermore, a mean of 14.18 is calculated for all the firms which indicates that the average of the firms has a ROE of 14%. According to global statistics, a good ROE for firms within the financial sector should be between 12.8% and 13.21% (Ahern, 2020). SOLVENCY indicates that the lowest Solvency ratio of a firm is 2.0 and the highest 80.39. This variable has a mean of 19, which indicates that the average of the firms has a solvency ratio of 19%. For this variable, global statistics show that firms are considered financially healthy in general with a solvency ratio of less than 20% or 30% (Furhmann, 2021). IRCE shows an average mean of 4, which indicates that the majority of the firms are disclosing the IR Content Elements well defined according to the IR framework (0 = if none of the elements are disclosed; 1 = if limited disclosed; 2 = if partially disclosed; 3 = if adequately disclosed; 4 = if well-defined disclosed and 5 = if extensively disclosed). IRC shows an average mean of 1, which indicates that the majority of the firms are disclosing the IR Capitals extensively according to the IR Framework (0 = capitals are not disclosed extensively and 1 = capitals are disclosed extensively). TA reflects in this study the firms' size and has a minimum value of USD 1,000 million for the total assets the firms have over a period of five years and a maximum value of USD 970,914 million. This means that the lowest total asset of a firm is USD 1,000 and the highest is USD 970,914 million.

6.2.3 SPSS outputs coefficients and Pearson correlation

In this subparagraph the focus is on the coefficients of the multiple regression analysis and the Pearson correlation of the regression analysis. Based on these outputs, each of the hypotheses is tested and analyzed in the subparagraphs 6.2.3.1, 6.2.3.2, 6.2.3.3 and 6.2.3.4.

Table 2A[a] Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-24.450	1.564		-16.268	.000	-28.533	-22.367
	IRCE	9.570	.406	.827	23.586	.000	8.770	10.369
	IRC	3.208	1.084	.104	2.959	.003	1.072	5.344

a. Dependent Variable: ROE

Table 2B[a] Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	35.553	3.980		8.932	.000	27.710	43.396
	IRCE	-1.657	1.032	-.107	-1.605	.110	-3.691	.377
	IRC	-11.428	2.758	-.276	-4.143	.000	-16.863	-5.993

a. Dependent Variable: SOLVENCY

Table 3 Correlations

		IRCE	IRC	TA	ROE	SOLVENCY
IRCE	Pearson Correlation	1	.336**	.087	.862**	-.199**
	Sig. (2-tailed)		.000	.189	.000	.002
	N	230	230	230	230	230
IRC	Pearson Correlation	.336**	1	.116	.381**	-.312**
	Sig. (2-tailed)	.000		.079	.000	.000
	N	230	230	230	230	230
TA	Pearson Correlation	.087	.116	1	.006	-.046
	Sig. (2-tailed)	.189	.079		.932	.487
	N	230	230	230	230	230
ROE	Pearson Correlation	.862**	.381**	.006	1	-.166*
	Sig. (2-tailed)	.000	.000	.932		.011
	N	230	230	230	230	230
SOLVENCY	Pearson Correlation	-.199**	-.312**	-.046	-.166*	1
	Sig. (2-tailed)	.002	.000	.487	.011	
	N	230	230	230	230	230

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Research findings SPSS

6.2.3.1 Hypothesis 1_a & 1_b

The first hypothesis in this study consists of H_{1a} and $H_{1b,}$ this due to the fact that firm's performance is measured by both the return on equity ratio and solvency ratio and the impact of the disclosure index scoring is tested and examined respectively on these ratios.

H_{1a}: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' return on equity.

Based on the research model, this hypothesis consists of the following equation:

ROE = β0+ β1 IRCE + FIRMSIZE + E

ROE = -24.450 + 9.570 + FIRMSIZE + E

Coefficient IR Content Elements

In hypothesis 1_a, the relation between the disclosure index IR Content Elements and ROE is tested over a sample period of five years from 2011 – 2015. Table 2A indicates that at a 5% level of significance and 95% level of confidence, the disclosure index scoring has a 0.000 level of significance which means that it is statistically significant. It shows that firms disclosing integrated reports adequately aligned to the IR Content Elements have a statistically significant impact on firms' financial performance. Furthermore, the unstandardized Beta coefficient indicates that a unit increase of the index scoring will lead to an increase of 9.6% of the firms' return on equity ratio. This coefficient gives a measure of the variable contribution to the model. A large value reflects that a unit change in the independent variable has a large effect on the dependent variable. As the level of significance of IRCE is lower than the significance level of 5% and the coefficient is positively correlated, the hypothesis H_{1a} is accepted at a significance level of 5%. This means that the increase of disclosing IR Content Elements will have a positive impact on the firms' financial performance.

$H1_b$: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' solvency ratio

Based on the research model, this hypothesis consists of the following equation:

SOLVENCY = β0+ β1 IRCE + FIRMSIZE + E

SOLVENCY = 35.553 – 1.657 + FIRMSIZE + E

Coefficient IR Content Elements

In hypothesis 1_b, the relation between the disclosure index IR Content Elements and SOLVENCY is tested over a sample period of five years from 2011 – 2015. Table 2B indicates that at a 5% level of significance and 95% level of confidence, the disclosure index scoring has a 0.110 level of significance which means that it is not statistically significant. It shows that firms disclosing integrated reports adequately aligned to the IR Content Elements does not have a statistically significant impact on firms' solvency. Furthermore, the unstandardized Beta coefficient indicates that a unit increase of the index scoring will lead to a decrease of 1.7% of the firms' solvency. This coefficient gives a measure of the variable contribution to the model. A large value reflects that a unit change in the independent variable has a large effect on the dependent variable. As the level of significance of IRCE is higher than the significance level of 5%, the hypothesis H_{1b} is rejected at a significance level of 5%. This means that the increase of disclosing IR Content Elements will not have an impact on the firms' solvency.

Pearson correlation IR Content Elements

Based on the outcome in table 3 for the disclosure index of IR Content Elements it can be concluded that a higher score for this index is positively correlated with the firms' return on equity ratio. The results also show a significant value of 0.000 between the disclosure index of IR Content Elements and IR Capitals. As expected, this indicates that the disclosure index scoring of IR content elements is positively correlated with that of the IR capitals which means that disclosing more of the content elements will also lead to an increase in disclosing the capitals. Furthermore, there is a negative correlation between the IR Content Elements disclosure index and the firm's solvency which means that disclosing more of the content elements may lead to a decrease in the firms' solvency. To conclude the results, this disclosure index is not significantly correlated with firms' size.

6.2.3.2 Hypothesis 2_a & 2_b

The second hypothesis in this study also consists of H_{2a} and $H_{2b,}$ due to the fact that firm's performance is measured by both the return on equity ratio and solvency ratio and the impact of the disclosure index scoring IRC is tested and examined respectively on these two ratios.

H_{2a}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' return on equity

Based on the research model, this hypothesis consists of the following equation:

ROE = β0+ β2 IRC + FIRMSIZE + E

ROE = -24.450 + 3.208 + FIRMSIZE + E

Coefficient IR Capitals

In hypothesis 2_a, the relation between the disclosure index IR Capitals and ROE is tested over a sample period of five years from 2011 – 2015. Table 2A indicates that at a 5% level of significance and 95% level of confidence, the disclosure index scoring has a 0.003 level of significance which means that it is statistically significant. It shows that firms disclosing the IR Capitals extensively have a statistically significant impact on firm's financial performance, due to the fact that the level of significance of IRC is lower than the significance level of 5%. Furthermore, the unstandardized Beta coefficient indicates that a unit increase of the index scoring will lead to an increase of 3.2% of the firms' return on equity ratio. This coefficient gives a measure of the variable contribution to the model. A large value reflects that a unit change in the independent variable has a large effect on the dependent variable. As the level of significance of IRC is lower than the significance level of 5% and the correlation is positive, the hypothesis $H2_a$ is accepted at a significance level of 5%. This means that the increase of disclosing IR Capitals extensively will have a positive impact on the firms' financial performance.

H_{2b}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' solvency ratio

Based on the research model, this hypothesis consists of the following equation:

SOLVENCY = β0+ β1 IRCE + FIRMSIZE + E

SOLVENCY = 35.553 – 11.428 + FIRMSIZE + E

Coefficient IR Capitals

In hypothesis 2_b, the relation between the disclosure index IR Capitals and SOLVENCY is tested over a sample period of five years from 2011 – 2015. Table 2B indicates that at a 5% level of significance and 95% level of confidence, the disclosure index scoring has a 0.000 level of significance which means that it is statistically significant. It shows that firms disclosing integrated reports adequately aligned to the IR Capitals does have a statistically significant impact on firms' solvency. However, when zooming in on the correlation, the unstandardized Beta coefficient

indicates that a unit increase of the index scoring will lead to a decrease of 11.4% of the firms' solvency ratio. This coefficient gives a measure of the variable contribution to the model. A large value reflects that a unit change in the independent variable has a large effect on the dependent variable. Even though the level of significance of IRC is higher than the significance level of 5%, the correlation is negative which leads to rejecting the hypothesis H_{1b}. This means that the increase of disclosing IR Capitals extensively will have a negative impact on the firms' solvency.

Pearson correlation IR Capitals

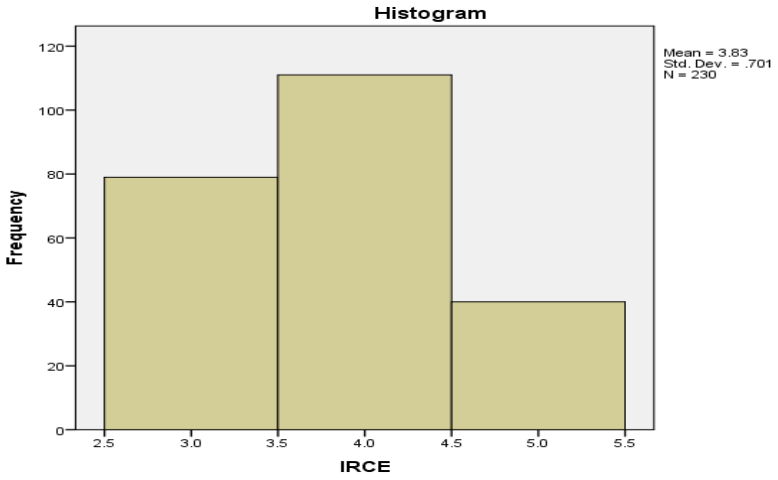
Based on the outcome in table 3 for the disclosure index of IR Capitals it can be concluded that a higher score for this index is also positively correlated with the firms' return on equity ratio. The results also show a significant value of 0.000 between the disclosure index of IR Capitals and IR Content Elements. As expected, this indicates that the disclosure index scoring of these two variables is positively correlated which means that disclosing more of the capitals will also lead to an increase in disclosing the content elements. Furthermore, there is a negative correlation between the IR Capitals disclosure index and the firm's solvency which means that disclosing more of the capitals may lead to a decrease in the firms' solvency. At last, it can be stated that this disclosure index is also not significantly correlated with firms' size at a significance level of 0.01 and 0.05.

Pearson correlation control variable

Zooming in on the relationship between the control variable TA, indicating Firms' Size, and the firms' ROE ratio, the results in table 3 shows a positive correlation. It can be concluded that when the firms' totals asset is increasing, the financial performance of these firms also increases. On the other hand, the relationship between TA and the firms' solvency ratio indicates a negative correlation which indicates that when the firm's total asset is increasing, the solvency ratio is decreasing and vice versa.

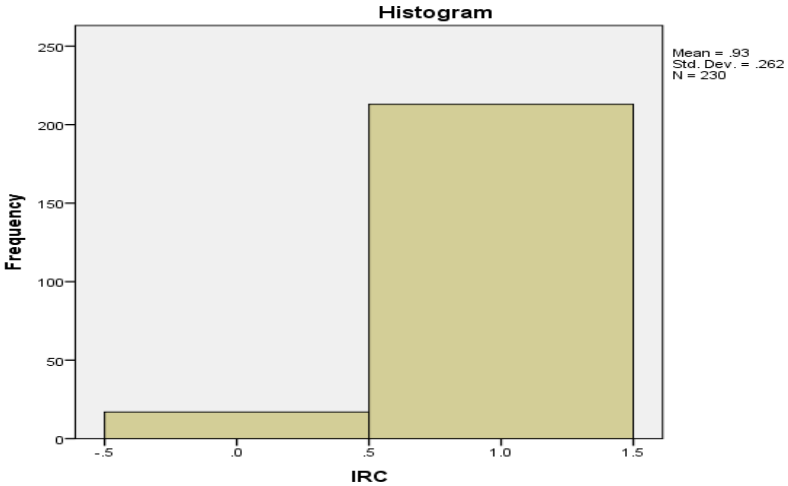
Outcome IR disclosure indexes

As mentioned before, the concept of IR in this study is measured based on the disclosure index scoring of IRCE and IRC. These index scoring gives an indication of the extent to which IR has been used by the firms in this study. The following graphical presentations gives an overview of the movement of these scoring during the period 2011 – 2015:



Graph 1. Histogram disclosure index scoring IRCE (Source: Research findings SPSS)

Graph 1 gives an overview of the level of the scoring index IRCE based on the published annual and integrated reports the firms published. This outcome shows that from the period 2011 – 2015 the publicly listed financial services firms mainly disclosed the IR content elements well defined taking into account the principles included in the IR framework. The results specifically shows that 79 firms adequately disclosed the IR content elements, 111 firms disclosed the IR content elements well defined and 40 firms disclosed extensively where no gaps were identified between the foundations used and the IR content elements principles from the framework.



Graph 2. Histogram disclosure index scoring IRC (Source: Research findings SPSS)

Graph 2 gives an overview of the level of the scoring index IRC based on the published annual and integrated reports the firms published. This outcome shows that from the period 2011 – 2015 the publicly listed financial services firms mainly disclosed the IR capitals extensively taking into account the principles included in the IR framework. The results specifically shows that 17 firms

did not extensively disclose the IR capitals, whereas 213 firms extensively disclosed the IR capitals where no gaps were identified between the foundations used and the IR capital principles from the framework.

Based on the outcome of the disclosure index scoring of both IRCE and IRC, it can be concluded that the majority of the firms disclosed the IR content elements and capitals according to the IR framework for the period 2011 – 2015. Although IR is a form of voluntary corporate reporting, these firms anticipated on this concept due to the increasing demand of a rapidly evolving marketplace and the considerable prominence it gained since the formation in 2010 of the IIRC, which complements the research findings of Smith (2014) and Cheng, Green, Conradie, Konishi & Romi (2014). Furthermore, as graph 1 shows, it is shown that the majority of the firm did not extensively disclose the IR content elements for this period, due to the fact that it is a voluntary form of corporate reporting and the official first IR framework was published in 2013 which means that before this year there was not much of a framework that could be used as a guidance.

6.2.4 ANOVA Analysis

This paragraph focuses on the ANOVA analysis as computed in table 4A & 4B. As mentioned earlier in this study the impact of IR on firm's performance is measured by both the return on equity ratio and solvency ratio. As a result of this, when emphasizing on the ANOVA analysis it is important to take this condition into account.

ANOVA analysis ROE

Table 4A[a] ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11320.836	2	5660.418	344.783	.000[b]
	Residual	3726.738	227	16.417		
	Total	15047.573	229			

a. Dependent Variable: ROE
b. Predictors: (Constant), IRC, IRCE

Source: Research findings SPSS

As the ANOVA results in table 4A shows, the processed data of the financial services companies has a significance level of 0.000 which indicates that the data is ideal for making an assumption of these firms where the predictors are IRC and IRCE and the dependent variable is ROE as the

significance level is less than 5%. This proves that the overall model is significant and that the disclosure index scoring IRCE and IRC affect the extent to which the financial performance ratio moves.

ANOVA analysis SOLVENCY

Table 4B[a] ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2899.158	2	1449.579	13.639	.000[b]
	Residual	24125.319	227	106.279		
	Total	27024.476	229			

a. Dependent Variable: SOLVENCY
b. Predictors: (Constant), IRC, IRCE

Source: Research findings SPSS

As the ANOVA results in table 4B shows, the processed data of the financial services companies has a significance level of 0.000 which indicates that the data is ideal for making an assumption of these firms where the predictors are IRC and IRCE and the dependent variable is SOLVENCY as the significance level is less than 5%. This proves that the overall model is significant and that the disclosure index scoring IRCE and IRC affect the extent to which the solvency ratio moves.

6.2.5 Model summary

In this paragraph the emphasis is on the model summary of the regression analysis. For interpreting this analysis, it is also important to take into account that the impact of IR on firms' performance is measured by both the return on equity ratio and solvency ratio. In these results the R squared and Durbin Watson values are explained from respectively table 5A and 5B.

Model summary ROE

Tabel 5A Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.867[a]	.752	.750	4.05183	1.231

a. Predictors: (Constant), IRC, IRCE
b. Dependent Variable: ROE

Source: Research findings SPSS

From the findings from table 5A the value of the R square is 0.752, which indicates that 75.2% of the variance in the firms' financial performance of the publicly listed financial services companies can be explained by the independent variables: the disclosure index scoring IRCE and IRC. The table further shows a Durbin-Watson value of 1.231. Due to the fact that this value is between 0 and 2, this indicates that there is a positive autocorrelation between the residuals and the disclosure scoring indexes and the financial performance of the firms examined in this study. In other words, the Durbin Watson value shows a positive autocorrelation between the difference of the observed value, the mean value and the independent variables.

Model summary SOLVENCY

Tabel 5B Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.328[a]	.107	.099	10.30917	.549

a. Predictors: (Constant), IRC, IRCE
b. Dependent Variable: SOLVENCY

Source: Research findings SPSS

From the findings from table 5B the value of the R square is 0.107, which indicates that 10.7% of the variance in the firms' solvency of the publicly listed financial services companies can be explained by the independent variables: the disclosure index scoring IRCE and IRC. The table further shows a Durbin-Watson value of 0.549. Due to the fact that this value is between 0 and 2, this indicates that there is also a positive autocorrelation between the residuals and the disclosure scoring indexes and the solvency of the firms examined in this study. In other words, the Durbin Watson value also shows a positive autocorrelation between the difference of the observed value, the mean value and the independent variables.

Based on the outcome of the model summary in table 5A and 5B, it can be concluded that the predictors IRC and IRCE have a greater R square value for the model summary of ROE (75.2%) than that of SOLVENCY (10.7%). This indicates that the extent to which the predictors explain the variance of the dependent variables is better for the model summary of ROE, since this value is greater than in the model summary of SOLVENCY.

6.3 Legitimacy theory, Stakeholders theory and Agency theory

As mentioned in paragraph 2 the character of IR in this research explains the responsibility these publicly listed financial services firms have towards their stakeholders, which can be derived from the legitimacy theory. Furthermore, El Deeb (2019) states that not only the internal organizational efforts but also the relationship with its stakeholders is important when it comes to value creation. In this context, IR is responsible for monitoring the nature and quality of a firm's relations with its important stakeholders, by explaining the way and to what degree the firm comprehends and taking into consideration the needs of stakeholder (IIRC, 2013). When it comes to disclosing firms' corporate information, there is a relationship between management and stakeholders which flows from the agency theory. This theory, introduced by Stephen Ross and Barry Mitnick (Mitnick, 2013), regards solving problems as a result of agency relationships. Due to the fact that IR reflects the conflict between the interest of the agent, in this case a firm's management and the principal, which are in this case the stakeholders, this theory also contributes to the concept of IR.

As the results show, for the period 2011 – 2015, the majority of these firms disclosed the IR content elements and capitals respectively well-defined and extensively based on the disclosure index scoring and according to the IR framework. This outcome reflects and complements the results of Albetairi et al (2018) which emphasized that companies tend to disclose more information when their legitimacy is threatened resulting in gaining a better reputation and communicating differently to their stakeholders (Palazzo & Scherer, 2006). In line with this, the results of this study also complement that of Smith (2014), who showed that stakeholder theory and the increases in stakeholder engagement are driving a new type of financial reporting in the form of an integrated reporting template. It is therefore shown that these firms anticipated on IR due to the considerable prominence it gained since the formation in 2010 of the IIRC and the publication of the first IR framework.

7. Conclusions, recommendations, limitations and suggestions for future research

7.1 Introduction

In this chapter the conclusions, recommendations, limitations and suggestions for future research are presented. These are based on the objectives of this research. The main objective of this study is to find out the impact of IR on firms' performance of publicly listed financial services companies during the period 2011 – 2015. In this study firms' performance is measured by its ROE and Solvency ratio, which indicates the firms' financial performance and its financial health. Furthermore, the objective of this research consists of investigating the characteristics of IR reporting, the current IR reporting standards and the determinants of firms' performance. To measure to what extent IR is implemented, a disclosure index scoring for the IR content elements and capitals is used which is built up based on the IIRC Framework.

7.2 Conclusions

As mentioned in the introduction, the main research question of this thesis is:

"What is the impact of Integrated Reporting (IR) on firms' performance of publicly listed financial services companies?"

To answer the research question and based on prior research, four hypotheses were developed. These hypotheses were tested using the multiple regression model, which was conducted using the software statistical package for social sciences, SPSS. All the sub questions are answered in the second to fifth chapter of this thesis.

Multiple linear regression analysis

In this study the following hypotheses have been formulated and tested:

H_{1a}: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' return on equity

H_{1b}: Firms disclosing integrated reports aligned to the Content Elements of IR positively affects firms' solvency ratio

H_{2a}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' return on equity

H_{2b}: Firms disclosing integrated reports with focus on the Capitals of IR positively affects firms' solvency ratio

Based on these hypotheses the following conclusion have been reached:

This first hypothesis consists of H_{1a} and H_{1b}, due to the fact that the relationship between the disclosure of IR content elements and firms' performance has been tested on respectively the firms' financial performance and the firms' financial health. As the results show the relation between the disclosure index IRCE and ROE is statistically significant and there is a positive impact of this disclosure index on the firms' financial performance c.q. its profitability. On the other hand, the relation between the disclosure index IRCE and SOLVENCY is not statistically significant. Meaning that there is no relation between the extent in which IR content elements are disclosed and the firms' solvency c.q. its financial health.

The second hypothesis also consists of H_{2a} and $H_{2b,}$ due to the fact that the relationship between the disclosure of IR capitals and firms' performance has been tested on respectively the firms' financial performance and the firms' financial health. As the results here show, the relation between the disclosure index IRC and ROE is statistically significant. It shows that firms disclosing the IR Capitals extensively have a statistically significant impact on firm's financial performance c.q. its profitability and the relation is positive. Meaning that the increase of disclosing the IR capitals will lead to an increase of the firms' financial performance. Whereas, the relation between the disclosure index IRC and SOLVENCY is also statistically significant but there is a negative impact. Meaning that there when disclosing more of the IR capitals, will lead to a decrease in the firms' solvency c.q. its financial health.

As the outcome of this study shows, it is noticeable that both disclosure indexes IRCE and IRC have a positive impact on the firms' financial performance. As these indexes reflect the extent in which IR is implemented and contribute to answering the research question, it can be stated that IR has a significant and positive impact on the firms' financial performance. This outcome complements prior research of Akisik & Gal (2020), where the relationship of integrated reports and external assurance on financial performance for North American firms for the period 2011-2016 is examined. The outcome of this study also showed a significant and positive association between integrated reports and financial performance. Furthermore, the results also complement prior research of El Deeb (2019) who found a positive significant correlation between the IR level of compliance and the firms' profitability.

On the other hand, it shows that the disclosure index IRCE and IRC respectively have no statistically significant impact and a negative significant impact on the firms' financial health. As the relation between these indexes and the firms' financial health also contribute to answering the research question, it can be stated that there is no relation respectively a negative impact on the firms' financial health. This outcome contradicts the research of Svetlana et al (2020), who shows that the adoption of IR can undoubtedly lead to an improvement in liquidity and affects firms' financial health.

7.3 Recommendations

Based on the results obtained from this research the following recommendations are made:

1. Based on the results, which indicate that IR disclosure affects the firms' financial performance, it is recommended for firms within any other branch to consider implementing IR. Currently, companies all over the world are finding themselves in difficult times due to the COVID – 19 pandemic and now it is more than ever important to implement IR, which will help organizations determine how to express their value creation in a transparent way. As shown, an effective integrated report should consist of detailed explanation of how the organization manages financial and non – financial risks which will help to generate sustainable returns rather than just a composition of an annual and sustainability report. This may help organizations to obtain more investment by attracting investors. This could improve their firms' public image and add value to its value creation process, while contributing in societal development and sustainability.
2. Due to the fact that financial services companies have an important role in the financial stability of the global economy and therefore are crucial for economic development, it is important that these companies set the tone for responsible investment and corporate reporting throughout the years, especially targeting activities to improve profitability. Due to the fact that study showed that IR is a form of corporate reporting which firms can implement voluntarily, this can lead to distortions in disclosing IR activities. It is therefore recommended that IR is made mandatory and is included in legislation and regulations as the reporting standard of sustainability annual reporting to enhance comparability and ensure transparency.

7.4 Limitations

The limitation of this study is that for the examination period of 2011 – 2015 it was a challenge to find an integrated report for some of the firms. This was especially before the year 2013. The reason for this can possibly be due to the fact that the first publication of the IIRC Framework was in the year 2013 and the implementation of IR is just a voluntary form of corporate reporting. However, for the firms' who did not specifically disclose an integrated report, the annual reports were used to measure the disclosure indexes in this study due to the fact that some firms mentioned the IR elements in their annual reports.

7.5 Suggestions for future research

For future research it is suggested that future research flowing from this study could include a study on all IR reporters in the collaborative database of the Value Reporting Foundation and Black Sun Plc. covering all the industries within this database. Including more industries might provide a clearer picture of the reporting style of different industries. Future studies could also focus on the extent of the variables used in this study to introduce a more holistic view of firms and their reporting styles. As shown, integrated reporting becomes more prominent in society, further research could also include the impact IR has when it has been audited by an independent audit firm. Furthermore, since Suriname also consists of publicly listed firms, future research can conduct a study to which extent these firms, especially in the financial services branch, can implement IR due to the important role they have in the national economy of Suriname and their social responsibility towards their stakeholders. Since the field of study of IR is still a relatively new area, there is therefore ample scope for future research.

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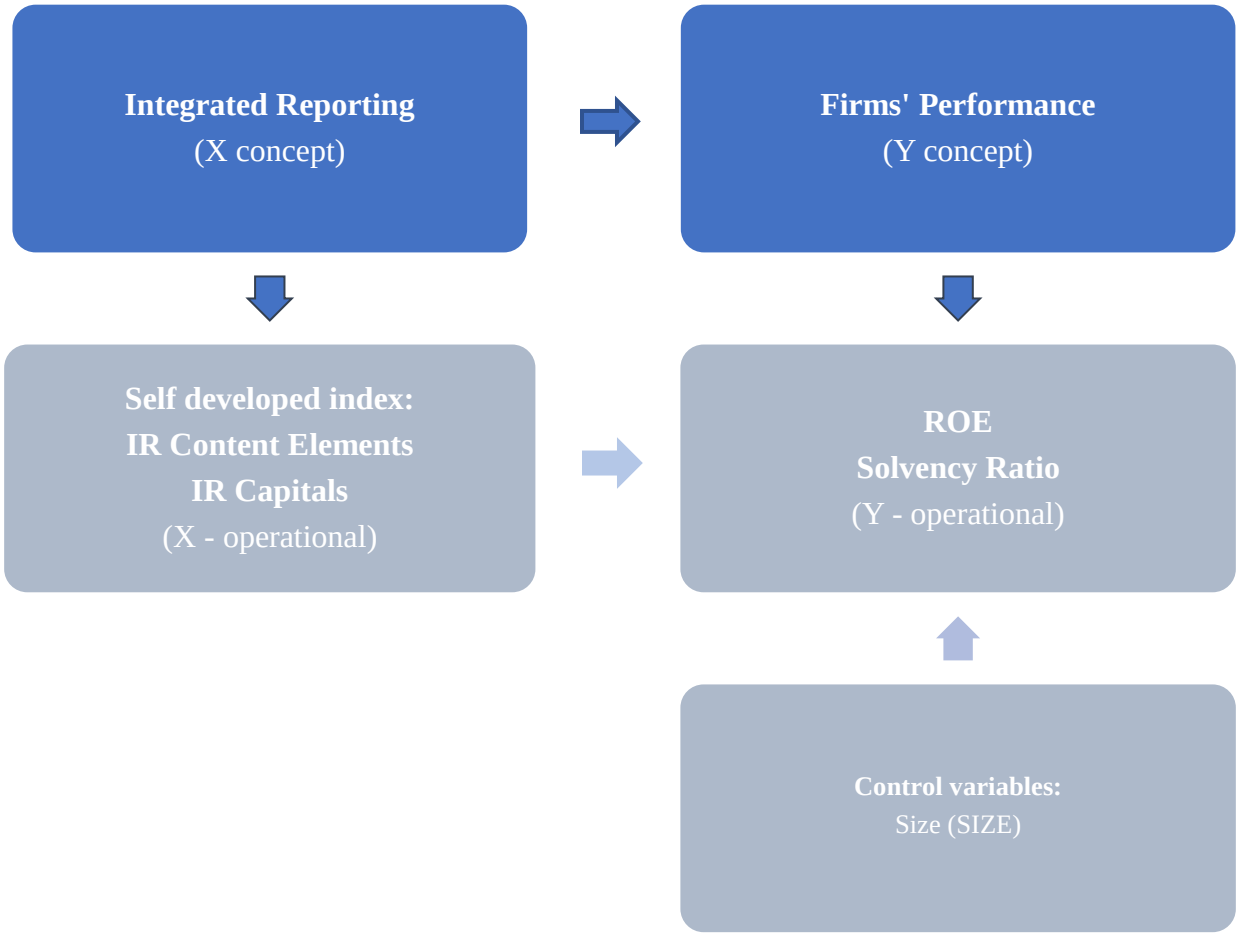
Appendix A An Overview firms by sector group and stock markets

#	Firm name	Sector	Stock Market
1	ABN AMRO	Banking	EURONEXT
2	ABSA Bank	Banking	JSE
3	Achmea	Insurance	EURONEXT
4	AXA	Insurance	EURONEXT, NYSE
5	Aegon N.V.	Insurance	EURONEXT, NYSE
6	Bank of Ceylon	Banking	COLOMBO SE
7	Banca Fideuram	Banking	NYSE
8	Bankmecu	Banking	NONE
9	Brazilian Development Bank	Banking	NONE
10	Banco Bradesco	Banking	NYSE
11	British Land	Investment	LSE
12	Capricorn Group	Investment	JSE
13	CCR S.A.	Investment	B3SE
14	DBS Bank	Banking	SGX
15	Development Bank of Southern Africa;	Banking	LSE
16	Direct Line Group	Insurance	LSE
17	Eurazeo	Investment	EURONEXT
18	FMO Development Bank	Investment	NYSE
19	FNB Corporation	Banking	NYSE
20	Garanti BBVA	Banking	ISE
21	Generali Group	Insurance	ISE
22	Hammerson plc	Investment	LSE
23	HSBC Holdings plc	Banking	LSE
24	IDLC Finance Limited	Investment	DHAKA SE
25	ING Groep N.V.	Banking	EURONEXT, NYSE
26	Itau Unibanco Holding S.A.	Banking	NYSE
27	LB Finance	Investment	COLOMBO SE
28	Liberty Holdings	Investment	JSE
29	Lloyds Banking Group	Banking	LSE
30	MS&AD Insurance Group	Insurance	TYO
31	National Australia Bank	Banking	ASE
32	Nedbank	Banking	JSE
33	Old Mutual Limited	Investment	JSE, LSE, ZSE
34	Peoples Leasing & Finance plc	Investment	COLOMBO SE
35	Redefine International	Investment	JSE
36	RSA Insurance	Insurance	LSE
37	Sanlam ltd	Insurance	JSE
38	Standard Bank	Banking	JSE, LSE
39	Stockland Corporation ltd	Investment	ASE
40	Strate	Investment	NONE
41	Triodos	Banking	EURONEXT
42	TSKB bank	Investment	ISE
43	UBS bank	Banking	NYSE
44	Unicredit	Banking	ISE

#	Firm name	Sector	Stock Market
45	Unipol	Investment	ISE
46	Vancity	Banking	NONE

Appendix B Libby box



Appendix C An overview of the data input

			Y		X		Control variable
#	Company	Year	ROE (%)	SOLVENCY (%)	IRCE	IRC	TA (usd mln)
1	ABN AMRO	2011	7.8	16.8	3	1	457,007.38
		2012	8.5	18.4	3	1	444,670.91
		2013	5.5	20.2	3	1	420,124.44
		2014	10.9	19.7	4	1	436,888.90
		2015	12.0	21.7	4	1	440,784.99
2	ABSA BANK	2011	16.4	13	4	1	13,994.71
		2012	14.4	13	4	1	14,407.00
		2013	15.5	11.9	4	1	15,441.24
		2014	16.7	11.9	4	1	15,899.11
		2015	17.0	11.9	4	1	18,355.79
3	ACHMEA	2011	2.4	20.8	3	0	104,166.18
		2012	3.9	21.2	3	0	106,991.70
		2013	5.3	20.2	3	1	106,480.54
		2014	0.2	21.5	3	0	105,172.72
		2015	4.0	21	3	0	104,847.74
4	AXA	2011	9.5	18.8	3	1	820,578.52
		2012	8.7	23.3	3	1	859,686.68
		2013	8.9	22.1	3	1	854,361.75
		2014	9.0	26.6	3	1	947,935.62
		2015	8.8	24.6	3	1	1,000.97
5	AEGON NV	2011	30.0	19.5	5	1	387,216.82
		2012	30.0	22.8	5	1	409,726.19
		2013	30.0	21.2	5	1	396,934.62
		2014	30.0	44	5	1	479,460.31
		2015	21.0	46	5	1	471,095.46
6	BANK OF CEYLON	2011	33.4	12.2	5	1	4,270.46
		2012	31.2	12.4	5	1	5,330.98
		2013	22.2	12.9	5	1	6,054.10
		2014	20.5	14	5	1	6,743.80
		2015	22.2	13.3	5	1	7,952.85
7	BANCA FIDEURAM	2011	27.0	17.8	5	1	10,970.33
		2012	27.9	19.8	5	1	13,323.04
		2013	29.3	19.4	5	1	13,532.93
		2014	34.0	8.7	5	1	29,294.45
		2015	42.0	16.7	5	1	32,541.99
8	BANKMECU	2011	10.1	18.5	4	1	2,624.81
		2012	9.1	18.5	3	1	2,836.79
		2013	7.8	19.83	3	1	3,044.46
		2014	7.1	20.53	3	1	3,230.08
		2015	6.1	19.74	3	1	3,577.42
9	BRAZILIAN DEVELOPMENT BANK	2011	23.1	9.8	5	1	624,800.00
		2012	18.8	10.59	4	1	715,500.00
		2013	16.9	10.41	4	1	782,000.00
		2014	13.1	15.4	4	1	877,200.00
		2015	15.4	20.6	4	1	930,600.00
10	BANCO BRADESCO	2011	18.0	15.5	4	1	1,922.67
		2012	19.2	18.8	4	1	2,133.32
		2013	18.0	15.3	4	1	2,871.96
		2014	20.1	16.4	5	1	3,821.44
		2015	20.5	18.6	5	1	4,993.53
11	BRITISH LAND	2011	6.0	35	3	1	7,260.00
		2012	6.0	40	3	1	8,158.00
		2013	7.5	40	3	1	8,269.00
		2014	8.0	44	3	1	10,779.00
		2015	8.8	45	3	1	13,001.00
12	CAPRICORN GROUP	2011	20.0	13.2	4	1	15,984.82
		2012	23.3	13.4	5	1	18,921.05
		2013	23.7	16.6	5	1	20,938.61
		2014	21.9	15.8	5	1	24,318.27
		2015	22.4	15.8	5	1	28,608.84
13	CCR S.A.	2011	28.0	21	5	1	12,513.86
		2012	35.0	23.2	5	1	14,305.83
		2013	38.8	24	5	1	14,033.01
		2014	36.7	26	5	1	17,223.18
		2015	22.4	28.5	5	1	21,683.49

			Y		X		Control variable
#	Company	Year	ROE (%)	SOLVENCY (%)	IRCE	IRC	TA (usd mln)
14	DBS BANK	2011	11.0	15.8	4	1	340,847.00
		2012	11.2	17.1	4	1	353,033.00
		2013	10.8	16.3	4	1	402,008.00
		2014	10.9	15.3	4	1	440,666.00
		2015	11.2	15.4	4	1	457,834.00
15	DEVELOPMENT BANK OF SOUTHERN AFRICA	2011	0.2	37.2	3	0	2,986.26
		2012	2.1	33.4	3	0	3,297.51
		2013	4.8	31.2	3	0	3,400.08
		2014	4.3	31.2	3	0	4,021.37
		2015	5.7	33.4	3	1	4,469.85
16	DIRECT LINE GROUP	2011	10.0	14.7	4	1	18,314.23
		2012	11.5	15.8	4	1	16,888.21
		2013	16.0	15.8	4	1	15,677.77
		2014	16.8	15.1	4	1	13,242.28
		2015	18.5	16.9	4	1	14,930.05
17	EURAZEO	2011	7.3	24	3	1	16,409.79
		2012	9.2	25.3	3	1	13,850.57
		2013	10.0	26	4	1	15,239.97
		2014	11.0	28	4	1	13,890.92
		2015	11.2	30.5	4	1	8,322.03
18	FMO DEVELOPMENT BANK	2011	8.5	14.3	3	1	5,708.59
		2012	10.0	14.1	4	1	6,278.43
		2013	11.2	17.3	4	1	6,978.04
		2014	13.0	18	4	1	7,998.11
		2015	15.0	20.3	4	1	9,502.27
19	FNB CORPORATION	2011	11.0	10.6	4	1	17,164.00
		2012	11.2	10.7	4	1	19,698.00
		2013	10.8	12.46	4	1	22,499.00
		2014	10.9	12.36	4	1	26,256.00
		2015	11.2	12.77	4	1	29,784.00
20	GARANTI BBVA	2011	20.0	13.5	4	1	11,878.04
		2012	21.4	14	5	1	12,975.59
		2013	15.0	14	4	1	15,948.59
		2014	14.8	17	4	1	17,550.10
		2015	14.5	15.8	4	1	20,601.75
21	GENERALI GROUP	2011	10.8	11.7	4	1	477,378.41
		2012	11.9	15	4	1	498,766.14
		2013	11.7	14.5	4	1	507,392.77
		2014	13.2	15.6	4	1	565,688.28
		2015	14.0	16.4	4	1	564,820.54
22	HAMMERSON PLC	2011	11.2	8.2	4	1	8,320.35
		2012	5.3	8.3	3	1	9,138.03
		2013	8.8	10.5	3	1	9,975.00
		2014	16.3	3.5	4	1	10,165.06
		2015	14.3	12.6	4	1	11,915.87
23	HSBC HOLDINGS PLC	2011	10.9	14.1	4	1	2,555.58
		2012	8.4	16.1	3	1	2,692.54
		2013	9.2	17.8	3	1	2,671.32
		2014	7.3	15.6	3	1	2,634.14
		2015	7.2	17.2	3	1	2,409.66
24	IDLC FINANCE LIMITED	2011	13.0	13.61	4	1	344,387.90
		2012	16.4	13.88	4	1	417,064.14
		2013	13.3	15.43	4	1	566,242.73
		2014	21.0	14.5	5	1	666,864.52
		2015	20.4	14.8	5	1	837,305.95
25	ING GROEP NV	2011	9.3	9.6	3	1	1,443.44
		2012	7.0	11.9	3	1	1,315.93
		2013	9.0	11.7	3	1	1,219.38
		2014	9.9	12.38	3	1	1,120.34
		2015	10.8	14.75	4	1	949,853.91
26	ITAU UNIBANCO HOLDING S.A.	2011	20.5	16	5	1	142,414.89
		2012	16.6	18.1	4	1	166,614.08
		2013	20.9	16.6	5	1	178,824.04
		2014	24.3	16.9	5	1	196,214.92
		2015	24.8	17.8	5	1	222,188.61

			Y		X		Control variable
#	Company	Year	ROE (%)	SOLVENCY (%)	IRCE	IRC	TA (usd mln)
27	LB FINANCE	2011	52.6	13	5	1	7,445.77
		2012	36.6	12.58	5	1	9,438.55
		2013	23.2	16.64	5	1	10,586.04
		2014	30.9	17.07	5	1	11,757.29
		2015	40.4	17.33	5	1	14,712.01
28	LIBERTY HOLDINGS	2011	6.0	2	3	1	36,409.20
		2012	7.3	2.71	3	1	38,307.70
		2013	8.0	2.56	3	1	67,714.30
		2014	8.0	3.1	3	1	72,841.90
		2015	9.6	3	3	1	67,867.20
29	LLOYDS BANKING GROUP	2011	6.7	15.6	3	1	1,290.91
		2012	3.3	17.3	3	0	1,240.98
		2013	9.7	20.8	3	1	1,120.37
		2014	13.6	22	4	1	1,137.01
		2015	15.0	21.5	4	1	1,072.90
30	MS&AD INSURANCE GROUP	2011	1.9	55.38	3	0	127,446.32
		2012	4.8	73.88	3	0	139,522.38
		2013	4.4	77.25	3	0	147,969.16
		2014	5.2	80.39	3	1	164,713.06
		2015	6.4	74.33	3	1	178,000.21
31	NATIONAL AUSTRALIA BANK	2011	14.2	11.26	4	1	753,757.00
		2012	10.3	11.58	4	1	763,090.00
		2013	13.0	11.8	4	1	808,427.00
		2014	12.1	12.16	4	1	883,301.00
		2015	13.1	14.15	4	1	955,052.00
32	NEDBANK	2011	15.4	14.7	4	1	106,800.37
		2012	16.4	14.1	4	1	112,337.62
		2013	17.2	14.5	4	1	121,703.58
		2014	17.2	15.3	4	1	131,153.80
		2015	17.0	15.8	4	1	149,829.85
33	OLD MUTUAL LIMITED	2011	16.0	3.9	4	1	78,417.17
		2012	11.8	4	4	1	87,098.16
		2013	14.0	3.2	4	1	94,206.93
		2014	17.8	3.1	4	1	115,825.16
		2015	18.0	3.2	4	1	122,877.87
34	PEOPLES LEASING & FINANCE PLC	2011	16.2	20	4	1	13,861.04
		2012	16.4	25.5	4	1	13,692.19
		2013	16.8	21.15	4	1	14,602.24
		2014	18.6	19.12	4	1	19,805.26
		2015	19.8	20.22	4	1	19,552.16
35	REDEFINE INTERNATIONAL	2011	16.0	21.3	4	1	7,722.55
		2012	16.5	24	4	1	8,138.97
		2013	17.0	25.5	4	1	8,508.94
		2014	18.0	26	4	1	5,013.28
		2015	19.6	28.3	4	1	6,928.08
36	RSA INSURANCE	2011	16.7	20.1	4	1	30,055.34
		2012	16.7	20	4	1	30,304.05
		2013	6.9	23	3	1	29,166.90
		2014	9.7	30.1	3	1	29,283.94
		2015	9.7	35	3	1	27,412.63

			Y		X		Control variable
#	Company	Year	ROE (%)	SOLVENCY (%)	IRCE	IRC	TA (usd mln)
37	SANLAM LTD	2011	15.7	15	4	1	59,501.95
		2012	22.0	16	5	1	60,741.52
		2013	17.0	17.7	4	1	97,707.53
		2014	12.8	19	4	1	106,402.27
		2015	18.4	19.8	4	1	112,713.27
38	STANDARD BANK	2011	14.3	12	4	1	260,661.22
		2012	14.2	11.7	4	1	272,388.65
		2013	14.1	13.2	4	1	294,929.63
		2014	12.9	12.9	4	1	331,904.87
		2015	15.3	13.3	4	1	344,852.20
39	STOCKLAND CORPORATION LTD	2011	9.3	15	3	1	12,055.00
		2012	8.2	16.3	3	1	12,114.00
		2013	6.0	17	3	1	12,072.00
		2014	8.8	18.9	3	1	12,203.00
		2015	9.9	20	3	1	12,684.00
40	STRATE	2011	7.0	13	3	1	216,827.00
		2012	8.0	16	3	1	222,582.00
		2013	7.9	17.3	3	1	243,291.00
		2014	9.0	18	3	1	274,119.00
		2015	9.8	19.6	3	1	245,155.00
41	TRIODOS	2011	4.3	14.4	3	0	4,841.47
		2012	4.5	16	3	0	5,970.24
		2013	4.3	17.8	3	0	7,274.42
		2014	4.4	19	3	0	8,070.79
		2015	5.5	19	3	1	9,265.48
42	TSKB BANK	2011	19.4	19.1	4	1	765,936.00
		2012	19.7	20.4	4	1	83,349.00
		2013	17.9	18.2	4	1	1,045.79
		2014	17.7	18.1	4	1	1,271.78
		2015	17.0	14.9	4	1	1,679.54
43	UBS BANK	2011	11.9	14.1	4	1	1,530.32
		2012	1.6	11.4	3	0	1,359.97
		2013	8.0	15.4	3	1	1,094.42
		2014	8.2	18.9	3	1	1,147.48
		2015	13.7	22.9	4	1	1,018.24
44	UNICREDIT	2011	12.0	12.37	4	1	1,030.87
		2012	13.0	14.52	4	1	1,045.85
		2013	14.9	13.61	4	1	954,445.38
		2014	16.0	13.41	4	1	952,616.24
		2015	17.8	14.36	4	1	970,914.40
45	UNIPOL	2011	9.0	15.6	3	1	6,425.05
		2012	11.0	16.3	4	1	7,738.13
		2013	13.8	17.8	4	1	8,098.17
		2014	14.2	18.2	4	1	8,527.87
		2015	15.7	19.3	4	1	9,583.73
46	VANCITY	2011	11.0	13.6	4	1	16,127.12
		2012	6.0	12.7	3	1	17,055.83
		2013	6.3	13.3	3	1	17,546.23
		2014	5.5	13.4	3	1	18,559.75
		2015	6.2	13.3	3	1	19,829.92