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FOREWORD

I would hereby like to sincerely kindly thank those who supported me throughout this thesis.

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My sisters and my parents for their loving support along my studies.

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LIST OF ABBREVIATIONS

Abbreviation	Explanation
<IR>	Integrated Reporting
<IT>	Integrated Thinking
CSR	Corporate Social Responsibility
ESG	Environmental, Social and Governance
GRI	Global Reporting Initiative
IIRF	International Integrated Reporting Framework or International <IR> Framework
IIRC	International Integrated Reporting Council
KPI	Key Performance Indicator
NFI	Non-Financial Information
PMS	Performance Measurement System
SR	Sustainability Reporting

I. INTRODUCTION

This introductory part intends to provide insights into this research paper. First, I will introduce the issue and context of the research. Then, I will present my theoretical and managerial motivations in undertaking this thesis.

A. Issue and Context

The insufficiency of traditional corporate reporting to meet the information needs of stakeholders has raised increasing concerns. In this way, the recent shift in information preferences has stimulated a significant surge in non-financial information (NFI), for e.g. within corporate reporting. Nevertheless, although NFI appears to be relevant and valuable for stakeholders it may also be quantitatively overwhelming. Thus, NFI should not only supplement traditional financial reporting, but their combination should also facilitate stakeholders' understanding of the company. As a result, stakeholders' demand for more relevant information on value creation and sustainability issues fostered the emergence and development of integrated reporting.

Integrated reporting (<IR>) is a process founded on integrated thinking (<IT>). It leads to an integrated report providing a holistic but concise picture of the business. Its main objective is to communicate relevant aspects of an organization's value creation. The report discloses the impact on the corporate value and performance of a comprehensive range of capitals. Hence, it demonstrates how a company creates and sustains value. The first integrated reports where issued by the Danish pharmaceutical organization Novo Nordisk (in 2004) and its biotechnology spin-off Novozymes (in 2002). Furthermore, since 2013 the concept of <IR> is established on the principles-based International Integrated Reporting Framework (IIRF). This stimulated an indispensable change in corporate reporting. With the International Integrated Reporting Council (IIRC) – a global coalition of reporting practitioners – the pioneers of integrated reporting were able to transform <IR> from a promising, innovative concept to representing a meaningful practice.

An extensive literature has developed arguments in favor of sustainability and integrated reporting. For example, the *Accounting, Auditing & Accountability Journal* published a special issue on the topic of <IR> in 2014. However, as integrated reporting gains greater momentum, more research is needed to understand the challenges associated with the adoption and implementation of integrated reporting. These recent developments have changed the way companies are reporting on their progress, the nature of KPIs disclosed, and their incorporation and linkage with the company' strategy and business model throughout the integrated report.

This thesis aims to understand the Performance Measurement Systems (PMS) of some <IR> financial services' adopters. The emphasis is given to recognizing the performance indicators disclosed in the integrated reports and their relevance to the integrated reporting ideology. This paper investigates the following question:

How to successfully implement a Performance Measurement System within the conceptual International Integrated Reporting Framework?

Therefore, the objectives of this thesis are addressed in each of the five ensuing parts. The first goal is to provide an introduction to non-financial reporting, including sustainability and integrated reporting. It also embraces discussing the previous research and current issues of non-financial reporting. In addition, it seeks to explore organizational PMS by apprehending the importance of non-financial information and measures. The second aim is to develop an adequate methodology in order to interrogate the PMS and the KPIs disclosed in integrated reports of financial companies. The methodology adopted comprises interviews with reporting managers and analyses of integrated reports. Therefore, the third ambition is to aggregate the information collected from the interviews in order to present a comprehensive range of answers to the research question. The fourth intention is to identify a set of potential discussion topics and recommendations linked to the development and implementation of <IR>. The last part of this thesis includes the summary of the results, theoretical and managerial implications as well as limitations. The structure of this thesis is exhibited in the Illustration 1.

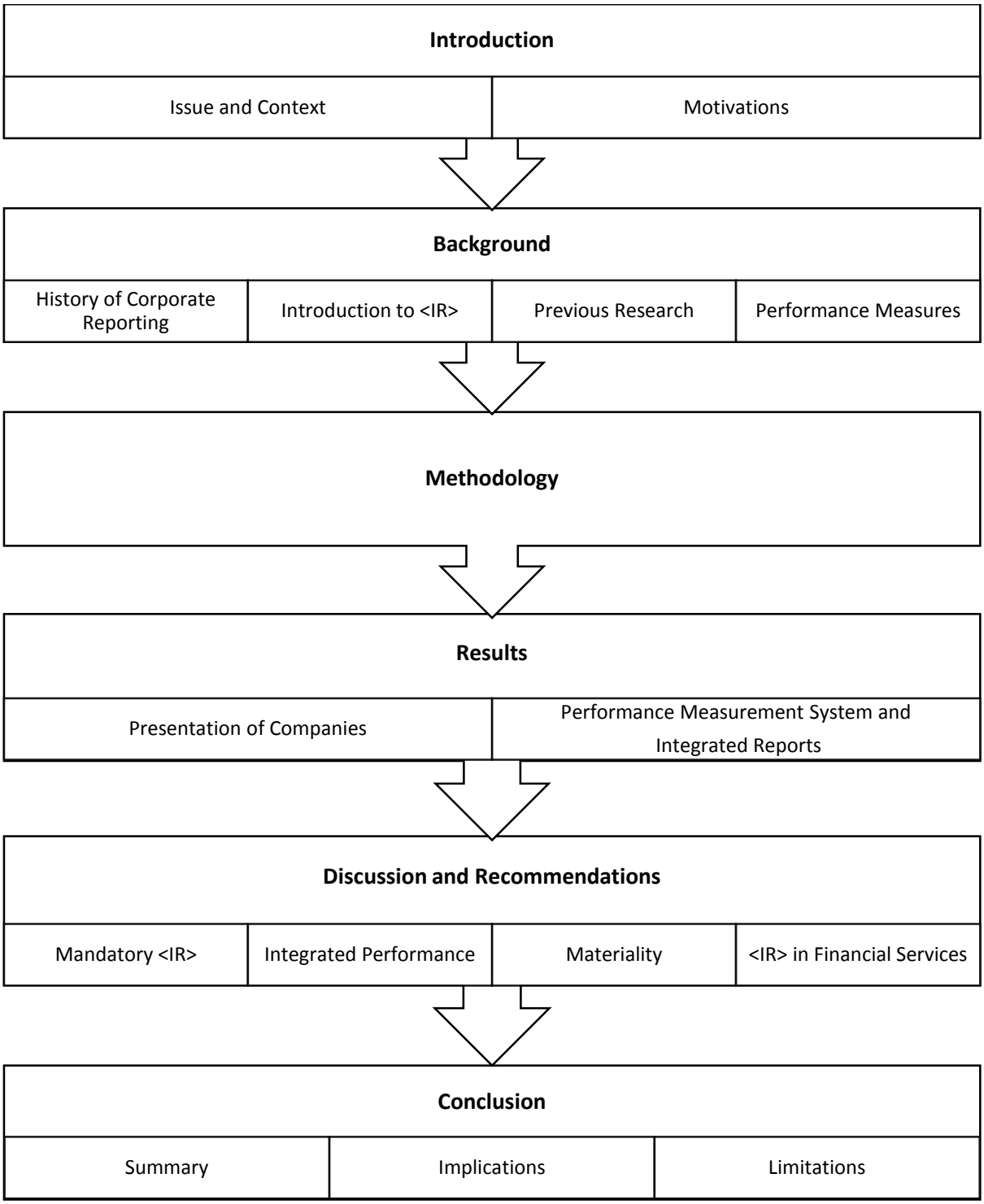

Illustration 1. Structure of the Thesis

B. Motivations

i. Managerial Motivations

From a managerial viewpoint, <IR> gains significant impetus as representing the latest reporting innovation. There is an apparent need for exploring the content and impact of integrated reports. Nowadays, the well-functioning of the economical system depends upon the provision of high quality information. Hence, integrated reports qualitatively superior disclosures have the potential to significantly influence the promotion and optimal use of valuable data. In this way, integrated reporting could positively affect the field of corporate reporting. For instance, does the contextual combination of financial and non-financial[1] information enhances the value creation story? Therefore, the focus on sustainability issues and the communication regarding how organizations perform in an evolving, mistrusted financial industry raises numerous interests.

ii. Scientific Motivations

From a scientific perspective, research concerned with the implementation of integrated reporting present an opportunity to explore the internal functioning of organizations as well as their external representation. In this thesis, I applied multiple sociological theories in order to apprehend the development of <IR>. I will investigate external contextual factors, internal organizational characteristics, institutionalism theories, benefits of integrated reporting, functions of corporate reporting and organizational change model to understand how we arrived at the present state of <IR>. Moreover, during the emergence of integrated reporting, multiple strategic outcomes with market, political, accountability and social motivations added to the existing pressures on voluntary and sustainability reporting.

These developments have changed the way companies are reporting. Organization must make relevant decisions in order to survive and preserve their legitimacy. Nowadays, they have adapted their internal mechanisms to external social pressures by disclosing information related to sustainability issues. Even if the International <IR> Framework

[1] IIRC's CEO P. Druckman as well as M. Vaessen, Chair of the Federation of European Accountants (FEE) Corporate Reporting Policy Group, proposed the notion of multi-capital, which I will also frequently use in this study.

does not include any proposals for reporting instruments or required disclosures. Consequently, the next step is to enhance <IT>. For these reasons, <IR> represents a dynamic practice that questions the organizations on fundamental interrogations: who are we; what are we doing; why are we doing it; and, how are we doing it? In times were, more and more indirect usage of humans is evidenced, these questions – that could also be philosophically postulated by individuals – bring to light that humans are at the origin of institutions. Hence, while the language of business is finance (as expressed by one of the interviewee), it is primordial to understand the importance of non-financial aspects (e.g. NFI) in business.

6.

II. DEFINITIONS

Corporate Performance and Key Performance Indicators

In spite of representing a central concept in the accounting literature, the notion of **corporate performance** is commonly considered too imprecise. On one hand, the financial performance measures are guided by widely-accepted principles and compiled from corporate reports. It principally assesses the changes in wealth of capital providers. On the other hand, the notion of non-financial performance (and consequently non-financial information) is wider and vaguer.

Key Performance Indicators are measures used by organizations to gauge their performance. KPIs are displayed under the form of metrics. They assess the management of performance towards the achievement of strategic and operational objectives. Hence, they are company-relevant. Besides, KPIs can be sector- or industry-specific, allowing for peer comparison. In the field of accounting, key performance indicators can be divided in two groups: **financial KPIs** and **non-financial KPIs**. Financial KPIs are usually related to the bottom line and commonly calculated in the forms of ratio or margin. On the other hand, non-financial KPIs are related to non-financial aspects of the business activities, and are associated to other parties than shareholders.

Non-Financial Information

Depending on the contexts, **non-financial information** can describe diverse forms of measures and disclosures. First, the term NFI describes corporate disclosures linking different corporate aspects (for e.g. forms of capital, strategy, performance, etc.). In addition, non-financial performance can sometimes be connected with more traditional financial measures. Second, NFI designates disclosures related to financial performance, but provided outside the typical corporate reporting channels or in a different format. Thus, non-financial information is defined as a non-traditional channel of communication and may include qualitative assessment of financial disclosures. Non-financial disclosures then describe this information through narrative or qualitative assessments,

forward-looking indicators, non-monetary items, intangibles (see Amir, Lev, & Sougiannis, 2003[2]), etc.

In line with these two approaches, Erkens, Paugam, and Stolowy (2015) identified two main definitions of NFI in the literature. First, focusing on the location of the information: "nonfinancial disclosures and metrics [that] include index scores, ratios, counts and other information not presented in the basic financial statements [i.e., presented outside]" (Upton, 2001, p. 5). Other studies used a slightly different definition, based on the nature of the information. For instance, in their research on the value-relevance of non-financial information in the communication industry, Amir and Lev (1996, pp. 22-23) considered untransformed (primitive)[3] NFI as non-accounting information. For their part, Erkens et al. (2015) defined non-financial information as *disclosures provided to stakeholders on dimensions of performance other than the traditional appraisal of financial performance from the investors' viewpoint*. Their definition included items disclosed outside the financial statements.

[2] Their research posed the following question: "To what extent non-financial report sources compensate for the intangibles-related deficiencies of financial statement?". They found evidence supporting compensation for some deficiencies, depending particularly on the industry. (Amir, Lev, & Sougiannis, 2003)

[3]Transformed non-financials have been "incorporated with financials in a valuation model […] by the accounting system which transforms primitive nonfinancials […] into monetary values of costs, earnings and assets" (Amir & Lev, 1996, p. 22). "The monetized financial information (are then related) to stocks prices and returns" (Amir & Lev, 1996, p. 23).

III. BACKGROUND

This part intends to grasp the context in which integrated reporting has been developing. First, we will follow the emergence of the corporate reporting landscape since the 1990s. This first part seeks to explore the appearance of different forms of reporting. It provides an overview of developments in corporate reporting from the Balanced Scoreboard to the Integrated Reporting. Besides, we investigate the necessity to standardize sustainability reporting. Second, we will introduce the concept of integrated reporting. This second part explores the International Integrated Reporting Framework, its fundamental concepts, guiding principles and content elements. It also pursues to investigate the future of integrated reporting in the global field of corporate reporting. The existent example of <IR> as a mandatory requirement for listed companies in South Africa is illustrated. Third, we will review numerous previous research on voluntary corporate reporting. In addition to external factors, these studies examine whether sustainability reporting is related to internal organizational features. After that, we explore the sociological theory of the new institutionalism to sense the rapid emergence of new forms of corporate reporting. Subsequently, we study the added value of sustainability activities and sustainability disclosures. Then, focusing on <IR>, we analyze two specific concepts related to corporate reporting, namely: the two functions of corporate reporting, followed by the model of organizational change. Fourth, we will inspect the field of performance indicators and whether its development and implementation may resolve the corporate challenges highlighted in the previous chapters. Finally, this review of the literature on corporate reporting and particularly, integrated reporting displays different research gaps. Thus, the last chapter will aim to determine a research question.

A. A History of (Voluntary) Corporate Reporting

The last 25 years have seen noteworthy developments in the academic literature on corporate performance and reporting systems. Several proposals included:

- Balanced scoreboard (BSC)[4] (Kaplan & Norton, 1993),
- Triple Bottom Line reporting (TBL)[5] (Elkington, 1997),
- Sustainability reporting (SR), and
- Integrated reporting (<IR>).

i. The Emergence of Sustainability Reporting

After a first appearance in the 1970s (Fifka, 2013), non-financial reporting definitively arose these last 25 years. Besides, the number of organizations producing sustainability reports has substantially increased these last ten years, particularly amongst the large multinational companies (KPMG, 2015). In 2002, as stated in KPMG's survey of **corporate responsibility** (CR) **reporting** 45 percent of the world's 250 largest companies (G250) reported on their sustainability activities (KPMG, 2002). This figure has increased to 64 percent in 2005, 83 percent in 2008 and reached 95 percent in 2011 (KPMG, 2005, 2008, 2011). In 2013 and 2015, this rate remained stable with respectively 93 and 92 percent (KPMG, 2013, 2015). In addition, the rate of publicly traded National 100 (N100) companies[6] that disclosed their sustainability performance is also steadily increasing. While in 2002, only 28 percent of the N100 reported on their sustainability activities (19 countries surveyed), this number increased to 41 percent in 2005 (16 countries), 53 percent in 2008 (22 countries), 64 percent in 2011 (34 countries), 71 percent in 2013 (41 countries) and 73 percent in 2015 (45 countries). These figures are displayed in the Illustration 2.

[4] The BSC is an internal management control process which reports strategic indicators (Kaplan and Norton, 1993). The BSC includes forward-looking measures focusing on the core strategic and operational aspects of the organization. Nonetheless, it raised critics as being more likely to display discreet measures drawing management's attention rather than enabling their integration (de Villiers, Rinaldi, & Unerman, 2014).

[5] The TBL appeared during the end of the 1990s (Elkington, 2004). It slakes an emerging demand for disclosed information regarding environmental and social matters (Elkington, 1997).

[6] Largest 100 companies by revenue in each country surveyed.

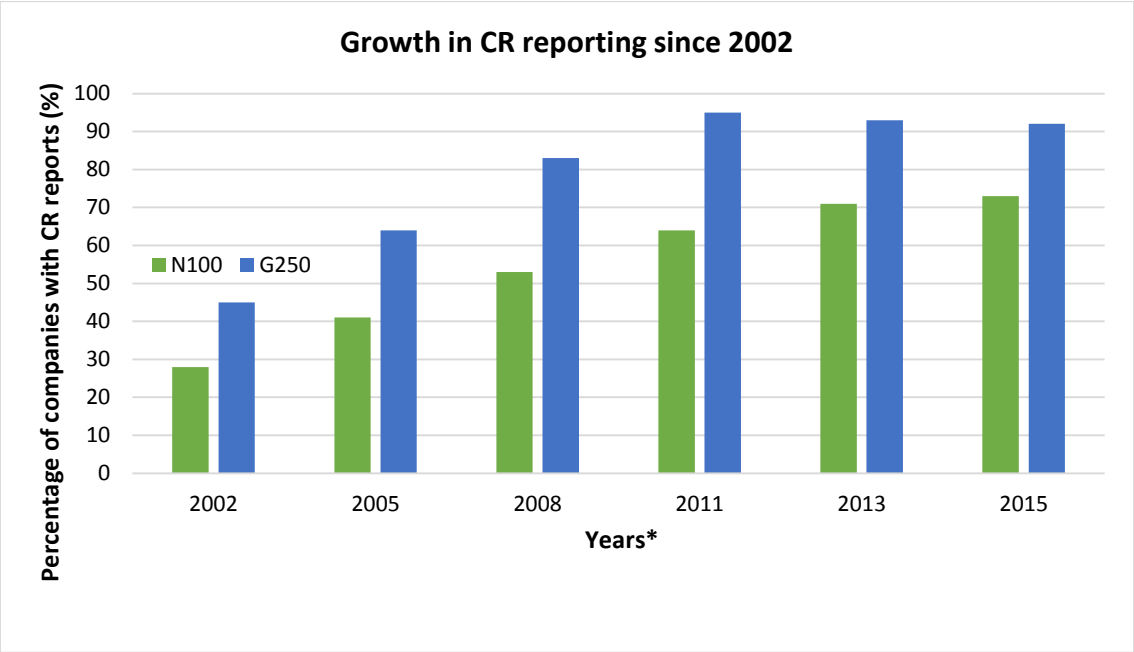

Illustration 2. KPMG Corporate Responsibility Reporting Survey

* Triennial until 2011, then biennial.

Source: KPMG (2002, 2005, 2008, 2011, 2013, 2015).

Therefore, this growth in CR reporting supports the emergence of a global sustainability reporting field. Aras and Crowther (2009) pointed out that sustainable development lessens the cost of capital, which combined with the harmonization of global standards (e.g. Global Reporting Initiative [GRI]) and guidelines (Fortanier, Kolk, & Pinkse, 2011) drives corporate social responsibility (CSR) disclosures.

Notwithstanding, sustainability reporting continues to be sparse outside the N100 (KPMG, 2015). Hence, even large, activity intensive companies which should indubitably benefit from SR do not report or have never considered it. Besides, sustainability disclosure appears to only connect symbolically to the concept of sustainability. For instance, Milne and Gray (2007) highlighted the lack of quality in SR and the little effects of the recent increase in reporting practice on the conditions of life. Furthermore, what exactly constitutes the corporate value that <IR> intends to present in a true and fair view remains contested. For example, Gray (2006) criticized the notion of value employed in the social, environmental and sustainability accounting and reporting field. He pointed out that new models of corporate reporting were needed in order to empower shareholder

value. Milne, Tregidga, and Walton (2009) study examined discourses in New Zealand sustainability reports. They discovered that what thought to be sustainable pragmatic speeches were instead purely economically driven. Finally, sustainability engagement might not sufficiently generate the desired market valuation.

a. Sustainability Reports' Format

Until the latter part of the twentieth century, sustainability reporting – sometimes referred to as environmental, social and governance (ESG) reporting – primarily took place via the medium of corporate annual report. Within their reports, organizations can select which information to disclose with regard to their ESG activities. Hence, these disclosures enhance the relationships with their stakeholders (Unerman, 2000). Neu, Warsame, and Pedwell (1998) studied Canadian public companies' annual reports over the 1982 to 1991 period. Their paper highlighted that managerial desires to meet the perceived information requirements of their stakeholders motivated the appearance of environmental disclosures in annual reports. Thus, the combination of sustainability concepts into corporate strategies required by stakeholders' expectations regarding CSR disclosures (Porter & Kramer, 2011) and investors' demand for material information about the future corporate growth became ineluctable.

As sustainability reporting became more widely practiced (expanding the amount of ESG data) organizations increasingly began to separate out social and environmental disclosures. On one hand, annual reports became mainly focused on communicating material information to financial stakeholders. On the other hand, alternative media such as stand-alone ESG reports published information considered relevant to other stakeholders (de Villiers & van Staden, 2011)[7]. Consequently, the independent development of the two strands led to an increase in disclosures. This expansion conducted to an extensive amount of information presented in unconnected silos (International Integrated Reporting Council [IIRC], 2011). Hence, some academics have suggested companies to report on their activities in an integrated manner (e.g. see Eccles & Krzus, 2010). Hubbard (2009) recognized the lack of consensus on corporate reporting

[7] The authors also found that companies preferred environmental disclosures in their annual reports when facing a long-term negative environmental reputation, while choosing to impart on their website when confronted to a shorter-term crisis (de Villiers & van Staden, 2011).

standards and the complexity in gathering existent frameworks. He suggested the use of a sustainable BSC that integrates measures grounded on an organizational sustainability performance index. Moreover, based on eight case studies related to the A4S[8] project, Hopwood et al. (2010, p. 26) recommended to "demonstrate how a broad and inclusive concept of sustainability can be, and needs to be, integrated into mainstream financial and business process". Such **connectivity** is considered essential since actions in one area may influence other corporate activities. Consequently, during the last decade some firms have started to take into account this idea of convergence between financial and sustainability reporting and have integrated ESG information into their annual reports.

ii. The Need for Voluntary Reporting Standards

Due to the emergence of the sustainability reporting practice, initiatives to develop **voluntary reporting standards** intensified (see Annex 1 for a glossary of current non-financial disclosures and sustainability guidelines). Their intention was to bring trust, comparability and credibility into/ to sustainability reports. In 2010, the SEC issued a *Guidance regarding disclosure related to climate change* to assist companies which present material risks associated with climate change (Securities and Exchange Commission [SEC], 2010). The same year the International Organization for Standardization (2010) delivered ISO 26000, which provides guidance on how corporate activities could be socially responsible. In 2011, the European Commission published a communication from the European Economic and Social Committee (EESC) and the Committee of the Regions (CoR), where it commits itself to present "a legislative proposal on the transparency of the social and environmental information provided by companies in all sectors" (European Commission (2011)[9] quoted in Sierra-Garcia, Zorio-Grima, & García-Benau, 2013, p. 2).

These new guidelines[10] based on the broadening of corporate reporting on ESG issues rendered sustainability reports more complex. Hence, it became increasingly challenging

[8] Prince's Accounting for Sustainability Project (in Wales).

[9] EU Commission. (2011). *Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*. Brussels: EU Commission.

[10] For more information related to non-financial standards and guidelines, please refer to the Annex 1. *Glossary of Current Non-Financial Disclosures and Sustainability Guidelines.*

for overloaded report users and makers to link information across corporate activities while ensuring its quality. Consequently, in order to account for the material and strategic KPIs driving corporate value, corporate reporting processes had to combine financial and non-financial information. Accordingly, this thesis will concentrate on the combination of **multi-capital** (financial and non-financial) **performance indicators** disclosed in **integrated reports**.

To cut a long story short, companies have recently enhanced reporting mechanisms to satisfy stakeholders' demands for relevant information (e.g. see Simnett, Vanstraelen, & Chua, 2009[11]). Therefore, King III[12] acted this willingness to obtain information going beyond shareholders' interests and defined **stakeholders** as *any group affecting and affected by organizational activities* (Institute of Directors in Southern Africa [IoDSA], 2009), *interested in corporate multi-capital data* (Deegan, 2002). It became necessary for companies to provide a holistic perspective of the corporate performance by the integration of financial and non-financial information. Nevertheless, the growing volume of disclosures – often without identification of strategic implications – rendered stakeholders confused (Eccles & Krzus 2010).

[11] In their article, the authors examined the emergence of assurance on sustainability reports. Based on a sample of 2.113 companies, from 31 countries, during the 2002 to 2004 period, they found that sustainability reports from organizations looking for improving their credibility and corporate reputation are more likely to be assured (Simnett et al., 2009).

[12] The third edition of the South African *King Report on Corporate Governance* – see II. B. iii. <IR> in South Africa.

B. Introduction to Integrated Reporting

In 2004, the Prince's Accounting for Sustainability Project (commonly known under the acronym A4S) was formed. Over the recent years, A4S developed guidance for a more connected reporting (Hopwood, 2009). This type of reporting required organizations to draw attention to the main connections between their material actions (Hopwood, Unerman, & Fries, 2010). In the following years, several reporting organizations and regulatory bodies responded to the challenge of providing a more holistic picture within sustainability reports through interacting relevant social, environmental and economic actions and impacts.

Then, in August 2010 the **International Integrated Reporting Council** (IIRC) was jointly formed by the GRI, the A4S Project and the International Federation of Accountants (IFAC). The IIRC is an international institution which involves "leaders from the corporate, investment, accounting, securities, regulatory, academic and standard-setting sectors as well as civil society" (IIRC, 2011, p. 1). In other words, it comprises "a global coalition of regulators, investors, companies, standard setters, accounting professionals and NGOs" (IIRC, 2013a, p. 0). The IIRC's ambition is to provide a holistic picture of the corporate activities' outcomes, while displaying the risks and opportunities inherent in the strategy and business model. The IIRC has implemented a **pilot programme** in 2012 involving approximately 140 companies and institutional investors around the world. This program ran through September 2014 with the objective to develop the **International Integrated Reporting Framework** (IIRF).

i. The International Integrated Reporting Framework

Since its creation the IIRC has been working on the development of a framework. The framework's **Consultation Draft** was published in April 2013 (IIRC, 2013b). The IIRC (2013a, p. 7) developed the International <IR> Framework "to establish Guiding Principles and Content Elements that govern the overall content of an integrated report". <IR> intends to reduce the clutter of current corporate reporting through promoting a holistic view of the interconnections between financial and non-financial information into a forward-looking, concise, coherent and more effective report. In other words, <IR> is an attempt to promote "a more cohesive and efficient approach to corporate reporting that

draws on different reporting strands" (IIRC, 2013a, p. 2), bringing together detailed financial, operational and sustainability data to focus solely on material issues impacting organizations' ability to create sustainable value.

Developments in the IIRC's reflection on <IR> shifted the emphasis from an integrated report as an overview of material corporate activities toward replacing other forms of corporate reporting. Hence, "the main output of Integrated Reporting is an Integrated Report: a single report that the IIRC anticipates will become an organization's primary report" (IIRC, 2011, p. 7). However, this ambition to act as the unique corporate report was restrained by the willingness to seeking conciseness. Subsequently, the IIRC's definition of an integrated report developed to: "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." (IIRC, 2013a, p. 7).

a. The Fundamental Concepts of Integrated Reporting

The International <IR> Framework describes the fundamental concepts of <IR> that underpin and reinforce the principles-based prerequisites present in the guiding principles and content elements (IIRC, 2013a, p. 10). These fundamental concepts center on the various capitals that a company uses and affects, the company's business model and the creation of value over time (IIRC, 2013a, p. 10).

In the framework, the **capitals** are *stocks of value playing the role of inputs into a company's business model*. Through the business activities and outputs, these capitals are transformed (IIRC, 2013a, p. 11). The IIRF identifies the six categories of capitals that companies should use as guideline in their reporting: *financial, manufactured, intellectual, human, social and relationship, and natural* (IIRC, 2013a, pp. 11-12). The IIRF argues that the **business model** "draws on various capitals as inputs and, through its business activities, converts them to outputs [and] outcomes in terms of effects on the capitals" (IIRC, 2013a, p. 13). Consequently, organizations can demonstrate the extent to which they create value over time as a result of their business activities by linking the business model concept to the six capitals. The **value creation** process is exhibited in the Illustration 3.

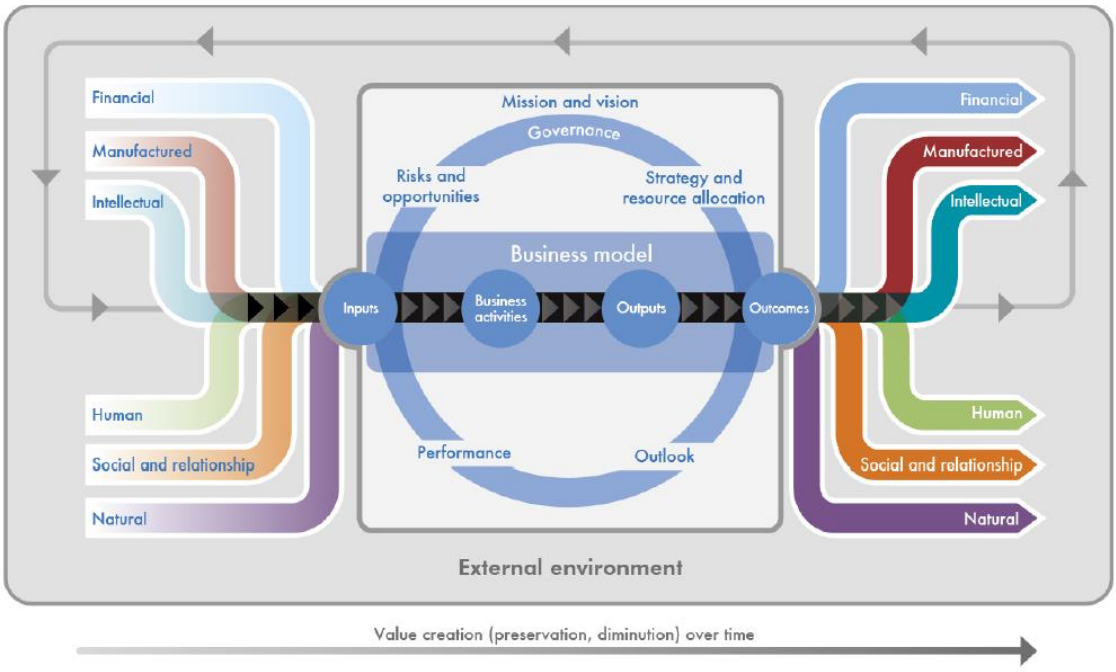

Illustration 3. The Integrated Reporting Value Creation Process

Source: IIRC (2013a, p. 13).

b. The Guiding Principles of Integrated Reporting

The content and presentation of an integrated report are supported by **seven guiding principles** (IIRC, 2013a, p. 5): *Strategic focus and future orientation; Connectivity of information; Stakeholder relationships; Materiality; Conciseness; Reliability and completeness; and Consistency and comparability*. For the purpose of each principle, please refer to the Annex 2.

c. The Content Elements of Integrated Reporting

The framework requires that "an integrated report includes […] **eight Content Elements** that are fundamentally linked to each other and are not mutually exclusive" (IIRC, 2013a, p. 5). The following eight elements are: *Organizational overview and external environment; Governance; Business model; Risks and opportunities; Strategy and resource allocation; Performance; Outlook; and Basis of preparation and presentation* (IIRC, 2013a, p. 22). For more information regarding each element, please refer to the Annex 3.

d. A Call for Integrated Thinking

The application of the guiding principles should steer managers into the direction of more **integrated thinking** (<IT>) (IIRC, 2013a, p. 7). This implies to consider "the connectivity and interdependencies between the range of factors that have a material effect on an organization's ability to create value over time" (IIRC, 2013a, p. 2). This approach to <IT> is also revealed in the IIRC's intended **audience group**: primarily *providers of financial capital taking a long-term investment view*. Though, in accordance with the stakeholders' relationship principle, other constituents should be taken into account. Thus, the integrated report must examine "how the organization interacts with the external environment and the capitals to create value over time" (IIRC, 2013a, p. 10).

ii. Integrated Reporting as the New Corporate Reporting Normal?

Since the IIRC was the main developer of integrated reporting, the IIRF had a strong impact on its global development – it intended to support companies with the implementation of <IR> (IIRC, 2013a, p. 8). Integrated reporting is in essence a hybrid practice proceeding between the fields of financial and sustainability reporting. An increasing demand for sustainable information combined with both regulatory standards and voluntary disclosures could empower integrated reporting in becoming the most effective way to communicate corporate impact and performance. The IIRC expects that companies will no longer produce "numerous, disconnected and static communications" (IIRC, 2013a, p. 2) and believes that <IR> will become the "**corporate reporting norm**" (IIRC, 2013a, p. 2). In this way, the IIRC seeks to achieve mandatory integrated corporate reporting by all listed companies (Eccles & Krzus, 2010). However, producing an integrated report is still a voluntary practice for companies (except in South Africa – see hereafter). As reported by the GRI Sustainability Disclosure Database (Global Reporting Initiative [GRI], 2016), more than **625 companies**[13] (computed by the author) around the world have started to engage with a form of <IR>, while nearly 330 companies using the GRI G4 guidelines also issued an integrated report.

[13] This figure represents the amount of integrated reports published in 2015.

iii. Integrated Reporting in South Africa

Globally, the implementation of <IR> assimilates to a journey where companies are moving at their own pace. However, since 2010 the South African Johannesburg Stock Exchange (JSE) required its 450 listed companies to produce an integrated report (Integrated Reporting Committee of South Africa [IRCSA], 2011). On a comply-or-explain basis, this report envisioned to replace the financial and sustainability reports. The King Report on Corporate Governance is issued since 1994 by the King Committee on Corporate Governance. Companies listed on the JSE must comply with the King reports. The latest version, **King III**, which is based on principles and practices (IoDSA, 2009), is viewed as one of the best international codes of corporate governance (European Confederation of Institutes of Internal Auditing [ECIIA] (2009) quoted in Sierra-Garcia et al., 2013, p. 3). A fourth revision of the King Reports, King IV, is expected by 2017. The South African adoption of the <IR> Framework allows to notice reporting differences. The mandatory *apply or explain* requirement generates different level of quality in integrated reports and thus disparities in the alignment with the IIRF. This explains why several empirical research concerned with <IR> have focused on South Africa. However, this study will focus on European companies for practical reasons.

C. Previous Research on Corporate Reporting

A vast literature on corporate reporting has been elaborated through the years. Expanding these last 25 years and especially the last 15 years (Beyer, Cohen, & Walther, 2010[14]), managers' voluntary disclosures have drawn attention from academics. More recently sustainability disclosures have attracted consideration from the academic literature. Most of the empirical research have examined external drivers (e.g. stakeholder pressures and regulation)[15], as well as internal determinants (e.g. size, industry and profitability), and the strategic corporate legitimacy and institutional appropriation theories.

The research outcomes have generated several useful insights. As an example, voluntary reporting disclosures can enhance stakeholders' ability to predict future corporate performance in their process of information's analyses. Other theories focused on the link between psychological behaviors of decision makers and disclosures (e.g. see Koonce & Mercer, 2005). Finally, due to its novelty, less research has been carried out regarding <IR>. Consequently, this thesis aspires to bring thoughts about the **implementation of performance indicators in integrated reports**. The Illustration 4 exhibits the structure of this chapter.

[14] The authors reviewed the literature on financial reporting, especially with regards to managers' voluntary disclosure, regulated disclosures and analysts reporting decisions.

[15] As explained in the chapter II. A. *A history of (voluntary) corporate reporting*.

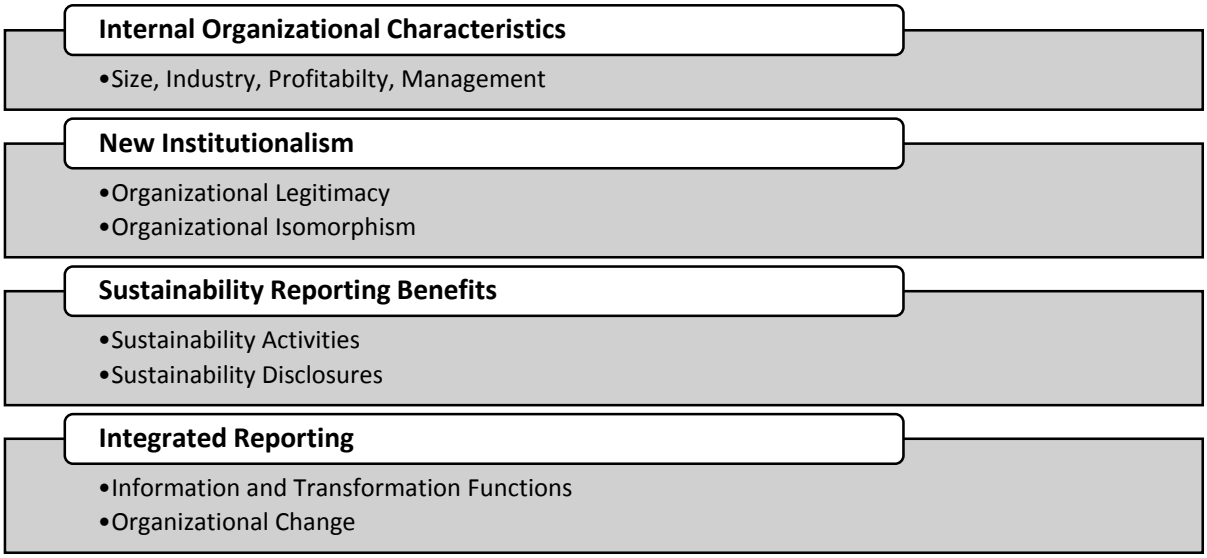

Illustration 4. Structure of the Chapter on Previous Research on Corporate Reporting

i. Internal Organizational Characteristics

First, a number of studies linked corporate reporting to **internal organizational characteristics**. Adams (2002) analyzed British and German chemical and pharmaceutical firms. His study demonstrated that internal contextual factors had a higher explanatory power than displayed in previous corporate social reporting theories concerned with organizational characteristics or general contextual factors. Regarding the determinants of reporting practices, the size, industry, profitability and management interests are generally considered significant. Patten (1992a) found that internal features like the size and industry grouping associated with public pressures forces companies to voluntary disclose the social impact of their activities. Likewise, Patten (2002) found a significant negative relation between corporate performance and environmental disclosure by using a sample of 131 US companies and their annual report's environmental disclosures, and controlling for the size and industry classification. Moreover, Xiao, Yang, and Chow's (2004) paper on the largest 300 Chinese listed companies demonstrated that variables like the corporate size, employment of an international audit firm, sectors and profitability had an effect on the publication of voluntary corporate disclosures. Furthermore, Marston and Polei (2004) concluded that company' size was the only significant explanatory variable impacting disclosed information, after examining financial and investor-related disclosures by German firms between 2000 and 2003. Besides, Khanna, Palepu, and Srinivasan's (2004) analysis of

disclosures practices of 794 companies from 24 countries found a clear link between profitability and voluntary disclosure. Both Cormier, Gordan, and Magnan (2004) paper regarding environmental disclosures in European and North American international companies and Adams and McNicholas' (2007) study on organizational processes related to SR recognized that voluntary reporting was more likely with the presence of top management commitment toward corporate sustainability. Thus, voluntary reporting goes hand in hand with management's interest in acting responsibly. Finally, Frías-Aceituno, Rodriguez-Ariza and Garcia-Sanchez' (2013) paper investigated the influence of certain Board of Directors' characteristics on the integration of information, using a sample of 568 non-financial international companies from 15 countries over the period 2008 to 2010. They concluded that growth opportunities, the size of an organization, its management bodies as well as gender diversity are the main factors in the decision to disclose integrated information.

Nevertheless, mitigated empirical results have questioned the credibility of external and organizational factors and strategic explanations. For instance, managers have some difficulties to display the benefits of SR. Belal and Owen's (2007) engagement-based research on the CSR practice in Bangladesh indicated some doubts concerning the success of managers' passive compliance strategy toward social reporting, especially when global standards are not in line with local factors. Moreover, Durden (2008) found that reporting tends to be disconnected from decision making processes, while information systems for collecting and using information are under-developed according to Bartolomeo et al. (2000). Consequently, reporting does not seem to be necessarily tied to organizational characteristics or strategic outcomes.

ii. New Institutionalism

The **neo-institutionalism** theory focuses on institutions' interactions and impact on the society. The common new institutionalism theory maintains that the field (see its definition hereinafter) applies a greater influence on human behavior than the interactions between individuals. I will develop on the **legitimacy theory** (normative institutionalism) and on **organizational isomorphism** (cognitive institutionalism) to explain the emergence of SR.

At the heart of the institutional theory is the **field**. It includes economic professional and social agents that participate to "a common meaning system and [who] interact more frequently and fatefully with one another than with actors outside the field" (Scott, 1995, p. 56). While organizations are part of multiple fields (Seo & Creed, 2002), fields operate at multiple organizational level (Scott, 1995). Within fields, regulatory[16], normative[17] or cognitive[18] institutional pressures incite conformance (Scott, 1995). Institutions (in this case, organizations) are influenced by the field (e.g. institutional peer pressure). In their field, their main objective is survival – which legitimacy can achieve.

In line with the *legitimacy theory* (Preston & Post, 1975), organizational legitimacy may explain the strategic willingness to voluntarily report. Dowling and Pfeffer's (1975, p. 122) conceptual framework indicated that organizational legitimacy is "the congruence between the social values associated with or implied by [organizations'] activities and the norms of acceptable behavior" of its environment. Suchman (1995, p. 574) defined legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions". Numerous research underpinned that corporate legitimacy may depend on a strategic fit with societal value systems (e.g. see Deegan, 2002) or on stakeholders' demands (e.g. see Neu et al., 1998).

Based on a historical analysis of 1970s waste issues in the chemical industry, Milne and Patten (2002) affirmed that environmental disclosures may restore corporate legitimacy. Moreover, in the aftermath of the Exxon Valdez' oil spill, Patten (1992b) found that social disclosures intend to react to the stakeholders changing perceptions of Exxon Valdez. Furthermore, Deegan's (2002) paper on social and environmental reporting (SAR) argued that the desire to legitimize corporate activities remains one of the motivation for SAR. Besides, Deegan, Rankin, and Tobin' (2002) study investigated the Australian firm BHP'

[16] Organizations influence individuals to maximize benefits. Individuals achieve their goals through institutions. This is called rational choice institutionalism.

[17] Organizations influence individuals by imposing what is supposed to be done. Individuals make certain choices because it is the appropriate action or feel a social obligation. This is called normative institutionalism.

[18] Individuals act according to their convictions or because of conceptions. They make certain choices because they cannot conceive an alternative. This is called cognitive institutionalism.

social and environmental reporting practices between 1983 and 1997. A positive relationship has been found between the disclosures of BHP's annual reports and community concern for ESG issues. The results of the study supported that BHP used disclosure as a legitimizing tool. In addition, O'Donovan's (2002) research on the applicability of the legitimacy theory in annual reports' environmental disclosures of three large Australian public companies indicated evidence of its explanatory power. Likewise, using a sample of North American companies, Aerts and Cormier (2009) found a significant positive relationship between annual reports' environmental disclosures and the legitimacy theory. Despite recent mixed results in academic research, Cho and Patten's (2007) research note/ study provided evidence for the legitimacy theory in environmental reporting. Finally, Deegan and Blomquist's (2006) paper on a 1999s WWF-Australia initiative regarding environmental reports of Australian minerals companies supported that lobby groups have a certain influence on corporate disclosures practices.

On the other hand, O'Dwyer's (2002) paper indicated that corporate social disclosures are only occasionally explained through the legitimacy theory, based on interviews with 27 Irish public limited companies. Additionally, Cooper and Owen's (2007) paper regarding British listed companies indicated that CSR have little effect on organizational stakeholder accountability due the inefficiency of institutional reforms in corporate reporting. Furthermore, Arvidsson's (2010) paper grounded on the legitimacy and stakeholder theories highlighted the practice of CSR as intended to avoid negative impact (e.g. utilitarianism) instead of aiming for positive or normative outcomes.

New institutionalism argues that voluntary reporting is concerned with the corporate isomorphic willingness and necessity to comply with social expectations. Marquis, Glynn, and Davis (2007) maintained that community isomorphism affects corporate social behaviors and practices within communities. Findings from institutional studies on SR pointed to the institutionalization of sustainability reporting. Based on the institutional theory framework, Bebbington, Larrinaga-González, and Moneva-Abadía (2008) explored why New Zealand reporting forerunners initiated SR. Their results suggested that sustainable disclosures are part of a value-added differentiation strategy. This implies that fields can be strategy-based, where organizations with similar strategies will adopt the same practices. Fortanier et al. (2011) paper found that multinationals adhering to

global corporate social responsibility standards present a harmonization of their CSR activities across countries. Therefore, multinationals present similarities in reporting patterns within a global corporate social responsibility field. Moreover, Kolk (2005), and Golob and Bartlett (2007) argued that (sustainability and CSR, respectively) reporting showed resemblances within various geographical regions and countries.

Consequently, corporate legitimacy may also be the result of *institutional isomorphism*. Within organizational fields, organizational isomorphism aimed to fit societal expectations (DiMaggio & Powell, 1991) ensures organizational legitimacy (Deephouse, 1996[19]). For instance, Etzion and Ferraro's (2010) article explored the role of analogy in the institutionalization of SR. The authors found that analogies had a double normative and cognitive effect, providing legitimacy to new forms of corporate reporting like SR. Thus, organizational activities act under institutional pressures by complying with social expectations instead of being necessarily deliberately conceived by managers or shaped entirely by individual organizational circumstances (Friedland & Alford (1991)[20] quoted in DiMaggio and Powell, 1991, pp. 232-263).

iii. Benefits of Sustainability Activities and Sustainability Reporting

In line with Hassel, Nilsson, and Nyquist (2005) research on the value relevance of Swedish listed companies' environmental performance, two schools of thought about the **added value of ESG activities** can be distinguished. First, the *cost-concerned* school argues that engaging in ESG activities creates an economic disadvantage because of higher costs. This leads to/ results in expected lower market values. In accordance with the principal-agent problem, Friedman's (1970) paper entitled *The social responsibility of business is to increase its profits* suggested that sustainability serves the interest of managers instead of generating value-added internal project benefiting shareholders. Moreover, Alexander and Buchholz's (1978) article on American stock market values

[19] Deephouse' study demonstrated that organizational isomorphism is positively related to organizational legitimacy (conferred by regulators and the mass media) in the banking industry.

[20] Friedland, R., & Alford, R. R. (1991). Bringing Society Back In: Symbols, Practices and Institutional Contradictions. *The new institutionalism in organizational analysis*. *10*, 232-263, Chicago: University of Chicago Press.

between 1970 and 1974 indicated a low insignificant relationship between risk-adjusted performance and CSR. Furthermore, Aupperle, Carroll, and Hatfield (1985) empirical study did not find evidence supporting a positive relationship between CSR and profitability. Finally, Hassel et al. (2005) found that the environmental performance had a negative relationship on corporate market value, supporting the cost-concerned school.

On the other hand, the *value creation* school regards ESG engagement as generating competitive advantage and thus improving financial performance. Porter and van der Linde (1995, p. 116) economical thoughts pointed out the necessity of rethinking the "relationship between environmental and industrial competitiveness […] relaxing the tradeoff and […] involving innovation-based solutions that promote both environmentalism and industrial competitiveness". Therefore, one can expect a positive relationship between ESG activities and market value. The stakeholder theory suggested that corporate activities should take into consideration stakeholders' wealth, notably due to the repetition of economic transactions. Lately, the theory of the firm proposed that CSR attracts responsible investors, which helps reduce information asymmetry.

In addition to the two distinctive school of thoughts, meta-analysis studies have revealed conflicting results. Orlitzky, Schmidt, and Rynes (2003) meta-analysis of 52 studies provided evidence for the benefits of social responsibility and to a lesser extent environmental responsibility. They found a positive relationship between corporate social performance and (book) corporate financial performance. On the other hand, Margolis, Elfenbein, and Walsh (2009) meta-analysis entitled *Does it pay to be good and does it matter?* explored the same relationship using 251 studies. Their results indicated an overall small insignificant positive effect, even after conducting sensitivity analyses.

Furthermore, in order to influence investors' decision making, companies should also report on **ESG aspects**. For instance, by publishing information explaining both corporate and stakeholders' benefits from ESG activities. Guidry and Patten (2010) examined the relationship between ESG disclosure and financial performance. Their paper procured empirical support for the value-relevance of sustainability disclosure via sustainability reports issuance exhibiting positive market reactions. Consequently, an increasing number of research have provided findings in support of the value creation theory. For instance, several empirical studies found that voluntary reporting enhances analysts' earnings forecasts by improving disclosures. In their research, Barron, Kyle and O'Keefe

(1999) found that management disclosures are related with less error and dispersion in analysts' earnings estimates. Their results are driven by forward-looking measures about capex showing that information's quality is essential in earnings forecasts. Using a sample from 31 countries, Dhaliwal, Radhakrishnan, Tsang, and Yang (2012) demonstrated that the issuance of stand-alone CSR reports was related with lower analysts' forecasts errors. In addition, their findings suggested that this non-financial information was complementary to financial disclosures. Thus, corporate voluntary reports disclose non-financial data which can be combined interactively with financial information. Furthermore, Eccles, Ioannou, and Serafeim (2014) found that a *high sustainability* group of companies, pioneers in the adoption of ESG policies, significantly outperformed their counterparts in the long-term with regard to both stock market and accounting performance. Correspondingly, several studies procured evidence that successful ESG disclosure and performance:

- delivered relevant information regarding the accuracy of analysts' earnings forecasts (Hope, 2003)
- lowered undesirable firm-idiosyncratic risk (Luo & Bhattacharya, 2009),
- attracted dedicated institutional investors and analyst coverage, diminished analysts' forecast errors and increased cash flows (Dhaliwal, Li, Tsang, & Yang, 2011),
- exhibited cheaper equity financing (Dhaliwal, et al., 2011[21]; El Ghoul, Guedhami, Kwok, & Mishra, 2011),
- lessened debt financing costs (Dhaliwal et al., 2011; Goss & Roberts, 2011),
- displayed significantly lower capital constraints (Cheng, Ioannou, & Serafeim, 2014),
- positively influenced analysts' recommendations thanks to the disclosed non-financial information (Ioannou & Serafeim, 2014), and
- brought positive abnormal returns (Dimson, Karakaş, & Li, 2015).

Nonetheless, even if these results generally indicated the benefits for investors of corporate ESG performance – assuming that the stock market values corporate ESG performance – the presence of the two theories and mixed empirical results do not allow to predict precisely the sign of CSR's impact on corporate performance. Besides, there is an important difference between ESG performance and **ESG disclosure**. As an example, reports are often positively biased since companies tend to display favorable information for their image. Deegan and Rankin's (1997) paper revealed that reports users considered

[21] For large organizations.

annual reports' environmental disclosures as material, while ranking that information behind traditional financial information. In addition, the value-relevance of ESG engagement may not be due to informative disclosures but to extensive ESG activities enabling companies to give more details about their performance. A positive relationship between ESG disclosure level and performance or by a higher degree of value relevance of ESG performance for firm publishing ESG information can confirm/ indicate this argument. Finally, Gelb and Strawser's (2001) study argued that companies disclosed CSR information for a normative motivation. They found a positive relationship between disclosure level and CSR. Therefore, socially responsible companies provided more information about their responsible activities and had better relations with investors. According to the authors, increasing ESG disclosures was thus a form of socially responsible behavior.

Nonetheless, studies revealed that the complexity of the corporate future performance's assessment and the potential lack of correlation between the different measures lessens analysts' reactions to NFI. For instance, Plumlee (2003) showed that the information complexity diminishes analysts' use of information. However, <IR> may resolve some of the reporting challenges. For instance, it has been evidenced that improving disclosure positively affects the treatment of that information. The separation between sustainable information and financial information has been criticized as insufficient to meet stakeholders' information needs. With regard to this information function, the IIRC (2013a) and Eccles et al. (2014) argued that an integrated report solved this prevalent limitation in the reporting landscape. In addition, this suggests that integrated reporting better-quality information format could influence users' information processing. For example, regarding audited information, Hodge (2001) evidenced that companies can influence investors' perceptions by linking unaudited data to audited financial information. Thus, integrated reporting raises the prominence of NFI through the combination of multi-capital data. For instance, Hirshleifer and Teoh's (2003) paper argued in favor of aggregated information but also redundancy, improving report users' information processing. Agnew and Szykman's (2005) findings concerning defined contribution plans suggested that individuals with lower financial knowledge were overloaded by information and stressed the information design' significance. However, some questions remain unanswered. This thesis will look into interrogations like: Is <IR>

able to enhance the **sustainable performance measurement**? Does <IR> increase the **value-relevance of sustainable performance**?

Moreover, when referring to the **signaling theory** (Akerlof, 1970; Spence, 1973) reporting on ESG performance might signal the organization' sustainability leadership, especially when the early adoption of <IR> enabled to build a strong socially responsible reputation. Empirical studies have proved the existence of a positive association between sustainability's reputation and financial performance. Using American non-financial companies from 1999 to 2002, Lo and Sheu (2007) found a significant positive relationship between corporate sustainability and financial markets valuation. This result supported that sustainable companies were rewarded with a higher market value. Moreover, Lourenço, Callen, Branci, and Curto (2014) evidenced a stronger market valuation of the net income of firms with good sustainability reputation. However, Cheung's (2011) paper based on a sample of American stocks from the DJ Sustainability World Index over the period 2002 to 2008 indicated that event announcement of index inclusions and deletions did not significantly impact stock return and risk, while the price and liquidity shifts experienced were temporary.

iv. Integrated Reporting

The few published papers have focused on the theoretical development of **integrated reporting**, case studies and on the comparison with other forms of voluntary reporting. Adams and Simnett (2011) considered integrated reporting as the new paradigm and future of corporate reporting. It is viewed as holistic, strategic and more meaningful than other reporting strands. From an empirical point of view, Jensen and Berg (2012) used the institutional theory to analyze why companies chose different reporting strategies. They examined the determinants of <IR>, as opposed to sustainability reporting, and found that various country-level factors (e.g. level of protection laws, degree of economic, environmental and social development, etc.) influenced the practice of <IR>.

A couple of studies (e.g. see O'Dwyer, 2002; Cooper & Owen, 2007) argued that integrated reporting finds its legitimacy in fitting societal norms. For instance, Palazzo and Scherer (2006) considered a new approach for organizational legitimacy due to the characteristics of modern societies and CSR discourses shifting in the direction of *moral legitimacy*. This approach involved companies actively justifying their activities in the

public debate. Besides, in a complex pluralistic environment, Palazzo and Scherer (2006) proposed a communicative approach toward legitimacy in which stakeholders are part of a dialogue and constituent of legitimacy. The authors based their reflections on Habermas' (1985) theory of *communicative action*[22]. In this respect, integrated reporting emphasizes the gathering of different rationalities as a basis for social order. Integrated reporting seeks legitimacy in a constantly evolving field where neither the practice nor the (institutional) environment is fixed. Consequently, legitimating <IR> requires societal involvement in public discourse over interpretations of what is valued and valuable for <IR>. Moreover, Scherer and Palazzo (2007, 2011) criticized the *positivist* and *postpositivist* CSR schools of thought and proposed that, under the conditions of globalization, organizations endorsed a more social and political role. Finally, Scherer, Palazzo, and Seidl (2013) explored the three strategies of corporate legitimacy[23]. The authors claimed that the best approaches to these strategies is the *paradox approach*: companies should use different response strategies simultaneously, even if conflicting.

a. Corporate Reporting Functions and Organizational Change

In this part, I would like to draw particular attention to two specific topics regarding <IR>. These are the **two functions of corporate reporting** and the **model of organizational changes**. I encountered these theories during my research and found them particularly relevant in understanding the complexity of organizations. Besides, linking to my proper experience regarding my internship, these theories reflected the notion of business as living being which exists in business ecosystems, as well as their purpose to foster a sustainable economy and society.

Few studies have investigated the *internal process of developing integrated reporting*. So far, whether integrated reporting is driving organizational change remains unclear. Given the lack of knowledge on how the adopters of IR are implementing this new practice, Stubbs and Higgins (2014) explored the internal mechanisms employed by Australian

[22] This theory argued that social actors interact actively, raising validity claims. Thanks to human rationality argumentation enabled individuals to contest these claims, learning from others and from their knowledge through questioning personal suppositions and dogmas.

[23] Namely, the isomorphic adaptation strategy, the strategic manipulation strategy and the strategy of moral reasoning (in accordance with Habermas' theory).

early adopters of <IR>. Their study draws insights from Laughlin's (1991) model of organizational change to explore whether integrated reporting is stimulating innovative disclosure processes. Integrates reporting raises new challenges compared to SR. Therefore, a certain number of interviews have been conducted with several managers related to <IR> in large organizations in the empirical part of this thesis. These interviews aimed to gain more knowledge in these reporting initiatives.

The information and Transformation Functions of Corporate Reporting

The considerable amount of market transactions in capitalist economies produce price signals reflecting individual preferences. The incorporation of relevant information into the decision making process of economic agents – individuals and organizations – enhances the liquidity of these markets. Corporate reporting intends to provide business counterparts with the necessary information regarding each economic transaction. This is the **information function** of corporate reporting. Decision useful information is likely to encourage more transactions and, all else equal, under better terms. Corporate reporting performs also the **transformation function**. Contrary to the information function, it assumes that the counterparties evaluate the information gathered, allowing for engagement and activism. Consequently, these counterparties will actively strive to bring change where they see opportunities to influence corporate behavior to their benefit. These engagement, activism, and change processes enable a company to transform itself.

Nonetheless, the transformation function does not assume that the information function is executed effectively. Counterparts engage frequently under conditions of information asymmetry. As a consequence, better informed counterparts will be able to spend their efforts more efficiently. The two functions can be combined within the firm. For instance, as the company seeks to improve its performance and is required to report on it externally, this may influence the internal decision making. Eccles and Serafeim (2014) assumed that <IR> had the potential to transform organizations. Consequently, the following discussion will refer to Laughlin's (1991) model of organizational change.

Organizational Change

In 1991, Laughlin explored **organizational change** in response to external environmental shocks. He conceptualized organizations as consisting of two intangible components

(*interpretative schemes* and *design archetypes*) and one tangible (*sub-systems*). The Illustration 5 depicts these organizational components in order of intangibility.

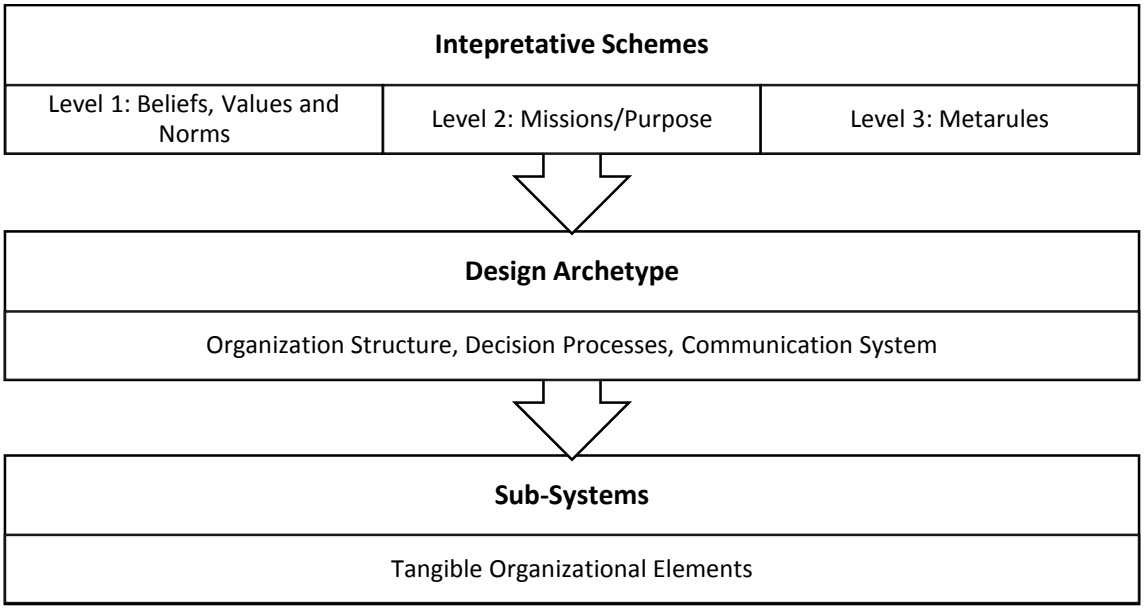

Illustration 5. The Relationship between Organizational Components (in Order of Intangibility)

Source: Laughlin (1991, p. 211).

Initiated by an environmental shock, **first-order change** results in changes to the design archetype and/or sub-systems without altering the core of the organization. **Second-order change** affects all components, getting into the corporate DNA. Laughlin identified two first order pathways for change (*rebuttal* and *reorientation*) and two second order (*colonization* and *evolution*). Contrary to the rebuttal pathway, reoriented shock is internalized by an organization and results in changes to the design archetype and sub-systems. Furthermore, evolution occurs when a shock decided by the whole organization modifies the design archetype and sub-systems, through reshaping the interpretive schemes, whereas colonization is forced upon the organization by a small group.

Laughlin's model has been used to examine environmental accounting in the dynamics of organizational change. Organizational change suggests that companies transform when responding to the environmental agenda. In their case study based on Spanish companies, Larrinaga-Gonzalez and Bebbington (2001) proposed that disclosures aligned with the corporate rationale (within the interpretive scheme) are more effective in driving changes. However, no other evidence has been found for significant changes in internalizing this

concept. For example, Gray, Walters, Bebbington, and Thompson (1995) investigated how accounting enhanced organizational responses to environmental disturbances, using Laughlin's model of organizational change. While they found some evidence for a rise in environmental accounting and the role for accountants, they remained skeptical regarding the notion of environmental accounting. Furthermore, in order to assess the interaction between environmental accounting and organizational change, Larrinaga-Gonzalez, Carrasco-Fenech, Caro-Gonzãlez, Correa-Ruiz, and Maria Páez-Sandubete (2001) investigated Gray et al. (1995) critics through conducting case studies in Spain. In line with the previous research, they pointed out the lack of change in corporate perceptions of environmental issues and the attempt to control the environmental agenda. Thus, both studies gathered evidence that environmental accounting was used to control environmental issues rather than encouraging change. These findings point in the direction of institutional appropriation[24].

These results query the ability of integrated reporting to drive change toward more sustainable outcomes. On one hand, thanks to its acknowledgement of the capitals' connectivity in affecting companies, <IR> offers possibilities to rethink organizational interpretive schemes. In addition, its enlargement of capitals stewardship corresponds partially to an interpretive scheme which admits that a prosperous economy depends on a healthy ecology and *vice versa* – referring to a second-order organizational change. On the other hand, the focus of integrated reporting on value creation as well as on investors may suggest that <IR> reinforces the capitalist interpretive schemes.

As previously mentioned, several studies found that internal contextual factors influenced the sustainability reporting practice. This suggested that SR instigates organizational change through integrating sustainability data into strategy, and ultimately performance measurement systems (e.g. see Adams & McNicholas, 2007). Hence, these mechanisms related to internal characteristics reflect reorientation changes.

[24] See the previous section II. C. ii. *New Institutionalism*.

D. Performance Indicators

Integrates reporting is expected to address several corporate reporting challenges. For instance, the **integration of financial and non-financial information** into a firm's **performance measurement system** enables to provide relevant performance indicators in order to assess the corporate multi-capital performance. Thus, the relationship between non-financial performance indicators and <IR> deserves attention. According to PwC (2002), non-financial KPIs provide a more complete picture when assessing long-term value than financial metrics. Besides, Lev and Zarowin (1999) found that the usefulness of accounting information is negatively related to the degree of change experienced by companies. They supported a revision from accountants of financial statements in order to take intangibles into account. A necessary step is the improvement of non-financial disclosures' effectiveness.

Implementing more integrated KPIs is essential in order to optimize <IR> effectiveness. First, disclosed KPIs should be strategic, fitting corporate strategies. Second, KPIs should be material. They should emphasis on the material issues for the business model and stakeholders. This will enable stakeholders to assess management's effectiveness and understand the organizational link between sustainability and profitability. Third, multi-capital KPIs should support non-financial information providing a vital forward-looking perspective. Consequently, KPIs could be metrics related to the material factors of value creation and supporting the links between the business strategy and the future performance. They should help explain the corporate value creation mechanism and strategy, as well as the potential impact on the future performance (World Intellectual Capital/Assets Initiatives Network [WICI], 2010, p. 3).

Nonetheless, while companies improved the integration of material sustainability aspects into their business strategy, this improvement is not always reflected in their reporting practices. According to a study from PwC (2013) [25], many non-financial factors are still presented without context. Companies disclosed separated non-financial KPIs lacking

[25] Fifty-five percent of the companies analyzed by PwC described material capital inputs into their business models, but only 19% explained the resources and relationships relied upon to deliver the company strategy or the degree of dependence the company had on them. (PwC, 2013).

relevance and linkage with the holistic corporate performance (EY, 2012, p. 7). KPMG (2012, p. 8) suggested benchmarking KPIs in order to determine the most relevant KPIs and linking them to the business strategic. Besides, PwC (2013, pp. 6, 29) observed that while 55% of the 40 JSE-listed companies surveyed had identified one or more material capitals, only 6% effectively communicated their holistic performance. Likewise, PwC (2013, p. 30) found that 81% of the JSE's top 40 companies' reports could improve in the purpose and definition of KPIs. Nevertheless, 71% of KPIs were quantified, indicating progress in the process of disclosing comparable non-financial factors.

E. Research Question

The recent emergence of integrated reporting offers countless research opportunities for academics. Especially, only a few studies have explored integrated reporting due to its novelty. In addition, while several papers focused on the reasons of the <IR> adoption, few investigated its implementation. Hence, although integrated reporting is supposed to bring numerous benefits, its practice raises several challenges. The literature review evidenced that the relationship between multi-capital performance indicators and <IR> deserves attention. More specifically, **the implementation of a successful performance measurement system associated to the concept of integrated reporting** has not been studied by scholars. Therefore, this thesis intends to fill a gap in the academic literature on integrated reporting.

Since 2013, the concept of integrated reporting is established on the principles-based IIRF. One of the content elements of <IR> is *performance*. The framework proposes to consider "To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?" (IIRC, 2013a, p. 28). Companies taking this topic into consideration could expect experiencing a positive yield. Hence, I explored the practice of integrated reporting, by asking several questions related to the performance focus of financial companies' integrated reports. For example, I looked into which performance metrics are reported and why these are the ones disclosed. I observed how KPIs are used to manage corporate performance. In addition, I studied how better data quality (e.g. more relevant KPIs) enhance the benefits of <IR> (e.g. better assessment of corporate activities' risks and impacts). Besides, I examined how the companies enhance the connections and connectivity throughout their report and link their business activities to their capitals and strategy. More broadly, I delved into the implementation of a PMS within the IIRF. As a result, I researched its impact on the business as well as the effect on the corporate thinking. Therefore, the empirical part of this thesis will explore the following main research question:

> *How to successfully implement a Performance Measurement System within the conceptual International Integrated Reporting Framework?*

It should be noted that the IIRF does not provide guidance on performance measurement. It highlights the value creation process as explained previously[26]. Besides, the IIRF appears to be more concerned with external reporting than with internal systems. Hence, my research on internal PMS will be limited, and will focus more deeply on the external representation of the PMS (as disclosed in the reports or evidenced through the interviews). Moreover, as stated by R. Howitt, member of the European Parliament, the focus of research should be *"about how"* where companies *"learn by doing".*

Furthermore, to assess the relevance of investigating the relationship between PMS and integrated reporting, I referred to the Association of Chartered Certified Accountants (2013), which surveyed managers to sense the impact of <IR> on corporate performance reporting. To the question "What would you consider to be the main benefits of a shift towards integrated reporting?", 42% responded that <IR> could explained better "the linkage between sustainability and long-term performance" (Association of Chartered Certified Accountants [ACCA], 2013, p. 20). In addition, to the question "In which of the following areas do you think the annual report needs greatest improvement?" 37% answered the "reporting of key performance indicators" (ACCA, 2013, p. 16). These results demonstrated the usefulness for companies to improve their PMS associated to integrated reports and the necessity for academics to study these developments. Finally, for P. Druckman, CEO of the IIRC, the topic of <IR> is of "p*ublic interest"*. Stakeholders require "*Better availability of credible information, relevant to markets".* Hence, studying the links between PMS and <IR> aims to go *"a step ahead"*, understanding *"how we connect things and not only why".*

[26] See the previous section III. B. i. a. *The Fundamental Concepts of <IR>*.

IV. METHODOLOGY

A variety of research methods could have applied to study the implementation of a corporate performance measurement system with the IIRF. The methodology used ensues from the designed objectives of this thesis. First, I aimed to learn from organizations implementing the integrated reporting guidelines – **AEGON** and **ABN AMRO**. Second, I purposed to sense the views, practice and assessment of external stakeholders – **PwC** – regarding the corporate PMS embedded in the <IR>. Consequently, the goal of this empiric research was to respond to my research question[27].

This has been realized through favoring **discussions** concerning corporate commitment toward <IR> objectives rather than broader cross-sectional modelling between different organizations. The interviews' data were analyzed in an interpretive manner. Therefore, a series of models summarizing interviewees' views will be presented[28]. Moreover, I carried out an analysis of the content of the 2015 integrated reports of AEGON and ABN AMRO.

Furthermore, according to P. Druckman, there is a "*problem with investor's confidence in the information provided. Capital markets have failed, not where need to be. [Hence, there are] needs intervention for financial stability and sustainability development.* Therefore, the support for financial stability and sustainability development has reached a global momentum throughout this last decade. The financial services industry has experienced multiple challenges related to the lack of transparency of its members. This lack of transparency deepened the mistrust associated to the roots of the financial practice. Hence, this thesis intends to review banks and insurers methodology to tackle multiple social and economic challenges, notably through the issuance of an integrated report. Moreover, these challenges faced by financial organizations required them to foster their story of long term value-creation. One hypothesis suggests that the PMS can help elaborating indicators presenting a wider view of value creation. Therefore, the examination of their

[27] How to successfully implement a performance measurement system within the conceptual IIRF?

[28] Several interviewees expressed the willingness to obtain the outcomes of this study.

integrated reports seeks to inspect the successful implementation of organizational performance measurement systems.

For this empirical study, the following three organizations have been consulted: AEGON N.V.[29], ABN AMRO Group N.V. and PricewaterhouseCoopers (PwC). For the written transcript as well as the interview guide[30], please refer to the following annexes: Annex 4 (Interview Guide), Annex 5 (Interview with N. Smith, Aegon), Annex 6 (Interview with E. Blonk-Jetten, ABN AMRO), Annex 7 (Interview with N. Vanhove, PwC), and Annex 8 (Interview with C. Metlzer, PwC). The Table 1 summarizes the positions of each interviewee within their organizations. The interviewees represent four groups of people involved in <IR>: N. Smith is a member of a sustainability team, E. Blonk-Jetten works in a finance and accounting team, whereas N. Vanhove is a consultant and C. Metzler a sustainability auditor. Hence, I have heard the views and opinions of very diverse internal and external stakeholders.

Table 1. Presentation of the Interviewees

Interviewee	Interviewee Name	Company	Role
1	Neil Smith	AEGON (Insurance)	Senior Associate, Sustainability Department, AEGON (NL) – co-chair of the <IR> Insurance Network
2	Elsbeth Blonk-Jetten	ABN AMRO (Bank)	Head of External Reporting, ABN AMRO Group N.V. (NL)
3	Nathalie Vanhove	PwC (Consulting and Auditing)	Senior Manager Finance and Performance Management, Management Consulting, PwC Belgium
4	Colin Metzler	PwC (Consulting and Auditing)	Senior Associate, Sustainability and Climate Change, Risk Assurance, PwC Belgium

All the interviews were conducted during the months of May, June and July 2016. They took place either as face-to-face meetings at the interviewees' offices, either via phone calls. All interviews were tape-recorded and transcribed while notes were also taken. Each interview lasted for about one hour and followed a semi-structured format with a series

[29] AEGON co-chairs the <IR> Insurance Network.

[30] Several references have been used to determine the questions posed in the interview guide. Concerning the performance measurement part, I used parts of research questions included in Searcy (2012, pp. 248-250) future directions for research. Regarding the integrated report part, I used Cheng (2014, p. 100) paper on potential future research projects.

of general questions relating to the corporate performance measurement system and integrated reporting. Besides, interviewees were encouraged to talk at length about their perceptions concerning these topics, but also about the future development of <IR> and measurement systems.

Moreover, I attended the join event held by the Federation of European Accountants and the IIRC on *Corporate Reporting: Enhancing Transparency and Value – From the Non-Financial Information Directive to Integrated Reporting*. In this event, I had the possibility to discuss current issues of integrated reporting with the IIRC's CEO, P. Druckman as well as with a handful of IIRC members, and <IR> practitioners and stakeholders. In addition, I participated to the webinar held by the Sustainability Accounting Standards Board (SASB)[31] on *The SEC*[32] *and the Regulation S-K Concept – What Financial Executives Need to Know*. For written transcript of the event and the webinar please refer to Annex 9 (IIRC Event on Corporate Reporting), and Annex 10 (The SEC and the Regulation S-K Concept).

[31] Presented by E. Waltner, Former Chair, Securities and Exchange Commission and SASB Board Member; Tom Riesenberg, Former Deputy General Counsel for EY and Director, Legal Policy for SASB; and, Jean Rogers, Founder and CEO, Sustainability Accounting Standards Board.

[32] The abbreviation of SEC stands for Securities and Exchange Commission.

V. RESULTS

Providing a rich source of information, and combined with information displayed in the integrated reports, the interviews gave a clear picture of the **integrated reporting practice** by global Dutch financial organizations as well as the opinions of Belgian <IR> stakeholders. An analysis of the data collected from the semi-structured interviews will be presented in the following pages. The first chapter introduces the three companies analyzed. Then, the second chapter exhibits the results of the research. The findings cover the notion of integrated thinking and the PMS methodology. In the next part (VI. *Discussions and Recommendations*), I also used the data collected to discuss the current state of <IR> in the banking and insurance industry as well as potential future developments of integrated reports (e.g. mandatory reporting, integrated KPIs, etc.).

A. Presentation of the Companies

i. Presentation of Aegon

Aegon is a global leading financial services organization, providing life insurance, pensions and asset management. Aegon employs over 31,500 people, serves 30 million customers and have more than €700 billion in assets (Aegon, 2016a). The four strategic objectives are: "Loyal customers; Operational excellence; Empowered employees; Optimized portfolio" (Aegon, 2016a, p. 22). According to Aegon (2016a, p. 22), "optimizing [their] portfolio ensure[s] [to] meet [their] long-term commitments to stakeholders by delivering sustainable financial results and maintaining a strong and stable balance sheet". In addition, Aegon puts emphasis on acting and investing responsibility. Finally, Aegon is a signatory of the UNEP-FI's Principles for Sustainable Insurance.

Responsible business

Aegon's responsible business commitment assures "to create value for all our stakeholders" through their business (Aegon, 2016a, p. 28). For Aegon, "being

responsible […] means that [they] integrate the needs of [their] stakeholders into [their] decision-making" (Aegon, 2016a, p. 28).

Investing responsibly

Aegon has "a longstanding commitment to responsible investment" (Aegon, 2016a, p. 29). Hence, Aegon "incorporate environmental, social and governance considerations in [their] investment decisions" (Aegon, 2016a, p. 29). Aegon is "also increasingly able to identify investments that […] make a positive impact on the societies in which [they] operate" (Aegon, 2016a, p. 29). The Annex 11a displays these impact investments.

Moreover, Aegon has also "a responsibility as a provider of capital. [Aegon] believes in active ownership and [their] ability to contribute to wellbeing and sustainable development. By integrating ESG criteria into investment decision-making, [Aegon] can have a positive impact on long-term, risk-adjusted financial returns." (Aegon, 2016a, p. 30). The Annex11b exhibits the responsible investment policy of Aegon.

Principles for Sustainable Insurance

Finally, "Aegon is one of the founding signatories of the UNEP-FI's Principles for Sustainable Insurance (PSI). The aim of the PSI is to make sure sustainability becomes business as usual." (Aegon, 2016a, p. 70). The following four principles of the PSI are:

- "[Embedding] decision-making ESG issues relevant to the insurance business.
- [Working jointly with] clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions.
- [Working jointly] with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance issues.
- [Demonstrating] accountability and transparency in regularly disclosing publicly […] progress in implementing the principles." (Aegon, 2016a, p. 70).

ii. Presentation of ABN AMRO

ABN AMRO is a full-service bank, primarily focused on the Netherlands. ABN AMRO employs over 22,000 people, serves retail, private and corporate banking clients and has an operating income of more than €8 billion. (ABN AMRO, 2016, pp. 4-5). ABN AMRO business principles are: "I aim to provide my clients with the best solutions; I take responsibility, I only take risks I understand; I am a passionate professional; I am

committed to sustainable business practices; I build relationships through collaborations" (ABN AMRO, 2016, p. 5) Besides, the five strategic priorities "designed to create sustainable value to stakeholders" (ABN AMRO, 2016, p. 26) are: "Enhance client centricity; Invest in our future; Strongly committed to a moderate risk profile; Pursue selective international growth; Improve profitability" (ABN AMRO, 2016, p. 5). Finally,

> *"ABN AMRO has increasingly integrated sustainability into its core activities. As a result, we have integrated the material sustainability issues into this report as from 2015. […] The sustainability information contained in this Annual Report has been prepared in accordance with the Sustainability Reporting Guidelines G4 of the Global Reporting Initiative. Our independent auditor, KPMG, has reviewed selected sustainability figures, which are labelled '<S>' in their respective headings. Going forward ABN AMRO will take further steps towards publishing a fully assured integrated report." (ABN AMRO, 2016, p. 2).*

For ABN AMRO, "banks […] have a responsibility to shape and ensure the sustainable development of business in the future. […] That means doing business responsibly, putting […] clients' interests centre stage and addressing the risks related to climate change, human rights and the shortage of natural resources" (ABN AMRO, 2016, p. 114). The bank planned a sustainability strategy up to 2017. The objective is to achieve "a positively recognized position on sustainability and transparency" (ABN AMRO, 2016, p. 114). ABN AMRO endorses "international standards such as the UN Global Compact". (ABN AMRO, 2016, p. 114). The Annex 12a exhibits ABN AMRO sustainability strategy.

ABN AMRO invested in the StartGreen Capital investment funds. Through venture capital, ABN AMTO finances clean-tech companies. "By investing in StartGreen, ABN AMRO creates societal return in two ways: by financing innovation and by stimulating sustainability" (ABN AMRO, 2016, p. 118). The Annex 12b displays eight of the 14 investment composing the portfolio developed by StartGreen.

iii. Aegon's and ABN AMRO's Integrated Reports Features

Regarding Aegon's and ABN AMRO's integrated reports, I selected several items from the reports. The Table 2 displays the selected characteristics of the companies.

Table 2. Integrated Reports Features

Item	AEGON[33]	ABN AMRO Group N.V.
Report Title	AEGON 2015 Review (*2015 Review Supplement*)	Annual Report 2015
Report Sub-title	Creating meaningful connections	Long-term stakeholder value: the heart of our story
Type of the report	Sustainability report	Annual report
Report audience	Customers, employees, business partners, investors and other stakeholders	Stakeholders (private client, corporate client, employee, investor relations, society at large)
Number of pages	80 (*15*)	488
GRI Framework	GRI G4	GRI G4
Other non-financial frameworks	International <IR> Framework; Principles for Sustainable Insurance	International <IR> Framework; Corporate Governance Code,
Assurance provider for non-financial data	PwC	KPMG Sustainability

Source: Aegon (2016a, 2016b) and ABN AMRO (2016), compiled by the author.

iv. Presentation of PwC

Nathalie Vanhove has been an auditor at Coopers and Lybrand for ten years. She was specialized in the insurance industry. After working as business controller and as global Program Director for Finance and Transformation at British Telecom, she came back to PwC two years ago as Senior Manager in the Finance and Performance Management Team (60 employees).

Colin Metzler is Senior Associate in the Sustainability and Climate Change services (five employees). The team has some clients from the financial services industries. The main part of the work is to support clients on reporting challenges (GRI appliance, integrated report, assurance on non-financial dimension, on KPIs, advisory services for sustainability strategy implementation, stakeholder engagement, etc.). For C. Metzler integrated reporting is *"a hot and very interesting field of work*". It's *"emerging, and fast-developing"*. In some sense, it provides a playground with new concepts, many questions

[33] AEGON published a *Review Reporting Supplement* to its integrated report. Its objective is to detail their compliance with GRI and the IIRC. The data related to this supplementary report are indicated between brackets and in *italic.*

and different answers. Companies *"learn from experiencing"* as well as from competitors. He pointed out that *"only big client companies move to <IR>"*. For C. Metzler, the integrated mindset is more essential than the reporting tool. It enables to *"take a comprehensive look and to ask the good questions"*.

PwC has been a frontrunner in the implementation of <IR> for its clients. For instance, PwC UK created the Total Impact Measurement and Management process. The TIMM model presents a new language for business which allows companies to value and compare the holistic impact of their strategies. However, for C. Metzler, *"this exercise is very comprehensive, requiring a great amount of data"*. Nonetheless, in a few years – when technology will enhance data procurement and storage - the TIMM might be a common practice within PwC clientele.

B. Performance Measurement System within Integrated Reports

This chapter intends to combine the results of the interviews with an analysis of the integrated reports. The first section looks into the fundamental concept of integrated thinking (<IT>). The second section explores the design of the performance measurement systems (PMS). In addition, it focuses on the format of the integrated reports published by the two financial companies. Furthermore, the last section delves into the implementation and usage of the PMS. This section is composed of the following sub-sections: Stakeholder engagement; Performance measures selection, KPIs purpose and definition; Integrated reports' balanced view and KPIs alignment; and, Performance benchmarking.

i. Integrated Thinking

Integrated thinking appears as the cornerstone in developing <IR>. P. Druckman emphasized that "*<IR> is more about the thinking than the report".* The IIRC's definition of integrated reporting reflects its prominence:

> *"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 […]." (IIRC, 2013a, p. 7).*

The interviews, especially with C. Metzler, confirmed the intuition that integrated reporting starts and grows with <IT>. For C. Zerlaut, Sustainability Performance Director at SAP, "*<IR> led to IT".* J. Banerjee, leader of the IIRC Technology Initiative, highlighted that "*<IR> is the final outcome of the process of <IT> ".* I observed a rising awareness for <IT> from both companies and consultants' sides. Even if <IR> disclosures have a strategic incentive, C. Metzler argued that, ultimately:

> *"<IR> is having a good availability of data, a good understanding of what is actually happening or how is something performed, having a good overview, making informed decision, having a good strategy that incorporates the risks".*

However, integrated reporting is a new concept for the majority of companies. Numerous companies still struggle with sustainability development. For C. Metzler, *"thinking in non-financial terms, impacts and risks"* has not always been the main interests of organizations. Getting a good comprehension of the corporate activates' impact is a challenging exercise. Besides, while the <IR> Framework provides principles, no standards are

displayed. Thus, the internal implementation seems primarily based on the thinking (contrary to the external reporting which is more clearly defined within the IIRF guidelines). Hence, companies must start this thought process up through reflecting on themselves. In some way, organizations are required to comprehend how they can best tell their story. Ultimately what matters to stakeholders is this storytelling – *"how you create value, what are your impacts, risks and performance"* (C. Metzler). Consequently, through the <IT> process, <IR> can enhance the communication of the company' story. The discussion on impacts and risks will enable stakeholders to get a better picture of the firm. Thus, integrated reporting adds value to your stakeholders. For instance, investors can build a better judgment on your NFI, which is more forward-looking than financial data. NFI provides information which was not available before <IR>.

Within Aegon, the <IT> approach is the main change in the business model. The Business Control team integrates more non-financials and acts as the leader of <IT> within the firm. Within ABN AMRO, integrated reporting results more in internal discussions – about <IT> – than in major changes in the business model. The focus is now more on the valuation than on the value added of NFI and KPIs. The externally reporting on non-financial KPIs requires some focus. In other words, according to E. Blonk-Jetten, "*it wasn't really a change in outcomes, but it changes in the way the dialogue is continued internally*". The implementation of KPIs within a IIRF emphasizes the "*link […] between your inputs, your business model and your outputs*" (E. Blonk-Jetten). Debt and equity investors but also NGO gave ABN AMRO some positive recognition.

ii. Performance Measurement System Design

Table 3. Design of the Performance Measurement Systems

	AEGON	**ABN AMRO**
Number of PMS	Multiple but changing into one integrated system	One (Internal Management Control Cycle)
Responsible of the PMS	Business Control Team (created 3 years ago)	Coordination Team within the Controlling and Strategy Department but Top Management is the ultimate responsible
Responsible of the sustainability PMS	Business Control Team in cooperation with the Sustainability Team	Controlling and Strategy Department
Role of the PMS	Developing financial and non-financial KPIs, indicating how the company is performing	Determining the performance measures and the appropriate methodology *"for the whole bank"*

	Business Control: Corporate performance
	Sustainability Team: Performance related to the GRI standards and IIRC principles

We can observe a clear difference between the two PMS. On one hand, Aegon possess multiple small PMS. On the other hand, ABN AMRO has one large PMS, requiring a coordination team of six people. When compared with the internal characteristics observed previously[34], the management and corporate legacy[35] can be responsible for these differences.

Within Aegon, since its creation, the Business Control (and the Sustainability Team) aims to focus on the drivers of corporate performance in spite of non-material performance indicators inherited from the corporate legacy. Although multiple PMS, with specific definitions and objectives, this is changing into a more integrated PMS. Within ABN AMRO, a coordination team synchronizes the multiple teams involved in the MCC. The existence of this cross-functional team indicates the broadening of parties implicated in the reporting procedure. Besides, even if the Controlling and Strategy team prepares the work, it's ultimately the responsibility of the top management board to decide which KPIs will be disclosed.

Furthermore, the difference in the services provided may explain these difference. While, both companies are members of the same financial services industry, AEGON focuses on Insurance and ABN AMRO intends to offer banking services. In line with the significant explanatory power of the industry factor found previously[36], this dissimilarity may explain several differences between the companies' implementation of a PMS within the <IR> Framework.

[34] See the previous section III. C. i. *Internal Organizational Characteristics*.

[35] N. Smith claimed that some misbehaviors are due to *"a legacy inherited"*.

[36] See the previous section III. C. i. *Internal Organizational Characteristics*.

a. Integrated Report Format

Table 4. Format of the Integrated Reports

	AEGON	**ABN AMRO**
Form of the integrated report – within the Annual report? (*place*)	No, Stand-alone (*Annual review*)	Yes
Reasons	Different objectives; Different audience; Different requirements and audits; and, More flexibility	Integrated and stand-alone are contradictory; and, Positive audience feedbacks

We can also notice a difference between AEGON and ABN AMRO's form of integrated report. AEGON's integrated report follows a double objective: compliance with standards and principles, and *"willingness to be an integrated report"* (N. Smith). In addition, the small percentage of investors interested in both reports and requirements on the financial statements of an annual report (compliance with both US and NL requirements) may explain this separation. Hence, the audit process is different and separated. On the other hand, E. Blonk-Jetten argued that the notion of *"integrated and stand-alone aren't in line"*. ABN AMRO preferred an integrated approach, where the audience can find everything concerning the company through the report. Investors have been very pleased with their report. The next step is the improvement of the website for stakeholders who desire to read only parts of the report.

Consequently, combining integrated reporting with existing regulatory requirements on annual reports represents a challenge for both organizations and auditors. J. Banerjee explained that <IR> should not become "*a compliance burden"*. Furthermore, insuring to respect the various <IR> principles while producing a concise report is also challenging. In this respect, E. Nooteboom, Head of Accounting and Financial Reporting at the European Commission indicated that there is "*too much information in different forms and instruments"*. Besides, even if P. Druckman argued that there is "*no prescribed format"* for integrated reports, E. Nooteboom claimed that "*<IR> should be one central point where we can find all this information"*. Accordingly, M. Vaessen, Chair of the FEE Corporate Reporting Policy Group maintained that integrated reports should provide *"an overview about value creation, business model strategy"*, and ultimately *"become the core report".*

For C. Metzler, the decision related to how and where to publish integrated reports in relation with other corporate reporting requirements lies between the hands of the

company's management. Their decision should be in line with the best approach for communicating their story to stakeholders. C. Metzler claimed that financial services could be more intended to separate out their financial report and a sustainability report, compared to for e.g. *"a chemical company where non-financial matters are more embedded in the business"*. However, only AEGON produces a stand-alone integrated report. Since the decision should be based on a communication objective, it appears to be crucial to take into consideration stakeholders' interests in this information. Furthermore, companies should help report users in making the rights links. C. Metzler argued that *"if you want to show that you use NFI to drive decision, then make sure that people understand how you make these links"*. Finally, both AEGON and ABN AMRO confided expecting to continue with their current form of report. It should be noted that Generali, which co-chairs the <IR> Insurance Network with Aegon, also a produce a combined integrated report (380 pages) – like ABN AMRO. M. Romano, Head of Group Integrated Reporting at Generali, claimed that there is "*no need of an additional report [since the] number of pages [has already been] reduced"*.

iii. Performance Measurement System Implementation and Use

Table 5. Implementation and Usage of the Performance Measurement Systems

	AEGON	**ABN AMRO**
PMS procedural strength criteria	Materiality (p. 15) of indicators "*What is important for the business, what do you want to measure, how can you see progress?*"	KPIs should be reliable, available/measurable and relevant
Critical success factors in the PMS implementation	PMS must correspond to "*the business needs*"	The outlook context; The planning; The deliverables assessed by the managing board; The management's clear commitment; Clear responsibility in the process of measurement and definition; Purpose and definition of KPIs; and, Relevant company-specific KPIs
Success factors for PMS relevance over time	Materiality *"what's important for the company, what drives performance, what makes us meet our strategic priorities"*	Yearly MCC; Integrated conceptual approach; Cooperation with other departments; and, Process planned for the entire bank

ABN AMRO referred to the following three criteria for guaranteeing its PMS procedural strength: **reliability**, **availability/measurability** and **relevance**; whereas AEGON focused primarily on **materiality**. Concerning the PMS relevance over time, AEGON' strategy experiences changes occurring every *"three to five years"* (N. Smith)[37]. ABN AMRO' strategy changes every three to four years ahead – they also felt the need to fine-tune minor yearly strategic updates – but the internal management control cycle is a yearly process. There is a strong focus on there is a strong focus on relevance – this explains why KPIs are disclosed only if ABN AMRO is certain to publish them for at least three years. ABN AMRO's PMS is an annual process with a strategic review. The Illustration 6 displays ABN AMRO's Yearly Strategic Review (YSR) process. ABN AMRO uses the YSR to review annually the validity and relevance of its long-term strategy. It starts internally in March regarding the *"annual report of the coming year"* (E. Blonk-Jetten). However, the process is not *"AR-driven, but [instead] a yearly strategic review"* (E. Blonk-Jetten). However, even if the process assesses *"whether [the] strategy still fits, whether […] an update is needed"* (E. Blonk-Jetten), the intention is not to considerably change the strategy every year. As depicted, the YSR starts with a fact base followed by a dialogue process with stakeholders. Thus, the following sub-section looks into companies' stakeholder engagement processes.

[37] In 2016, AEGON accelerated the previous strategy movement. They embedded deeper its responsible business strategy (more definitions, indicators, targets).

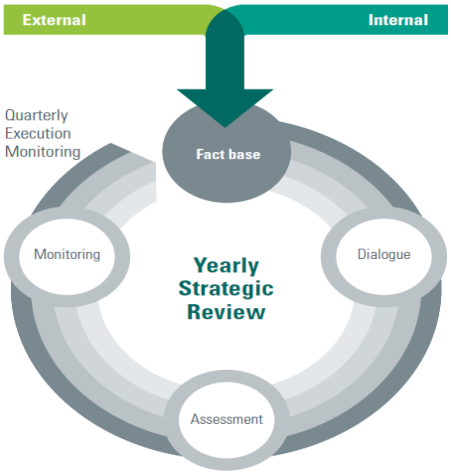

Illustration 6. ABN AMRO's Yearly Strategic Review

Source: ABN AMRO (2013, p. 33).

a. Stakeholder Engagement

Organizations must implement a **stakeholder's engagement process** – *"actively approaching stakeholders, […] identifying the issues and risks"* (C. Metzler) – in order to apprehend the business and especially its impacts. This enables to grasp the perception of the company and aspects sensed as important. This allows to map and focus on the issues pointed by stakeholders. In addition, companies can *"[identify] missing data and policies"* (C. Metzler). The integrated *"report serves the purpose to speak to […] stakeholders, it's [crucial] to understand their interest"* (C. Metzler). In this way, more <IT> implies including more NFI and in order to recognize these NFI, stakeholder's involvement is required.

Table 6. Stakeholder Engagement within Integrated Reports

	AEGON	**ABN AMRO**
Stakeholder analysis	Yes	Yes
Responsible of the stakeholder analysis	Independent consultancy company	Independent sustainability advisory firm
Composition of Stakeholders' group	See Annex 13.	See Annex 14.
Stakeholders weighting	Yes	No
Period of involvement	Since the beginning of the PMS for the creation of the materiality matrix	Since the beginning of the MCC (PMS) for the stakeholder dialogue

The Annexes 13a and 14a display the stakeholders' engagement process implemented by AEGON and ABN AMRO, respectively. These processes are more closely associated

with GRI G3.1 and G4 recommendations – which proposed to first identify stakeholders and then identify corporate impacts – than to the IIRF guidance which focuses mainly on providers of financial capital.

The Annexes 13b and 14b also exhibit the materiality assessment used a basis to determine the focus of the strategy and thus, of the PMS. Therefore, the next sub-section is concerned with the selection of performance measures.

b. Performance Measures Selection

Finding an agreement on which criteria KPIs should respect through the **KPI selection process** represents a challenging exercise. According to the Institute of Chartered Accountants of Scotland [ICAS] (2015, p. 4), each KPI should possess the five following characteristics:

Strategic	•Each KPI should be derived from and reflect the company's strategy and be material to the corporate value creation
Linkage	•Each KPI should be linked to the other information in the corporate report on which it is based
Reliability	•Each KPI should be accurate, capable of being reperformed and of withstanding challenge
Consistency	•Each KPI should be capable of being compared with the previous year's KPI and also preferably with other KPIs used
Completeness	•The combined KPIs should present a balanced view of the company's performance

Source: Institute of Chartered Accountants of Scotland (2015, p. 4).

According to C. Metzler, the successful implementation of the PMS, in line with the <IR> Framework, requires that the indicators respect the following criteria:

Relevance/materiality	• *"The stakeholder engagement process determines which notion of relevance/materiality should be applied"*
Reliability	• *"Fair and accurate data"*
Comparability	• *"Related to consistency"*
Transparency	• *"Explanation of assumptions or estimates"*

Whereas for N. Vanhove, the PMS should guarantee that the indicator selection process complies with the following requirements:

Manageable and Impactful	• *"Main criteria of the value drivers selection"*
SMART	• *"Specific, Measurable, Achievable, Relevant and Timely*"
Validity	• *"Related to the value drivers"*
Simple	• *"Easily communicable and transmissible"*
Controllable	• *"Related to managable"*

Table 7. Indicators Selection Process

	AEGON	**ABN AMRO**
Criteria for the KPIs selection	*"What drives the business needs"* Depending on the stakeholder review and the materiality assessment	Depending on the stakeholders' analysis
Criteria for the KPIs disclosure	Relevance	Relevance, reliability and availability
Current KPIs disclosed (number)	Strategic (8), Material (8) and GRI-relevant Indicators	Strategic KPIs (15) and KPIs per business (7)

Number of KPIs audited	*"Only a few KPIs are selected"*	Non-audited[38], only reviewed[39]
Type of assurance	Strategic indicators: Reasonable assurance Material indicators: Limited assurance Other KPIs: GRI G4	Reviewed in accordance with Dutch Standard 3000 *Assurance Engagement other than Audits or Reviews of Historical Financial Information*
Time horizon	Last two to three-year performance	Yearly but potentially three years' minimum
Targets	No (in the future)	No
Introduction of new KPIs if:	*"Materiality driven by regulatory change, activities within the business, economic or financial crisis"*	Relevance, reliability and availability (but no introduction expected in 2016)

We can observe that C. Metzler's opinion is particularly in line with ABN AMRO. According to E. Blonk-Jetten, ABN AMRO seeks to avoid *"cherry-picking"* by being able to consistently disclose KPIs for at least three years. KPIs disclosed are those available to *"focus on internally [and] relevant externally"* (E. Blonk-Jetten). Their number should be limited and should present "*a mix of financial and non-financial KPIs"* (E. Blonk-Jetten). Moreover, KPIs should fit the strategic pillars of ABN AMRO and should be meaningful to stakeholders. The disclosed KPIs are separated in two parts: in the business chapter with KPIs per business, and in the strategic report, with KPIs for ABN AMRO as a whole. Last year new KPIs have added and thus cannot be compared to previous years. Moreover, KPIs must be reliable. Therefore, some are audited, while others are reviewed by KPMG. At present, ABN AMRO aims to get "*a review on the text for sustainability issues"* (E. Blonk-Jetten). ABN AMRO intends *"to incorporate more reviewed KPIs in the [auditor's] assurance report"* (E. Blonk-Jetten). Moreover, the proportion of multi-capital measures should be equal and balanced. However, this requirement depends on regulators and also the KPIs' usefulness. The Annexes 15 and 16 present the KPIs disclosed in ABN AMRO's reports. The Annex 15 shows the 15 strategic performance measures for the years 2014 and 2015. Besides, the Annex 16 regroups the sustainability indicators that

[38] Only some disclosures in the Risk, funding and capital report contain audited information (on IFRS 7 and IAS 1) – part of the Annual Financial Statements

[39] Some sustainability disclosures have been review by KPMG – see Annex 14 *ABN AMRO's Reviewed Sustainability KPIs*.

have been reviewed by KPMG. These seven indicators are displayed in the business report (the part which follows the strategic report) of the integrated report.

AEGON guarantees the KPIs alignment with the strategy by reporting on *"what runs the business*" (N. Smith). In this respect, the evolution in <IT> may shift further to sustainability KPIs. The eight strategic indicators measure the corporate performance against the strategy. "These indicators relate directly to Aegon's four strategic objectives: Optimize our portfolio; Strengthen customer loyalty; Pursue operational excellence; Empower our employees." (Aegon, 2016b, p. 5). The material indicators are related to material topics for the company, but not linked to its strategy. "These indicators relate to our G4 materiality assessment. We took our 11 core G4 indicators and narrowed these down to the 8 we considered most material and relevant to our business and our stakeholders." (Aegon, 2016b, p. 5). The other indicators are selected based on their materiality from the material matrix, then mapped against the GRI G4. The auditing procedure *"adds credibility [and] value to the reporting"* (N. Smith). It supports *"better controls, more accurate data and [is used to run the business"* (N. Smith). The first audit took place eight years ago and is a very intense process. Aegon does not disclose quantitative targets due to the novelty of certain indicators (and thus the lack of comfort on its reasonability and relevance), but uses internal targets. For some parties, *"the trend is more important than the figure"* (N. Smith) as it explains the changes. Finally, the variation of indicators depends on the assessment of strategy, which is usually instigated *"every three to five years"* (N. Smith). The Annex 17 presents the eight strategic indicators and the eight material indicators. Both have been audited by PwC. However, the strategic indicators received a reasonable assurance[40], while limited assurance[41] has been provided on the material measures. The rest KPIs disclosed in the integrated report have been reviewed in line with GRI G4 guidelines.

Additionally, I displayed the value creation process of Aegon and ABN AMRO in the Annexes 18 and 19, respectively. The charts reflect the corporate creation of value. Aegon used the concepts of capitals in its Review Supplement (page 13). However, in its Annual Review, the company favored the notions of capital (related to financial capital in the

[40] "Reasonable assurance means our auditors are satisfied that, in our reporting, we are presenting a "true and fair" view of our performance." (Aegon, 2016b, p. 5).

[41] Limited assurance "means that our auditors provide a basic check that nothing in our reporting of these indicators appeared incorrect" (Aegon, 2016b, p. 5).

Supplement), talent and trust (both related to the intellectual and human capitals in the Supplement), and distribution compared to the six capitals. Similarly, it addressed its outputs as protection (related to the intellectual capital in the Supplement), benefits, profits, and ultimately society (the three are related to the social and relationship capital in the Supplement). I observed that Aegon argued to procure benefits and profits but linked them to the social and relationship capital, whereas the financial capital could seem more appropriate. On the other hand, ABN AMRO used the concepts of capitals as expressed in the <IR> Framework for the inputs. Their outputs are expressed under the forms of KPIs. Additionally, they detailed how the group creates value associated to each form of capital. Finally, their strategic priorities are embedded in the core of the value creation.

c. KPIs Purpose and Definition

Regarding the **purpose** and **definitions of performance measures**, AEGON and ABN AMRO presented different results. According to N. Smith, for whom KPIs should tell how the firm is performing toward its objectives, a lot of work has been done on KPIs definitions. The main reason is Aegon's decentralization (the figures in the review are an aggregation coming from eight different countries. *"For instance, in the US, the definitions were understood differently than in the NL"* (N. Smith), yet managers were giving information, *"running the risk of misreporting"* (N. Smith). Consequently, improving the understandability and the alignment have been one of the main task of N. Smith. Besides, the *"auditors have really added value"* (N. Smith) with these improvements. Definitions are also provided to external stakeholders. On the other hand, according to E. Blonk-Jetten, for whom KPIs are toward *"what you steer"* your company, internal stakeholders have not experienced difficulties in apprehend the KPIs. Perhaps thanks to the NL being the main market and 80% of the responsible group being Dutch. E. Blonk-Jetten hopes these KPIs are sufficiently understandable to external stakeholders. Finally, M. Vaessen argued that KPIs should be **"***more communicative"*. In addition, he claimed to move *"from NFI to multi-capitals".*

d. Integrated Reports' Balanced View and KPIs Alignment

For C. Metzler, the CEO statement is one example of the **transparency** and balanced requirement. A balanced view should be transparent *"about risks and issues encountered"* (C.

Metzler). Explanations about the cause and consequences should be given as well as the manner they are addressed. However, the balanced view depends on how the company's commitment to be transparent and trustworthy.

Table 8. Balanced View and KPIs Alignment with Integrated Reports

	AEGON	**ABN AMRO**
Balanced KPIs	A balanced view is the principle of the GRI and one of the goals of IIRC For e.g. see. *The challenge(s),* pages 18, 26, 29 of the report	Providing both financials and non-financials is one of the objective of ABN AMRO Introduction of new KPIs even when negative result
Verification of Balanced view	Auditors	ABN AMRO verifies that the KPIs can be disclosed for at least three years
Alignment of KPIs	KPIs selection based on the strategic objectives	*"Clear link between the strategy, the business model and the disclosed KPIs"* in the value creation model

AEGON intends to give explanations on both good and bad results, whereas ABN AMRO avoids the cherry picking practice in the reporting process.

e. Performance Benchmarking

For C. Metzler, "*It easy to position yourself against peers on the market if you use the same performance indicators"*. In addition, *"stakeholders can compare"* (C. Metzler) the corporate performance. While GRI encourages a greater comparability within sectors, IIRC should not become too prescriptive. According to P. Druckman, *"the data needs comparability but not the reporting"*. Thus, *"the process is part of the credibility"* provide to report users. Whereas benchmarking and comparability are useful, it's *"key to remain in the business mindset"* – *"does it make business sense, in terms of understanding risks, improving performance, working better with business partners."* (C. Metzler).

Table 9. KPIs Integrated Reports Benchmarking

	AEGON	**ABN AMRO**
Use of standardized indicators	Implied by the conformance to GRI Disadvantage of potentially disclosing irrelevant KPIs	Benchmarking purpose Disadvantage to not be balanced if too many KPIs
Company-specific KPIs implementation	More relevant	More material, relevant and strategic

	In conformance with <IR> and thus more flexibility	
PMS evaluation focused on benchmarking	Do not drive their decision making on peers since different material issues But check peers reports and discuss best practices	*"PMS should be linked to our business"* But discusses with peers' new ideas and potential learning experiences leading to an improvement in the reports; Also looking for peer- or industry-relevant KPIs
Comparable KPIs	GRI offers consistent indicators But first materiality and relevance, then comparability	Strategic KPIs are relatively comparable

Both companies indicated preferring **relevance to comparability**. For ABN AMRO, the primary objective of disclosures is to use relevant KPIs for both the company and the stakeholders. According to E. Blonk-Jetten, the PMS and KPIs *"should be linked to our business and not our competitors"*. One reason is that not all measures are comparable across organizations. However, benchmarking with peers and the industry may help both report makers and users. Regarding benchmarking, N. Smith argued that the IIRC should not go in the GRI direction in order to remain relevant to your business and not prescriptive. The IIRC gives some flexibility that allows to conform with the material topics, whereas GRI may have multiple indicators, but only a few are relevant. Therefore, "*sometimes, you are using standardized indicators but there are not relevant to your business, that becomes problematic".* (N. Smith). Therefore, concerning a benchmarking <IR> principle, E. Blonk-Jetten posits that the company should define itself the relevant metrics, in order to remain principles-based. For N. Smith, companies even in similar industries may have different interests. For example, AEGON has less interest in climate change than some peers because they are not involved in Property and Casualty insurance.

VI. Discussion and Recommendations

As seen previously, the corporate reporting landscape is highly dynamic. Businesses in the 21st century face increasing challenges. These developments have changed the way companies report. However, corporate reporting still presents a number of shortcomings. For instance, with regard to SR, for the same issues companies often using different indicators. Consequently, there is currently a lack of understanding regarding how to determine the materiality of sustainability issues, and there is no clear guidance on how to translate these issues into performance indicators. One of the many tasks at hand to realize such a change in the economy through business reporting initiatives may be to reach agreement on materiality, as well as on reporting guidance. Accordingly, as reporting initiatives continue to gain momentum, the spotlight on the definition and scope of KPIs being reported will only strengthen. The more that non-financial information becomes integrated into companies' decision making processes and their external reporting, the greater the need for report users to rely upon these KPIs. According to ICAS (2015), some recent regulatory changes have already encouraged greater alignment between KPIs and strategic objectives.

A. Mandatory Integrated Reporting

Several academics argued that mandatory sustainability reporting could address these challenges. Hence, in this chapter, I will discuss the possible positive **impact of mandatory integrated reporting**. Integrated reporting inherently aims for comparability and credibility. Mandatory <IR> could create a level playing field for corporate disclosures and allow benchmarking in the assessment of corporate performance which would contribute to better resource allocation decision making. For R. Howitt, *"regulation is part of the answer, helps the level of reporting"*. In addition, some current rules-based accounting standards could be replaced by some integrated reporting principles-based ones. This may give more flexibility to report makers and reduce complexity for report users. In this respect, M. Vaessen maintained to "*move toward compliance"*. In his opinion, mandatory would improve "*the communication of a company"*. However, mandatory disclosures would require one-size-fits-all indicators which lessens organizations' reporting flexibility. Mandatory <IR> would necessitate improved auditing enhancing the

reliability of the information disclosed in integrated reports. This audit will need to meet relevant country- or industry-based criteria. Even if providing an assurance on the reliability of the multi-capital statements will imply an increase in costs, it will also require companies to deepen their <IT> process. For R. Howitt, it's the "*role of accountants [to] ensure more sustainable business"*. Mandatory reporting will raise several questions with regard to the responsibility in creating new reporting standards.

Like with the standard GRI G4, mandatory integrated reporting will necessitate to identify a set of comparable KPIs. Consequently, in the Annex 20 I displayed Lyndenberg and Rogers' (2010) process allowing reports makers and users to successfully identify sector-specific KPIs will be essential. The criteria for indicators selection is part of larger debate about the implementation of <IR>. Through G4, GRI has already taken important steps toward the identification of industry-relevant KPIs. Increased disclosures about the impact of corporate activities seem inevitable since these activities increasingly influence stakeholders. As mentioned during the interviews, disclosures should be comprehensive and balanced. These requirements could assure an accurate assessment of change drivers and an appropriate focus on material impacts. The development of mandatory <IR> will have to balance these two requirements.

C. Metzler had particularly in-depth opinion on the assurance practice. PwC Belgium does not provide assurance on the concept of integrated report. One reason is that *"integrated reporting is not a standard, it's more of a guidance or a concept"* (C. Metzler). Hence, PwC sticks to the verification of the compliance with GRI. The interviews expressed that <IR> should remain principles-based, but a broader, thinking-focused, concept than GRI. Moreover, the definition of a standard fitting different companies represents a challenge. For instance, GRI constantly reworks its framework[42]. In this respect, it's vital to give organizations flexibility in their storytelling. Therefore, the IIRF's guidance offers this flexibility. According to C. Metzler, companies currently focus their reporting's relevance in order to enhance the storytelling of the corporate performance. Hence, *"you need flexibility to allow for choosing for what is relevant"* (C. Metzler). Moreover, the dynamism of the sustainability field *"makes it difficult to impose a standard"* (C. Metzler). At present, GRI

[42] GRI is for the moment proceeds to a consultation phase to come up with a new standard that builds on GRI G4.

becomes an expectation as it's a global standard. G4 addressed the issues related to the rigor of G3.1. It provides flexibility, with the idea of core principles – where you are expected to report. Hence, it's now topic-based and the idea is to introduce modules per topics, which modifies the disclosure structure.

i. Assurance on Integrated Reports

The interviews highlighted some concerns regarding like the completeness and true and fair notion of integrated reports. C. Metzler evidenced that assurance is now provided to only the information (and not the process). Hence, the assurance practice is currently limited to particular KPIs and GRI-compliant. **Credibility** on integrated reports could enhance stakeholders' trust and interest. In this respect, the concepts of materiality and reliability are essential. As previously mentioned, regulator could modify the regulatory environment in order to adapt to <IR> characteristics. It should be noted that the IIRF introduced the concept of reliability as:

> *"The reliability of information is affected by its balance and freedom from material error. Reliability (which is often referred to as faithful representation) is enhanced by mechanisms such as robust internal control and reporting systems, stakeholder engagement, internal audit or similar functions, and independent, external assurance."* (IIRC, 2013a, p. 21).

ii. Insights from the SASB on Sustainability Assurance

I participated to a webinar given by the SASB in order to better understand the topic of **sustainability assurance**. The webinar addressed the concern of establishing a standard related to sustainability issues and disclosures. The SASB recognized that the *"SEC hasn't examined disclosures of sustainability issues in detail since mid-1970s"* (SASB). Moreover, they argued that "*analysts need metrics and data to compare performance and risks, peer-to-peer comparison"* (SASB). For the SASB, *"materiality [should be the] basis for standard setting"*. Regarding the difference between, the notions of materiality and relevance, it has been argued that relevance is related to stakeholders about all "*ESG topics of interests"* (SASB), while materiality refers to *"sustainability factors likely to affect the financial condition or operating performance of a company"* (SASB). Besides, the SASB claimed that *"a market standard [would] eliminate the possibility of selective disclosure"* (SASB). This standard would *"allow peer-to-peer comparison"* (SASB) and would enable to evaluate performance with the context of industry value drivers.

B. Integrated Performance and Quantification of Non-Financial Measures

One of the possible development of integrated and sustainability reporting is the **quantification of NFI**. However, according to the managers, this remains an avant-garde challenging topic. One first step could be to improve the linkage of information. As a result, the emphasis should be put on demonstrating the relevance of measures and the clear links between KPIs and the strategy and the business model.

For Aegon and ABN AMRO, understanding how each KPI impacts another one is essential. Aegon's value chain allows to generate correlations between several KPIs. For ABN AMRO, the value creation model incorporates the linkage between KPIs and demonstrates their added value. However, these models remain limited. Regarding integrated KPIs, Aegon assumed that audit firms are the ones responsible for further development. N. Smith imagined that in a ten years this practice will be mainstreamed among large organizations. In addition, he argued that further research could investigate value destruction (*"negative value creation"* (N. Smith)). The challenge of indicators' integration is broadly discussed among the <IR> networks.

The quantification of NFI brings several benefits. First, it may represent a necessity since the business language is expressed through financial terms. Therefore, one could imagine the use of a likelihood or an impact scale to quantify certain impact or risks. This measurement would allow benefit to comparability of performance. Second, NFI quantification allows to gain top management support with the company. Third, it allows to better perceive the performance for report readers. However, the issue of measurement and the contestation of results remain outstanding. In this respect, I present the methodology used by SAP to integrate its performance in the next pages[43].

[43] PUMA developed also an advanced *Environmental Profit and Loss Account* which enables to quantify its environmental risks.

i. Improving the Linkage within the Integrated Report

AEGON intends to follow an integrated approach. The strategy has been related to what makes a company run. This required to link financials and non-financials together. As a knowledge-based company, the employees are essential. Consequently, indicators should prove that the strategy has been integrated into the business model. For ABN AMRO, the sustainability department is responsible for demonstrating the value creation story and encourage to tackle ESG issue, interrelating these matters to the business activities. In the Annex 21, I present four specific actions proposed by PwC (2014) to improve the linkage of information.

ii. The Example of SAP (Integrated Performance Analysis)

SAP is a **German software company** that provides ERP applications enhancing operations management. Since 2013, SAP publishes an integrated report. One of the main characteristics of its integrated report is the attention reserved to understanding the connections between multi-capital performance drivers. In order to provide a balanced view of the organizational activities and to offer a holistic picture of their impact, SAP disclosed a broad set of ESG measures. Besides, they decided to take disclosures one step further and explore the interconnections between these measures. Given that one indicator may influence another one, connecting these KPIs could enhance the corporate value creation. Consequently, SAP explores the cause and effect relations between multi-capital KPIs in their integrated report. In addition, SAP intends to assess the impact of multi-capital value drivers on the corporate strategy. Through the cause and effect relationships, SAP improved its comprehension of the relationships between its different capitals and resources. The Annex 22a displays the chain of cause and effect for SAP's Business Health Culture Index (BHCI).

Since 2014, the chain helps SAP linking different indicators and places a dollar value on each of them. SAP first started this process by doing a stakeholder analysis, revealing the cascade of impacts of its activities. Then, using the chains they quantified the impact on operating profit. Therefore, in its 2015 integrated report, SAP started a journey toward connecting the impact of some of its material KPIs. C. Zerlaut detailed this process of calculating the financial impact of eight sustainability performance measures. This is processed through "*multivariate regression"*. In this respect, two question need to be

answered "*what are the positive or negative financial impacts, what are the levier to drive a financial impact?".* By connecting non-financial indicators to operating profit, SAP enables intangibles to have a more comprehensive and tangible impact on the corporate value creation. As displayed in the Annex 22b, when clicking on one box representing one KPI, an arrow appears, reaching the other indicators that it affects. For instance, one percent change in Employee Engagement indicator may increase the operating profit by 40 million €. At present, a one percent increase/decrease in four indicators has been quantified to impacting the profit (BHCI (€75-85 million), Employee Engagement (€40-50 million), Employee Retention (€45-55 million) and Greenhous Gas Emissions (€4 million)). Further case studies of this model are exhibited on SAP's website.

C. Materiality

The concept of **materiality** is central to audit. For M. Romano, *"materiality has been the main driver"* of <IR>. Requirements on assurance on integrated reporting will determine how auditability influence materiality as well as information acquisition and processing. The <IR> Framework emphasized on the prominence of the notion of materiality. It is displays as one of the seven guiding principles[44]. Hence, "an integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term." (IIRC, 2013a, p. 18). However, for P. Druckman, there is an *"overuse of the word materiality"*. For R. Howitt, "*reporting should be reformed"* in order to become "*more relevant and material"*. For E. Nooteboom, reporting should *"add value"* by coming *"only material"*.

During the interviewees, AEGON detailed its materiality analysis. Through an external analysis, they identified a set of 20 topics. Then, via the stakeholder engagement, these issues are ranked in order of importance. On the other hand, the management board ranks them in order of opportunities and risks. Finally, relevant topics are plotted on a weighted matrix and AEGON selects a materiality level. According to N. Smith, the material topics remain similar throughout the recent years as the insurance industry is not fast-moving.

The definition of materiality is specific to each company. For AEGON: "material issues are defined as those that we believe have, or will have, a significant long-term impact on our profitability, operations or reputation" (Aegon, 2016a, p. 15). They followed the GRI definition: "The report should cover aspects that: reflect the organization's significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders." (Aegon, 2016b, p. 6). For ABN AMRO:

> *"Materiality is the threshold at which topics become sufficiently important to be reported. Material topics are those that may reasonably be considered important for reflecting the organization's economic, environmental and social impacts, or influencing the decisions of stakeholders, and, therefore, potentially merit inclusion in a report." (ABN AMRO, 2016, p. 479).*

[44] See the previous sub-section III. B. i. b. *The Guiding Principles of <IR>*.

D. Integrated Reporting in the Financial Services Industry

Since the financial crisis of 2008, a global emphasis has been drawn on **supporting financial stability and sustainability**. Financial organizations are expected to enhance a longer-term thinking. In this respect, the use of multi-capitals is essential for implementing prosperous investment strategies. Aegon confirmed that financial companies became increasingly seeking to signaling undertaking sustainable investment decisions. As a consequence, there is a need for more **credibility** and **transparency**. In this sense, integrated reporting lessens the information asymmetry between firms and stakeholders. Hence, <IR> enables a deeper comprehension of the value creation' story. Besides, the corporate PMS can help elaborating indicators presenting a wider view of value creation. Banks and insurers need to demonstrate how sustainability supports their profits. As a result, in an industry lacking trust, <IR> can be viewed as useful for financial organizations by reshaping their image, enhancing transparency and **trust**.

VII. CONCLUSIONS

A. Summary

This thesis purposed to investigate the integrated reporting (<IR>) practice of financial services companies. In seeking to understanding the implementation of integrated reporting within performance measurement systems, I considered indispensable to perceive the progress of integrated reporting within the corporate reporting landscape. Through interviews with integrated reporting practitioners, I identified several similarities and divergences in the practices, views and opinions of <IR> forerunners (e.g. AEGON and PwC) and late adopter of <IR> (e.g. ABN AMRO). Through an in-depth literature review on sociological theories, I studied the development of reporting processes toward on institutionalization of the integrated reporting concept. I noticed the prominence of early adopters in influencing the practice of other report preparers, through resolving the corporate challenges faced with issues like sustainability development and NFI measurement.

As mentioned by Eccles and Serafeim (2014), corporate reporting performs two functions (information and transformation). The prominence of this information role has been identified in the discourse of the managers. This thesis demonstrated that it benefits both report users and makers in decision making. Besides, it confirmed that integrated reports enable managers to benchmark their performance results. Moreover, the interviewees recognized that integrated reporting serves the vital purpose to enhance the organizational value creation' storytelling. The long-term perspective of combining financial and non-financial (also designated by the term *multi-capital* in this thesis) information enriches this story. In my view, this aim of improving storytelling indicates the strategic motivation in undertaking <IR> – which was one of the reasons found in the literature background on the <IR> adoption. Regarding the organizational performance measurement systems (PMS), the disclosure of KPIs intends to promote this story – and to comply with regulatory requirements, as explained by one manager. Nevertheless, the focus on value creation may support a profit-maximization motivation. As with financial reports, integrated reporting aims to provide information linked to potential risk and future value. On the other hand, sustainability reporting (SR) aimed to disclose information to a broader variety of stakeholders. Accordingly, I recognized that the strategic focus on

value creation – and subsequently the audience of the report – represents one of the main difference between <IR> and SR. Additionally, as stated in the IIRF, integrated reporting should support investors in their efficient capital allocation assessments as "a force for financial stability" (IIRC, 2013a, p. 2). Finally, I assumed that the pronounced attention devoted to materiality reinforces the strategic motivation in undertaking <IR>.

Furthermore, the interviews have highlighted the necessity of starting the process of <IR> through an exhaustive stakeholder engagement mechanism. Contrary to the attention deserved to shareholders with regard to value creation, I observed that a broad range of stakeholders are involved, at least theoretically, in this participatory process. Moreover, I remarked that both AEGON and ABN AMRO used stakeholder engagement as the basis for their reporting practice and then employed their integrated report as means of further engagement – which refers to the transformation function of corporate reporting. Therefore, a constructive stakeholder engagement mechanism (see Annexes 1 and 2) appears as a common practice which lessens the attention given by the International <IR> Framework (IIRF) to the shareholder primacy.

Second, the transformation function: stakeholder engagement enables organizational change. However, interviews evidenced bigger changes in the <IT> than in the corporate systems. Hence, the adoption of integrated reporting has not undoubtedly stirred innovative disclosure mechanisms. First-order changes (reorientation) have been evidenced – as with sustainability reporting. I observed a broadening of stakeholders involved in the reporting process – for e.g. ABN AMRO cross-functional teams – demonstrating a willingness to break down reporting silos. Nonetheless, several interviews pointed out the implausibility to reach a transformation of the corporate reporting practice, although the IIRF focus on integrated thinking. Consequently, <IR> integrated reporting seems more likely to reinforce rather than transform business models.

The information's design is also crucial. On one hand, AEGON favored a separated out integrated review and argued that stand-alone reports are preferred for understandability, compliance and audience-related reasons. On the other hand, ABN AMRO assumed that combining information offers better insights of how companies are managing the relationships between multi-capital performance and supported the inadequacy of separated reports by combining the integrated report with its annual report. Nonetheless,

it should be noted that by overloading report users, this increase of information reduces the comprehension of the linkage between different impact.

Moreover, while regulation enables the information function's effectiveness, too prescriptive standards run the risk to transform integrated reporting into a compliance exercise. I evidenced that currently the principles-based IIRF supports companies in determining the most material issues through stakeholder engagement and then to continue the engagement process. Furthermore, AEGON suggested that auditing enhanced the effectiveness of KPIs and subsequently, the credibility of multi-capital disclosures. Mandatory <IR> may shift the actual auditing practice from a reviewed form to a limited and even reasonable assurance.

Besides, integrated reporting poses a number of questions regarding the impact of the <IR> process on organizations' business model. Therefore, the aim of this thesis was also to deserve attention to the relationship between multi-capital performance indicators and <IR>. Numerous conclusions can be drawn in investigating the depth, breadth and quality of KPIs. I found an increasing awareness for the importance of sustainability measures in the managers' discourse. They agreed that KPIs are based on internal information with the purpose to public disclosure. In addition, they emphasized that several KPIs are company or industry-relevant/specific. Hence, only those repeated within a sector can be benchmarked. Furthermore, AEGON suggested to incorporate future targets. For P. Druckman, CEO of the IIRC, <IR> should enable to "*connect the information"*. In this respect, J. Banerjee, Leader of the IIRC Technology Initiative highlighted that integrated reports could "*enhance the visibility of NFI through ESG metrics [since] all the capitals are connected. [Hence] this connectivity across the capitals makes the difference"*. The link between NFI and performance measurement systems represent further academic challenges, for instance the integration and quantification of non-financial performance.

Finally, the results of the interviews confirmed that the ownership of the reporting process lies in the hand of the business control and sustainability teams, whereas for ABN AMRO the final decision concerning performance disclosures is left to the fate of top management. I found that accountants and finance people are involved in multi-capital reporting, whereas sustainability teams work on non-financial disclosures. These teams are responsible for managing data analyses and developing performance indicators. Thus, the (future) development of <IR> depends greatly on those managers.

B. Implications

i. Theoretical Implications

This thesis brings several implications and raises multiple questions on integrated reporting. The literature review[45] (indicated with a 'R' hereafter) and the interviews (indicated with a 'I' hereafter) evidenced that undertaking <IR> can benefit both the firm and its stakeholders by:

- For the organization:
  - Accelerating integrated thinking (R, I)
  - Incorporating sustainability into the business model (R, I)
  - Enhancing external reputation (R, I)
  - Reducing financial risks and costs (R)
  - Altering the societal perceptions and expectations on the appropriateness of organizational behavior (R)
- For stakeholders:
  - Understanding the creation of value through relevant disclosures (R, I)
  - Improving analysts' forecasting abilities (R)
  - Reduce information acquisition costs (R)
- For both:
  - Increasing transparency (R, I)
  - Better decision making (R, I)
  - Revealing connections between multi-capital data (R, I)
  - Demonstrating how organizations create and sustain value (R, I)
  - Recognizing organizational activities' impacts (R, I).
  - Fostering the link between the corporate performance and the business (I).

However, while integrated reporting gains momentum, several criticisms have been raised. First, only a limited number of companies publish integrated reports; second, the IIRF focuses on providers of financial capital to the detriment of non-financial stakeholders; and third, the volume of disclosures may sharply surge if <IR> data are not sufficiently integrated with sustainability and financial reporting.

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[45] Particularly the section III. C. iii. *Benefits of Sustainability Activates and Reporting*. Regarding the findings highlighted in this section, I assumed that benefits from sustainability reporting applied to integrated reporting. The main reason is that companies uses sustainability guidelines and standards, particularly GRI (as evidenced by the part V. Results), to undertake <IR>. Whether this is the most effective and appropriate practice is not determined in this thesis. However, this observation is used to draw my conclusions. Further research in this area is required in order to obtain more robust insights.

Moreover, some standards could enhance integrated reporting toward driving corporate reporting innovation. Principally, standards for non-financial information should be required. Further, the processes of auditing and assurance on <IR> raise questions regarding for e.g. its value added and legitimation – due to vague guidance by the IIRC. Consequently, the absence of assurance might refrain stakeholders' involvement and thus <IR> expansion. However, integrated reporting should not become a compliance exercise. Additionally, it should avoid becoming as complex that it no longer reflects the reality of the underlying business.

Furthermore, I evidenced the central notion of materiality in corporate reporting. While, for P. Druckman, there is an *"overuse of the word materiality"*, M. Vaessen, Chair of the FEE Corporate Reporting Policy Group argued for more *"relevance of the corporate reporting system [as well as] the information"*. In other words, "*core and more"* (M. Vaessen). It is expected that more material reporting will become more focused and thus more efficient.

In my opinion, integrated reporting appears to be an extension of sustainability reporting, but focused on accomplishing an information function. Hence, the information function of integrated reports undermines the transformation function's achievement. Further research will need to investigate whether companies are more likely to alter the sustainability agenda (in order to guarantee the continuity of their activities) than to change themselves.

ii. Managerial implications

From a managerial perspective, the implementation of integrated reporting within organizations gains impetus. Integrated reporting pioneers like AEGON recognized the usefulness in undertaking <IR>. For instance, across the last decade, multiple corporate scandal made sensational headlines. N. Smith gave a few examples of integrated thinking's (<IT>) potential:

> *"Reporting is one thing, thinking is another, you want to embed integrated thinking. If BP had more integrated thinking, the Gulf of Mexico disaster may have never happened. If VW's corporate governance structure was adequate, then this scandal would have never happened and their profits wouldn't have been impacted"*

Since the financial crisis, several industries have, slowly but surely, reflected on these wrongdoings – for e.g. <IR> espoused AEGON shift to becoming a people/customer-

centered organization instead of product- and profit-focused. For R. Howitt, Member of the European Parliament, "*the way companies account for themselves is changing this decade in a way that will affect the next 100 years"*. In addition, according to M. Romano, Head of Group Integrated Reporting at Generali, "*<IR> helps solving the puzzle of corporate reporting"*. Moreover, for E. Nooteboom, Head of Accounting and Financial Reporting at the European Commission, "*<IR> is a necessity, it will come because it forces companies […] to consider the messages they wish to convey to the outside world. In an age of transparency, this is essential"*.

Nonetheless, <IT> seems to have more impact on business models that the implementation of the IIRF guidelines. Currently, integrated reports' design reveals a narrow approach to measure performance. Hence, neither the adoption of <IR> guiding principles, nor the development of integrated PMS demonstrated a willingness to bring change. Besides, the alignment of reporting processes is more related to the adoption of GRI standards – based on sustainability reporting – than the <IR> approach. Therefore, while E. Nooteboom wishes to bring "*reporting to the state the market is asking"*, integrated reporting is not yet modifying the corporate interpretive schemes.

Sustainable performance is increasingly integrated in the strategy. However, more focus should be put on non-financial and long-term financial performance by managers. This will allow to go further in the direction of value creation. Furthermore, <IR> should promote stakeholder empowerment and organizational accountability. A level playing field between stakeholders is necessary in order to enhance stakeholder engagement. Active engagement will also promote transparency. Finally, even if sustainable issues are varying across companies, a fundamental and global reconsideration of the accounting practice is necessary in order to deal with those concerns.

Interviews confirmed the intense effort required with undertaking integrated reporting. Currently, producing an integrated report is not an expectation for companies, expect among the large and impactful N100 – where this report can narrate the business strategy' story and its impact on stakeholders. Organizations should take advantage of this momentum in order to use <IT> to drive change, with <IR> as its main instrument.

C. Limitations

The extensive research agenda on integrated reporting represents a consequent challenge for academics. In order to produce a robust thesis, I reviewed multiple studies produced over the past decades. I grounded the foundations of my research related to the contemporary <IR> practice on this literature. I perceived both the importance in providing reliable insights when addressing my research questions (recognizing that interviews are subject to both inaccuracy and bias), especially as the <IR> practice is increasingly developing, and the opportunity that integrated reporting represents for organizations and the academic community.

However, the small sample of interviewees and the single-country focus were a major limitation of the empirical research. Hence, while top management and various types of external stakeholders were not represented in this study, further research are required with organizations undertaking integrated reporting across different countries, and with a wider range of internal and external stakeholders, to further understand the mechanisms of <IR> adoption and in/confirm my conclusions.

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IX. ANNEXES

i. Annex 1. Glossary of Current Non-Financial Disclosures and Sustainability Guidelines

Source: Federation of European Accountants (2016, pp. 7-10).

AccountAbility (AA)

Since 1999, AA publishes accountability principles. The latest version – the AA1000 Accountability Principles Standard – was developed in 2008. The three main principles – inclusivity, materiality, and responsiveness) intend to help companies in undertaking business while taking their accountability into consideration.

International Integrated Reporting Council (IIRC)

Since 2010, the IIRC aims to foster integrated thinking through integrated reporting with organizations. Since 2013, its framework promotes a better corporate communication about value creation over time.

ISO 26000

The ISO 26000 is a standard aimed to encourage organizations to undertake responsible business activities. The guideline comprises seven core subjects, often used for reporting purposes.

Global Reporting Initiative (GRI)

Since 2000, the GRI intends to enhance the corporate communication about impacts on stakeholders. It offers a list of elements required to be disclosed. The objective of the latest version – GRI G4 – is to foster the corporate communication of relevant topics.

Organization for Economic Co-operation and Development (OECD)

The OECD guidelines discloses principles intended to encourage companies to contribute positively to their environment. The latest version deals with disclosing CSR information.

Sustainability Accounting Standards Board (SASB)

Since 2011, the SASB develops accounting standards dealing with sustainability topics. Their objective is to integrate the standards within annual reports required by the SEC. In addition to a conceptual framework, nine industry-specific reporting standards have been developed.

European Federation of Financial Analysts Societies (EFFAS)

Since 2010, EFFAS purposes to integrate CSR data into corporate performance reporting, through disclosing CSR KPIs. The more recent version – KPIs for ESG 3.0. – aims to enhance the integration of these KPIs into valuation models.

United Nations Global Compact (UNGC)

Since 2000, the UNGC plans to offer a platform for the development of responsible corporate practices. It published ten principles to assist the management of risks and opportunities associated to sustainability issues.

ii. Annex 2. Integrated Reporting Guiding Principles

The content and presentation of an integrated report are supported by seven guiding principles (IIRC, 2013a, p. 5). The following table illustrates their purpose.

Table 10. Integrated Reporting Guiding Principles

Guiding Principle	Purpose
Strategic focus and future orientation	"An integrated report should provide insight into the organization's strategy, and how it relates to the organization's ability to create value in the short, medium and long term and to its use of and effects on the capitals." (IIRC, 2013a, p. 16).
Connectivity of information	"An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time." (IIRC, 2013a, p. 16).
Stakeholder relationships	"An integrated 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." (IIRC, 2013a, p. 17).
Materiality	"An integrated report should disclose information about matters that substantively affect the organization's ability to create value over the short, medium and long term." (IIRC, 2013a, p. 18).
Conciseness	"An integrated report should be concise." (IIRC, 2013a, p. 21).
Reliability and completeness	"An integrated report should include all material matters, both positive and negative, in a balanced way and without material error." (IIRC, 2013a, p. 21).
Consistency and comparability	"The information in an integrated report should be presented: on a basis that is consistent over time; 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." (IIRC, 2013a, p. 23).

Source: IIRC (2013a, p. 5).

iii. Annex 3. Integrated Reporting Content Elements

The framework requires that "an integrated report includes […] eight Content Elements that are fundamentally linked to each other and are not mutually exclusive" (IIRC, 2013a, p. 5). The following table displays the question posed for each element.

Table 11. Integrated Reporting Content Elements

Content Element	Question
Organizational overview and external environment	"What does the organization do and what are the circumstances under which it operates?" (IIRC, 2013a, p. 24).
Governance	"How does the organization's governance structure support its ability to create value in the short, medium and long term?" (IIRC, 2013a, p. 25).
Business model	"What is the organization's business model?" (IIRC, 2013a, p. 25).
Risks and opportunities	"What are the specific risks and opportunities that affect the organization's ability to create value over the short, medium and long term, and how is the organization dealing with them?" (IIRC, 2013a, p. 27).
Strategy and resource allocation	"Where does the organization want to go and how does it intend to get there?" (IIRC, 2013a, p. 27).
Performance	"To what extent has the organization achieved its strategic objectives for the period and what are its outcomes in terms of effects on the capitals?" (IIRC, 2013a, p. 28).
Outlook	"What challenges and uncertainties is the organization likely to encounter in pursuing its strategy, and what are the potential implications for its business model and future performance?" (IIRC, 2013a, p. 28).
Basis of preparation and presentation	"How does the organization determine what matters to include in the integrated report and how are such matters quantified or evaluated?" (IIRC, 2013a, p. 29).

Source: IIRC (2013a, p. 22).

iv. Annex 4. Interview Guide

N.B. This is the interview guide used for the interviews with N. Vanhove and C. Metzler from PwC.

The main objectives of the questionnaire are:

1. To explore performance measurement system(s) within organizations
2. To determine which and how performance metrics should be measured and disclosed

I. Introduction (5-10')

- Presentation of the moderator/interviewer
- Presentation of the objectives of the research, main rules and type of the investigation: One-hour face-to-face interview - record – anonymity – "No right or wrong answers" - Topic = "How do companies measure and disclose performance metrics?"
- Presentation of the respondent: background, global experience and expertise, description of her/his job & responsibility in <IR>, main challenges …
- Presentation of the organization: specificities, size …

II. Performance Measurement System (PMS) (25-30')

Moderator: In this first step, the discussion is about the system used to measure corporate performance. The management of several types of issues is discussed. Keep attention to the wording used to define the PMS & re-use it in the discussion.

1. Procedural Issues
   a. Who should be responsible for leading the corporate PMS?
   b. Which criteria determine its procedural strength?
   c. When is the appropriate time to involve stakeholders in its design and to what extent should they be involved?
2. Contextual Issues
   a. What factors determine the number of indicators?
   b. What is the time horizon to be covered by the indicators?
   c. To what extent should standardized indicators that may be used for benchmarking purposes be incorporated?
3. Implementation and Usage Issues
   a. What are the critical success factors in implementing the PMS?
   b. Are indicators designed specifically for the company more likely to be implemented than generic sets of standard indicators?
   c. Which indicators should be externally reported?

III. Focus on ABN AMRO's Key Performance Indicators (15-20')

Moderator: to determine which and how performance metrics are/should be measured and disclosed.
Objective: to understand the link between corporate reports and disclosed KPIs

   a. What format should an integrated report take?
   b. How should an organization link its business activities to sustainability issues?
   c. Does the implementation of <IR> result in changes to its business model?

d. How could the KPIs reflect the managerial assessment of strategic performance?
e. How could an organization demonstrate a clear alignment between the KPIs and the company's business model and strategy?
f. How could the purpose and the definition of the KPIs be sufficiently understandable to users? How reliably should the KPIs be measured?
g. How could the full range of KPIs give a balanced view of the company's performance?
h. How could the KPIs enhance the communication of the company's story?

IV. Wrap Up & Optimization (5-10')

Now that we went through performance measurement systems. Do you have personal recommendations for the future on:

- Measuring performance indicators?
- Is there anything you would like to mention regarding PMS which has not been discussed yet? Anything additional?
- Finally, what could be recommended to improve future researches on <IR> and KPIs?

v. Annex 5. Interview with N. Smith (Aegon)

1. Introduction

- Presentation of the respondent

Neil Smith, senior associate in sustainability at Aegon – started in 2007 - manage all relevant activities in sustainability; including reporting – 3 people in the sustainability in NL – new managers which will focus on strategy – chair of the IR Insurance Network with Massimo from Generali

- Presentation of the organization

Multinational, 25 countries (main market: US, NL & UK), 31 000 employees, growing part of the business: asset management, global entity set up 7 years ago (where resides the responsible investments, another team is in charge, new KPIs regarding this significant topic) – pilot member of the IIRC, 5th IR – a lot of work and recognition, the first to introduce a statement of materiality – a lot of work with Professor Eccles

2. Aegon's Performance Measurement System (PMS)

- Who is responsible for leading the design of Aegon's PMS?

Not one system, different definitions and objectives for PMS – the business is changing to more of one PMS, Aegon has a new function created 3 y ago, called Business Control, which develop financial and non-financial KPIs, which is an indication of how the company is performing – BC is responsible for leading but overlap with sustainability team to align things – different objects: BC: performance of the company, ST: performance but obligations to GRI, IIRC – sometimes measuring things that may not be driving the decisions in the company, but legacy inherited and now try to focus more on the performance of the company – BC: 4ppl – underressources in sustainability, regarding the size of the company

- What are the criteria for determining its procedural sufficiency of the PMS?

More for the BC – Driven by the materiality and the business, what is important for the business, what do you want to measure, how can you see progress – Material topic and issues – p.15: "Material issues are defined as those that we believe have, or will have, a significant long-term impact on our profitability, operations or reputation" – Materiality matrix is now done by Steward Redqueen for privacy reasons – looking at what is important and capital for the business, what money we have in the bank, how can we measure that, how can we address Solvency II and this types

- When is the appropriate time to involve stakeholders?

Material issues are identified by the stakeholders, every year, keen to see what is material for them, thus where we should be focusing our efforts, stakeholders should always be involved since the beginning in every process that has an impact on them, it's very easy to ignore them and think you are doing the right thing – stakeholders are weighted, check the Supplement (20% customers etc.) – e.g. academics: speak to a lot of academics but accord 5%

- What factors determine the optimal number of indicators?

Should be driven by what your business needs, it would be easy to say 20 KPIs is too much, but if your business needs 20 in order to perform and to measure performance and progress then 20 KPIs is needed – it depends on the business needs – a number cannot be put on it – for audit reason only a few KPIs are selected – but p. 63: strategic and material indicators – 8 strategic indicators: part of the strategy, measure how we perform against the strategy, very important for the company, with a reasonable assurance – material indicators: not linked to the strategy but still very important and

material, with limited assurance – then other indicators page 64 etc., GRI requirements, not audited with the same view than the first KPIs – selected based on materiality from the material matrix, then mapped against the GRI G4, gives you flexibility or lack of flexibility to select material aspects then your report against these indicators, so for determining material aspects we use our stakeholder review and our materiality matrix

- What is the appropriate time horizon to be covered by the indicators?

Always year to year – we report every year but we report on last three year performance – no quantitative targets – to get targets you have to start measuring performance, some indicators are very new, we want to establish what is reasonable, our true response to business strategy and then start to decide what we can target and what make sense, now in that process – we have internal targets but not disclosed because you could be looking at a new indicator where you don't have a high level of comfort and thus targeting is not very accurate – can't put a number on the time you wait, depends on your processes, that's were our auditors have been very good, you start to get good controls in place, good processes, you get more comfort on the number, you start to use the number to drive the business and then you start to disclose the number, it's not as easy as packing a number

- To what extent should standardized indicators that may be used for benchmarking purposes be incorporated?

By definition, if you conform to the GRI you use standardized indicators – not agree with the reporting of all indicators, for the wrong reasons, because to conform with the framework – opinion on some indicators, if you understand the GRI, you pick a material aspect if you want to conform, if you want to be comprehensive you have to report against every indicator under that material aspect, but e.g. two may be completely irrelevant to your business, for example we had to determine last year the number of women how return after materiality leave but that didn't leave the company within a year, it's a very complex indicator that doesn't tell us anything, we are not driving the business on its own, we are not making decisions based on it, but we had to do because of GRI – the aspect is material but that indicator itself is immaterial and we didn't used it this year – that's an example of sometimes, you are using standardized indicators but there are not relevant to your business, that becomes problematic

- What are the critical success factors in implementing Aegon PMS?

Depends on the business needs

- Are indicators designed specifically for the company more likely to be implemented than generic sets of standard indicators?

Yes – if someone else gives that set, because it has to be relevant to your business and every business is different – change indicators? It follows the strategy, every 5 years your look at the strategy of your business except if major changes of course

- Does the use of structured indicator selection criteria and/or a structured conceptual framework increase the likelihood for successful implementation?

No, you should be implementing what is your business needs, other than a structured framework like GRI I don't believe makes a difference in meeting your goals – IIRC, it's a good way to report but it's a framework and guidelines and it's not prescriptive like the GRI that tells what must be reported – the IIRC shouldn't go in the GRI direction, it should be relevant to your business, but not prescriptive, the GRI is very rules-based and IIRC is principle-based – e.g. human capital is very important so you pack some indicators that are relevant important for your employees, that's more flexibility, more meaningful for the business and the IIRC allows us to conform to that with the material topics, GRI may have 7 indicators but only two or three are relevant that's the difference and the practical example

- What indicators are currently being externally reported by Aegon?

Page 63 onwards: strategic, material indicators, the rest are relevant for GRI disclosure, CDP (carbon disclosure project)

- How does Aegon determine which indicators to report on externally?

Materiality - stakeholder review than materiality, then we pick a selection based on materiality from the GRI and that determines the indicators – again, what is relevant for your business

- What is the process for introducing new indicators into Aegon PMS?

Materiality, what is material for our business, which is driven by a lots of things: regulatory change, activities within the business, something that happen in the world like the financial crisis – it comes back to materiality, what is important for us as a business

- To what extent should external stakeholders be involved in its assessment?

They have to be involved right from the beginning, there determine materiality – changes in stakeholders: the groups will remain the same, but we try to get new representatives of these groups, to get more diversity, it's quite difficult sometimes to get the right mix of people, we try to expand and to get a good customer panel in the US that we could use for next year, the broader ranging that you could get, the more accurate you should get up in the end

Materiality analysis: use an external analysis, pages 14/15, mid-term review, what's going on, current trends, range of issues, that we short to a set of 20 topics, we release a survey and we ask our stakeholders to rank these in order of importance, then we rank the biggest opportunities and risks – we do the same with our management board – we plot these on a matrix weighted and determine materiality – you have to speak to your stakeholders, 10 years no one did that – you can always improve it, more people, ways to reach, panels which a lot of companies do, high profile experts, looking to improve it, but then it comes down to time and resources and what is achievable and what is effective, in an industry like insurance it's not moving so fast that topics are changing every 3 months, even from year-to-year we see our topics remain the same: low IR, changing capital requirement, employees, customers satisfactions – you can set these panels but what to discuss after three meetings, you have discuss everything and nothing has changed, you have to balance that as well, what's achievable, what's realistic

- To what extent should its evaluation focus on external benchmarking?

No comparison to peers – others have huge interest in climate change, because they are involved in Property and casualty insurance, you can't base your decision based on your peers, but of course, we would look at peers' review and reports, and see what they do, use best practice, impact assessment, we are looking but we won't use them to drive our own decision making in terms of what you report, because everyone has its own set of material topics (ex P&C insurance)

- How does Aegon keep its PMS relevant and useful over time?

Materiality, what's important for us as a company, what drives performance, what makes us meet our strategic priorities, you are always assessing that – change in the strategy every three to five years, changed in 2016, accelerating the previous, working more on the responsible business strategy and embedding that there are more definitions, in terms of indicators, targets

3. Aegon's Integrated Report

- What form should Aegon's integrated report take?

Is Integrated reporting useful and needed? Absolutely, for example if you take the case of BP and VW – reporting is one thing, thinking is another, you want to embed integrated thinking – if BP has more

integrated thinking, the gulf of Mexico disaster may have never happen – VW if their corporate governance structure was adequate then this scandal would have never happened and their profits wouldn't have been impacted, their another link between something non-financial and something purely financial – the industry has changed since the financial crisis, and sometime you need these things to happen, you need a VW scandal to think that way – Aegon went from being a product & profits-oriented company to customers-oriented

What form? Why not in the annual report? Because two different audit – you see a lot of people doing that, but at the end, they are taking the integrated report and put it at the front of the AR, you have different audit, different objectives, we made the decision to have a separate report that was going to be an IR – Generali publish an AR which integrated but is 380 pages long and then they take the first section – this is a true IR – there is too much requirements on an AR, on financial disclosures, too many to create a small report, and the audience of an IR is a separate audience – investors? Are more an audience for a financial report, they will look at the review, but look at the details and the figures, there is not so much integrated thinking – responsible investors? They would look at the review for sure, more emphasize in the AR on RI but it doesn't represent the majority of our investors – your AR is also a compliance document, we have to do two, US and NL, the requirements are huge, you see that in the number of pages, statements, norms, if you try to put some nice pictures amongst that it's not going to received be very well

Trend of stand-alone report will continue? Yes, for Aegon, two objectives: one driven by compliance, one driven by the willingness to be an integrated report – any one report will be massive, front heavy, nice pictures in the front, integrated and the back will be financial statements, we just made a conscious decision to have more freedom for the IR, let's not forget it's audited separately, it has its own assurance which is a huge task.

- How is Aegon linking its business activities to ESG issues?

It's an integrated approach, our strategy is not only financial and hasn't been for the last six years, so you work on what is material to a company, employees, customers, having money in the bank, making profit, shareholders, these are all financial and no financial it has been about linking them together and coming with a strategy– we come up with 4 strategic objectives 6 y ago, things like loyal customers, making sure they are happy, not very financial, optimizing our portfolio, divesting in non-core markets and investing in core-markets, empowered employees, in a knowledge based companies our strength is our employees, without them we are nothing, they are really part of the strategy happy are they and how empowered, this are all embedded in one big strategy, with indicators that should prove that, that for us show that we integrated it

Integrated KPIs? We are not there yet, not with a correlation – a lot of resources and efforts – we have our resources linked to our value chain – we would like to start quantify our outputs, now it's nice but it doesn't tell you much, we take our employees we make them talented and we invest in them and they help return a profit, but what do they add, we could see that if employees are happier suddenly we see the benefits to the society increases because we pay more taxes etc. – the expertise in knowing how to do it, someone people are fighting for this business, all the big four – it starts small and start to see if we can quantify some things – it could be ten years from now that we require to that, it's no longer enough that we just report, ten years from now, people may want to know what impact that has on the society, you really want to see what your true value is to society to all your stakeholders – another ex is benefits, negative value creation, which is less than value expected, is not captured in the data reported, it's not capturing the true value

- Does the implementation of <IR> result in changes to its business model?

No yet, you will not change your business model just because of IR, we are doing more integrated thinking, the BC function is more on non-financial KPIs but not a change in the business model at this point – BC is the start of integrated thinking for Aegon

4. Aegon's Key Performance Indicators

- Do the KPIs genuinely reflect how strategic performance is assessed by the board?

Yes, we report on what runs the business – the more we e/involve in terms of integrated thinking, you may see more KPIs and different KPIs – with the IR network we are talking a lot about integrated indicators, one indicator that may be a methodological behind numerous indicator but really shows a true integration – for now, if we look back to the last 5 y, the indicators have reflected the strategy, we didn't meet all our targets within these last 5 years

- How does Aegon demonstrate a clear alignment between the KPIs and the company's business model and strategy?

We have been working with strategic objectives, pages 24-25 we show what we are trying to do, the goal is to become closer to our customers, to measure that we are looking at NPS and performance, that's the alignment

- Do the KPIs enhance the communication of the company's story?

Yes, because people want to know what you did, how well or how bad – if you did well in your strategic objectives it will improve your corporate image, if you have a goal to make sure that you have loyal customers and your NPS is increasing then ultimately that make the company better

- Is the purpose and the definition of the KPIs sufficiently understandable to users?

It's a good question, because we did a lot of work on that, it could be better – we work in a very large organization, decentralized, so this is where the auditors really add value, they can pack things – for ex in the US, the definitions were understood differently, yet they were given information to the NL, so you run the risk of misreporting – now we have done a lot of work to improve the understandability, and more are doing more work to make that aligned – the definitions are in the review – the figures in the review are aggregation coming from 8 different countries, you have to make sure the person giving the data for that aggregation knows what you are asking and that sounds very simple but it's not as easy – the auditors only pack up on the deficiency – the definition are the work of Neil – ex impact investment: an investment that has a secondary impact but the UK don't included a certain investment in it because they didn't think it fits the definition, it's the work of the audit to realize of that missing, so we provided the definition

- Are the selected KPIs consistent measures of performance against the previous year's KPIs?

To see a trend, you need different years of data – we always go back two to three years, for some people the trend is more important than the figure in itself, and the explanation of change

- To what extent are the selected KPIs comparable measures of performance amongst the organizations in similar sectors?

Not all indicators are comparable – this is where GRI may help because you have consistent indicators – more comparable? No because it should be relevant to your business, if a topic is not material you should not always report on it – comparison should be driven your report

- How reliably can the KPIs be measured?

They are audited (strategic and material) – we wouldn't report a number without a level of comfort – being audited adds credibility but also value to the reporting, we gain better controls, more accurate data, we are using it to run the business, it really adds value – first audit 7/8 y ago, a lot of effort, very intense, cost a lot of money, yearlong process, we start to define materiality, which KPIs does it make sense to audit, what can be feasibly audited, sites visits starting in September, walk through the

process, how do you define this data, making sure that everyone has the same definition, the actual audit on the data, runs 3 to 4 weeks before the publication

- Is there a clear understanding of how each KPI impacts another one?

Not every KPI impact other ones, ex ratio of cost to asset impacts other – no relationship btw employee CO2 and employees turnover – trying to make more correlation if you think of the value chain

- Does the full range of KPIs give a balanced view of the company's performance?

Yes, it's the principle of GRI that you represent a balanced view – IIRC also wants to represent a balance view, the KPIs we use, some of them we would like to be better, NPS is a good example, you expect to perform better, but because we are not doesn't make us not disclosing it, we provide an explanation of why, we try to be balanced through the whole report – explanations? Absolutely, ex NPS, the challenges are things that we used to called dilemmas – you see it also in the customers' section, the auditors asked to provide explanations – balanced view? Principle from the GRI, the auditor checks that very early on in the process, when we are writing content they look at that, if they think we have been too positive, they will tell us, because they audit against the GRI

5. Wrap Up & Optimization (5')

- Personal recommendations for the future on:
    - Measuring performance indicators

Driven by your business needs, what could you accurately measure, have good data on, control that data and have comfort, our BC is doing quarterly KPI reporting and it drives performance, it goes back to meaningful data – largely linked to strategy and to your audience

    - Connectivity of information with an IR

With integrated thinking and understanding of the business, that's a challenge for us, it's a challenge for every company, to get people to think integrated – changing the profit oriented mindset and driving integrated thinking in the organization, that's a challenge, if you do that, you are going to get that connectivity as part of everyday business – ex Unilever, everyone, no matter what brand, know how they contribute to the sustainability of the company

    - <IR> for financial services

Industry that people have little trust in, always put profit before customers, done thinks that we are very proud in the past – if your start IR and therefore integrated thinking, you start to see risks that you never saw before and also opportunities – can make customers more loyal and makes the business more secure – more control on the process? Yes, if you compare sustainable reporting to financial reporting, there is a long way to go, a lot more mature, maybe we could get there, we start to see more disclosures, more compliance – mandatory? I see the benefits as I work in sustainability, but everyone doesn't have that, even the board level, that's always a challenge – you see companies like VW or BP that learned the hard way, you could live the hard way through financial crisis and lose customers

- Some examples of other good quality integrated reports?

Mark & Spencer, Akzo Nobel, SAP, Holcim: Integrated Profit and Loss (then you can start to make a case to sell business as a result of it, start to use the outcome of that, once you get what shows your impact on society and use it to do more business, your credentials to potential customers is huge, we will probably start with quantifying the value chain, maybe the IPL is not relevant for Aegon, it makes the case for the board level)

- Finally, what could be recommended to improve future research on <IR>?

A lot with integrated indicators, work with risks and how risks may be embedded into IR, still a very young market, still has to mature, could to think about the future, start to think ahead, abstract, controversial, could be mandatory reporting or true impact, imagine a regulator requires to contribute to the wider society to operate.

vi. Annex 6. Interview with E. Blonk-Jetten (ABN AMRO)

1. Introduction

- Presentation of the respondent

Elsbeth Blonk-Jetten, head of external reporting department at ABN AMRO, publish the AR 2016, started in 2011 and joined the team in 2015

- Presentation of the organization

3 or 4 years ago started <IR>, it takes baby steps, the organization needs to be ready for it, also integrated way of thinking, already had a process for financial KPIs but not yet reviewed and consistent non-financial KPIs throughout the whole organization which had non-financial KPIs but department-specific, you need kind of alignment there, when you look at the annual report a few years ago you see it's purely financial, last year we made a step toward stakeholder analysis and value creation model, we took quite few steps and the next step for us will be to incorporate integrated reporting more clearly throughout the whole AR, we are looking whether we can structure the AR differently according to strategic themes and material topics for our stakeholders instead of business organization-oriented.

2. ABN AMRO's Performance Measurement System (PMS)

- Who is responsible for leading the design of ABN AMRO's PMS?

The internal management control cycle didn't change because it's a yearly process which under the responsibility of our controlling and strategy department, there determine what are the KPIs, how we measure them, for the whole bank, it's an annual process with a strategic review but certainly you cannot change KPIs every year, there is a strong focus on reliability, availability and also relevance, and a kind of rule is that we want to publish a certain KPI for at least 3 years – The C&S team do the prework at it's ultimately the responsibility of the managing board – A lot of people concerned with the management control cycle, all department should be somehow involved there, the coordinating teams is about 5-6 persons but a lot more involved

- Which criteria determine its procedural strength?

KPIs selected? We look at what is available but also to have a good mix of financial and non-financial KPIs, there shouldn't be too many KPIs, KPIs on which we focus on internally which are relevant externally, we have strategic pillars and our KPIs should fit these pillars otherwise they will not be incorporated, they should also say something to our stakeholders, we are also looking for KPIs that are peers or industry relevant (e.g. the M score which is an industry KPI) and another requirement is that we don't want to cherry-pick KPIs so they have to be reliable and measurable but also we want to be able to consistently disclose them for at least 3 years

- When is the appropriate time to involve stakeholders in its design?

Through the whole year, it's a management control cycle, which is a yearly cycle, you start quite early, we start in the beginning of the year with the stakeholder analysis and ask what the material topics are that's more external focus, but internally they start in March or April for the AR of the coming year, but it's not an exercise that AR-driven but an exercise that we call a yearly strategic review, an exercise whether our strategy still fits, whether we need to do an update, it's certainly not intended to change every year

Stakeholder analysis? Since 2015; before? One of the things that IR teaches it that we explicitly need to listen to our stakeholders, earlier we certainly had contact with our investors, we didn't look at it formally, it was more a continuous process of feedback and in the end we decide what to incorporate

in the financial disclosure, now it's more a formalized approach where we do interviews or check lists which stakeholders can signal what they find important; stakeholders? 4 types in the AR? Stakeholders groups, we hired a sustainability advisory firm which helps our process of deciding the procedure of stakeholder dialogue, e.g. contact stakeholders through Facebook, through Investors relations department, employees, we also reach out to the greater public, not with True Price, depends on what can be achieved this year

- What factors determine the optimal number of indicators?

Stakeholder materiality analysis; disclose also topics? Only topics that the respondent rated, if there is one stakeholder that adds a topic and no other stakeholder mentions it then no, 15 are disclosed but not all are audited, (<S>) only reviewed

- What is the appropriate time horizon to be covered by the indicators?

Yearly but should be disclose on a horizon of 3 years' minimum

- To what extent should standardized indicators that may be used for benchmarking purposes be incorporated?

We want to use KPIs that are relevant as well for us as for our stakeholders and it certainly helps when they are comparable for peers and industry but you need to balance it, it should be too many KPIs

- What are the critical success factors in implementing ABN AMRO PMS?

When they are good and relevant, we will incorporate them; the outlook context, the planning, the deliverable are assessed by the managing board, that there is a clear commitment; there can be a standard but also company specific KPIs, it should clear for stakeholders what the purpose and the value of certain KPIs because otherwise it won't add any value, it should be also very clear what are the responsibility in the process of measuring and defining the KPIs, that are the most important success criteria for implementation

- Are indicators designed specifically for the company more likely to be implemented than generic sets of standard indicators?

GRI? We use the indicators useful for us; IIRC KPIs? I think they should leave it up to the company itself to define what is a relevant metrics, if not it's very rules-based and the risk is that we disclose a certain amount of KPIs which do not say anything about our strategy or our value creation model that's not in the substance of the GRI criteria for example

- What indicators are currently being externally reported by ABN AMRO?

In the AR, in the business chapter we have KPIs per business and in the strategic report we have KPIs for ABN AMRO as a whole, for example the NPS is a very important for us, but also employee engagement – Audited? Some of them are; with <S>? yes exactly, those are reviewed; more to be reviewed? Yes, I expect

- How does ABN AMRO determine which indicators to report on externally?

Relevance, reliability and availability

- What is the process for introducing new indicators into ABN AMRO PMS?

Last year we increased the number of KPIs significantly, we don't expect to do that this year also

- To what extent should external stakeholders be involved in ABN AMRO PMS assessment?

External stakeholders should be involved for the material topics, you should ask them what do you think is important to know about ABN AMRO and to share on, then it's up to us to explain to our stakeholders how we did that; stakeholders weighted? No;

- To what extent should its evaluation focus on external benchmarking?

Comparison with peers? Yes, but it's more a form kind of discussion, we look at peers to see if there are new ideas, what we can learn, how we can improve, it's certainly something we do, but in a way that a bank has KPIs that we don't have ourselves, we want to make the assessment ourselves, it should be linked to our business but not our competitors

- How does ABN AMRO keep its PMS relevant and useful over time?

It's more in the yearly cycle that we go through; cycle? Responsibility of the S&C department, they do that in cooperation with other department like the sustainability department, they have an integrated conceptual approach, so you plan processes for the entire bank and also other process for which the S&C will control they are all interrelated with each other

3. ABN AMRO's Integrated Report

- What form should ABN AMRO's integrated report take to present the connectivity between the financial and non-financial information?

I think the word integrated and stand-alone are not in line with each other, so we choose for a really integrated approach; best approach? Yes, otherwise it's not integrated in my view; if you make a separate report, your financials are not anymore there; same audience? Yes, there is everything in it, investors are certainly very pleased with our report, equity investors that we received during our general meeting also very much appreciated our report, so we received some very good comments actually, what we are investigating is if we can improve our website a bit, for stakeholders who don't want to read the whole report are also sufficiently serviced, that's the plan for the coming years

- How is ABN AMRO linking its business activities to ESG issues?

It's very much interrelated actually, we have our sustainability department but there are not really responsible for any activities on its own but they are responsible for the value creation through the whole bank, responsible to encourage the whole bank to lift up to ESG issues, so it's very much interrelated with our business; which form? in the AR we have our material topics, which are important for our stakeholders that we report in the business chapters as much as possible and will certainly do more next year; strategy? 3-4 years ahead, minor yearly strategic updates were will evaluate what needs to be fine-tuned; actual priorities? In 2015

- Does the implementation of <IR> result in changes to its business model?

Actually it shouldn't, but it certainly results in discussion around it, it doesn't result in major changes but more in internal discussions; emergence of integrated thinking? Yes; when you start externally report on non-financial KPIs there should be some focus, the non-financial KPIs that are currently reported where already important for us internally the previous years but now the discussion is much more about the value is of these non-financial KPIs, the discussion is just more explicit, it wasn't really a change in outcomes but it changes in the way the dialogue is continued internally

4. ABN AMRO's Key Performance Indicators

- Do the KPIs genuinely reflect how strategic performance is assessed by the board?

Yes, I do, but I certainly see that we can shift a bit more to non-financial theory because the focus now is primarily financial but the others will matter, they can gain in way; proportion of financial and non-financial KPIs? It should be balanced, it's more 50-50 now and I think that's ok but if there needs

to be more financial if it asked by regulators then there need to be in there, and will not be ok with introducing extra non-financial KPIs if they are useless, I don't think that the number is overruling

- How does ABN AMRO demonstrate a clear alignment between the KPIs and the company's business model and strategy?

We do that in our report, in the value creation model, where we mention the KPIs, so we make a clear link with our strategy, our business model and the disclosed KPIs; remuneration? It's certainly related to material topics but it's not KPIs because KPIs is what you steer on and the company doesn't do any better when you provide a higher remuneration for example but it does say something whether you are listing to your stakeholders, we disclose it the financial report as a material topic

- Do the KPIs enhance the communication of the company's story?

Yes, to make very what the link is between your inputs, your business model and your outputs; external recognition? Yes, we certainly had, from debt investors but also equity investors and other stakeholders like organizations for environmental issues.

- Is the purpose and the definition of the KPIs sufficiently understandable to users?

I hope so; difficulties from the teams? I don't think so; one team NL? Main market is NL but very international investors, we are the group team that is involved in the report, and we are responsible for the whole group, we are 80% NL

- Are the selected KPIs consistent measures of performance against the previous year's KPIs?

Yes, they are, even if we increased the number last year – 3 years: we don't incorporate any KPIs if we believe that we cannot consistently report on that for at least 3 years, they should be reliable and we should be able to report on that for at last 3 years

- To what extent are the selected KPIs comparable measures of performance amongst the organizations in similar sectors?

NPS, employee engagement, all in the strategic chapter

- How reliably can the KPIs be measured?

They must be reliable, because otherwise I won't publish them; not all of them are audited, but they are all reviewed; more audited? We aim to incorporate more reviewed KPIs in the report assurance of the auditor, now all the indicators are reviewed but all want a review on the text for sustainability issues

- Is there a clear understanding of how each KPI impacts another one?

Yes, I think there is; Integrated KPIs? I don't know which one you are referring too, we show our value creation model that should incorporate the linkage between the KPIs if they are there and for example if employee engagement doesn't create any value, we shouldn't treat that as a KPI; correlation between KPIs? That's what I said, they all add value to the company; and with the six capitals? The 6 capitals are introduced in our value creation model and we define KPIs for each capital

- Does the full range of KPIs give a balanced view of the company's performance from both a financial and non-financial perspective?

I think so; objective to give a balanced view? As I said it's an objective to have a balanced presentation but the ratio itself is not a goal; bad KPIs disclosed? Yes, I assure that, we don't want to do cherry picking, that's exactly the reason why they should be disclosed for at least 3 years, I don't want to the

managing board for example says I don't like the outcome, I won't publish it this year, so when we introduce KPIs, we also make sure that they are reported even when it's negative, you also see in our KPIs this year, that not all of them improved

5. Wrap Up & Optimization

- Personal recommendations for the future on:
    - Measuring performance indicators

We are continuously improving our approach

    - <IR> for financial services

I hope it will remain a substance discussion and not a form discussion, it should focus on what the idea is and not provide a set of rules for example

    - Is there anything you would like to mention regarding ABN AMRO's reporting which has not been discussed yet? Anything additional?

No, I think you asked important questions

- Some examples of other positive integrated reports?

A lot of very good IR, you can find on the internet, I have to check in our benchmark folder, if you check the integrated reporting website you will find a lot of them

- Finally, what could be recommended to improve future researches on <IR>?

Mandatory IR? I don't think that it would work, in this kind of topic, you need to be willing to report on it in a certain way, when you are obliged it will kind of a check-list approach.

vii. Annex 7. Interview with N. Vanhove (PwC)

- Presentation of the respondent

Nathalie Vanhove, auditeur chez Coopers et Lybrand pendant 10 ans (réviseur d'entreprise et agrégée par la commission pour les assurances – 4 ans chez Belgacom – British Telecom (business controler, program directeur finance and transformation au niveau global – 2 ans senior manager chez PwC (management consulting (120 employés avec supply chain and operations et marketing and sales) – finance and performance management (60 employés)

1ère étape

Pour Performance measurement, il faut que ce soit aligner avec la stratégie. Quand on regarde les sociétés leaders dans leur performance, ce sont celles qui ont un focus très clair, clairement définies quelle est leur stratégie, que doivent-ils faire pour l'atteindre – et ils sont alignés sur cette objectif stratégique

Pour créer le focus : vision – stratégie – objectifs (SMART) – value drivers → strategy map (planning&budgeting/followup : KPI et dashboard)

Que faut-il faire pour arriver à cette objectif stratégique → value drivers puis les mesurer

Pour créer l'alignement : on part du strategy map, qu'est-ce que cela implique : au niveau des processus, systèmes, organisation (gouvernance), people (skills, compétences)

Value drivers et strategy map : toutes les choses qu'il faut faire pour répondre à la seule question : qu'est-ce que tu as fait pour améliorer le focus

Balanced scorecard : learning&growth, process, client et finance → pour atteindre le strategic objectives → value drivers pour les 4 classes

On met les value drivers sur une matrice (manageable et impact) (distraction, critical…)

2ème étape

On repart de la strategy map

KPIs – Target – budget annuel

Une fois les value drivers, il faut définir les KPIs (opérationnel et financier, tangible ou intangible) puis target setting, il y a toujours un target, afin d'arriver à l'objectif stratégique

Target selon la durée de l'objectif, entre 3 et 5 ans selon l'industrie (stable ou volatil) – financial services : changement avec la digitalisation, à 3 ans plutôt qu'à 5 ans

Puis budget annuel

Il faut traduire les value driver en KPIs

Balance scorecard: finance (passé, ext) – client (ext), process (present, int) – learning (future, int)

Le KPI ne doit pas nécessairement être l'output mais aussi les processus, les value drivers doivent être mesurées et pas uniquement l'output

Une fois les KPIs définis, on va aussi les traduire à CT (annuellement), où veut-on arriver cette année et les années suivantes

Puis on met le budget

Ensuite les KPIs : Specific, Measurable (discussion sur la définition du KPIs plus que sur le résultat), Achievable (challenging mais realistic), Relevant, Timely

Validity lié au values drivers

Simple : facilement communicable, pour expliquer au manager et stimuler les employés – pas de définition, ça dépend des value drivers que l'on veut mesurer – et clair pour tous, pas trop complexe

Contrôlable – lié à manageable

Budget : lié au value driver, les entreprises doivent prioritiser les projets, on prend les projets qui le plus d'impact sur les value drivers et qui respectent le budget

- Who is responsible for leading the design of performance measurement systems?

Le management, il est toujours responsable pour définir ce qu'il faut faire, en consulting on les supporte, on est expert dans certains domaines, ce sont eux qui ont la 'end responsablity'

- When is the appropriate time to involve stakeholders in its design?

Ça dépend ce qu'on entend par stakeholders, quand on définit les KPIs c'est pour gérer la société, ça c'est ce qu'on veut atteindre et ça c'est ce qu'on doit faire pour y arriver, on implique les stakeholders en interne dans le développement (employés, directeurs), mais pas les clients dans le management reporting – le plus vite qu'on les implique au mieux c'est, car ils font partie du développement, on leur input à donner et c'est plus facile d'implémenter qqch avec des gens qui sont impliqués

- What factors determine the optimal number of indicators?

Il faut avoir un nombre de KPIs qui dit où on va vis-à-vis de l'objectif stratégique, ça ne sera à rien de suivre 100 KPIs au niveau du top management (mais bien au niveau opérationnel) – limité entre 20 et 30 – c'est la société qui décide, on regarde ce qui est important en fonction de l'objectif stratégique – il faut que les KPIs respectent les caractéristiques – si trop de KPIs, le management les limitent – ce sont eux qui décident ce dont ils ont besoin – on va les challenger par rapport aux KPIs

- What are the critical success factors in implementing PMS?

C'est le focus et l'alignement (aussi de la part du management), que les KPIs respectent les caractéristiques, que les stakeholders soient impliqués

- How should organizations determine which indicators to report on externally?

Les entreprises communiquent sur les outputs plutôt que les processus – ils ne mettent par leur scorecard dans un rapport annuel, mais ils vont faire référence à certains de leur KPIs pour montrer qu'ils y sont ou vont y arriver, plutôt les informations générales que celles en interne

- Strategy update?

Chaque année, l'entreprise regarde si elle doit updater sa stratégie, même pendant l'année en fonction des circonstances (ex. nouveau concurrent) du marché

- Should the selected KPIs be consistent measures of performance against the previous year's KPIs?

Si on change la stratégie, les KPIs vont aussi changer

- To what extent should the selected KPIs be comparable measures of performance amongst the organizations in similar sectors?

Non pas de benchmarking, c'est un exercice séparé du choix des KPIs – le starting point de chaque entité peut être différent de celui des autres entités, ça dépend où en est l'entreprise en fonction de l'objectif

- Target definition?

Responsabilité du management, car ils sont supposés être au courant de leur société, c'et leur accountability de définir leurs KPIs

- How could there be a clear understanding of how each KPI impacts another one?

Durant la strategy map, quand on regarde les différents value drivers – quantification? non

- Recommandations?

Focus et alignement dans le management team – les value drivers, souvent les gens qui ont une stratégie et qui ont défini leurs objectifs, ne sont pas pour autant aligner dans l'interprétation – qu'on ne passe pas directement des objectifs au KPIs mais par les value drivers, aussi bien sur output que sur processus – définition des objectifs.

viii. Annex 8. Interview with C. Metzler (PwC)

- Presentation of the respondent

Senior Associate, small team (5ppl): Sustainability and climate change services, part of risk assurance, clients from different industries, on reporting challenges: integrated report, GRI appliance – also assurance on non-financial dimension, on KPIs, advisory services for company to build-up a good sustainability strategy or to engage with their stakeholders

<IR>: hot topic, very interesting field of work because it's emerging, fast-developing, new concepts, playground because we don't know all the answer, there is no right and wrong, you learn from experiencing, from competitors - <IR> is not the biggest portfolio, work with a lot of companies on reporting challenges, only big client companies move to IR

The key is start the integrated thinking, to make links between financial and non-financials, that's how its starts, that's what you see happening, because at the end of the day <IR> is having a good availability of data, a good understanding of what is actually happening or how is something performed, having a good overview – of course reporting to stakeholders can be a good strategy, very helpful for the company but at the end of the day it's about making informed decision, having a good strategy that incorporates the risks – that you see in many firms, the awareness of this is very growing, it's also an area where many people struggle with it it's not pre-set – to move toward more sustainability, you have good concepts and guidance but it's not just something easy that you can implement, not just like a standard – it's a thought process that companies need to start, to reflect on themselves – people struggle to think in non-financial terms, impacts, risks, to have a comprehensive understanding on the company, the impact and risk it has, that can be very difficult and that is the whole exercise, getting a good understanding of who you are, it's very difficult to understand your impact on the community or the environment, that's why companies struggle, you need to understand how can you best tell your story, because at the EOD it's telling your story, how you create value, what are you impacts, risks, performance

- Do the <IR/T> enhance the communication of the company's story?

I think so, if you report in an integrated manner, you have gone through this whole process, that allows to tell your story much better, because you worked on your impact, on your risks, you have discuss them, and every stakeholders will hence get a better understanding of who you are as a company, what impact you actually create, that adds a lot of value to your stakeholders, investors a much more interested in reading your reports, they can build a better judgement on your data, but the more data they have available, the better they can make a judgment, an non-financial matters focus more not on the performance of a given year but it looks more on the future, the M/LT, that can have a lot of value for investors to understand what the risks are for the years to come

- Link between financial and NFI?

Yes, I think so, because it's often difficult to quantify non-financial information and a the EOF business language is a financial language, it's all about quantifying a certain impact or risk, if you manage to give a likelihood or an impact scale, you can start measuring it, you can compare thing – this is quite advanced, it's not what I have been working on, because, that's very advanced reporting

TIMM? Very comprehensive exercise, need a lot of data, issue: you don't have the data available, ahead of time, in a few years, obtaining data, storying data, having data available will become easy through technology

For me it's not about using the tool but being in the mindset, take a comprehensive look, what you don't always need clear data to ask the good questions

- Auditing of IR?

We haven't done that yet? We work more on GRI, because <IR> is not a standard, it's more of a guidance or a concept, you can't give assurance on an IR, you need some sort of standard – audit the report but the purpose of the audit isn't to say that the report is integrated – we audit certain sections or certain KPIs that are disclosed, we work specifically to check that the report is compliant with GRI

- <IR> in the direction of GRI?

No, now it's sufficient enough, it's more of a broader concept, more of a thinking concept, to combine FNFI – rules can't really help – companies are very different, different issues, to define a standard that fits all of them is quite a challenge, GRI constantly rework they framework, now there is a consultation phase to come up with a new standard that builds on the old one (G4) – flexibility for firms is very important, you ask firms to tell their story, if you prescript them to tell it in a certain way, that's not always helpful, you put pressure on them, GRI becomes an expectation, because it's a global standard, people ask questions if you don't have one

- <IR> and reporting flexibility?

It's more of an idea, with documents to explain or to guide, it's important to have this flexibility, because sustainability is a dynamic evolving field, the dynamism makes it difficult to impose a standard, because it might be outdated after a few years

- GRI relevance?

G3.1 is quite rigorous, it prescripts much more than what we expect the company to report – G4 the issue has been addressed with giving a lot of flexibility, core principals where you are expected to report, now it's more a topic-based, now they think about introducing modules per topics, they expect the reports to take that structure

- In line with <IR>?

Yes, it encourages to think about what is relevant, the current trend is to report on what is relevant (e.g. sustainability report of Telenet), tells the story in a nice way, good and fair description of what they do, how they do it and how they perform, what is your business, impacts and how you perform, it's key to look at what is actually relevant to your stakeholders, you need flexibility to allow for choosing for what is relevant.

- What form should an integrated report take to present the connectivity between the financial and non-financial information?

The firm has to decide how to best communicate to their stakeholders – bank: one financial report and a sustainability report / chemical company where non-financial matters are more imbedded in the business – the stakeholders differ, what and the way you communicate, depends on who you want to address and what story you want to tell – it's important that you help the readers of your publication to make the right links, if you want to show that you use FNI to drive decision, then make sure that people understand how you male these links.

- When is the appropriate time to involve stakeholders in its design and to what extent should they be involved?

Ask what is my business, then what is my impact, start a stakeholders' engagement process, actively approach stakeholders, ask them what are the issues, what are the risks, what should we focus on, you learn how you are perceived in the process, you can map these, see the aspects perceived as important and then identify missing policies and data – at the EOD, the reports serve the purpose to speak to your stakeholders, it's good to understand their interests, to be relevant – the more <IT>, the more

you include NFI and the more you need to understand NFI, that involves more stakeholders – I think of it as thought process for firms to understand their story, what and how they do it, how they can improve, you need flexibility.

- KPI criteria?

Relevant, difficult because different definition of relevance, that's why stakeholder engagement process can be very important. Materiality? Material topic for the company, no difference with relevance – Reliable, fair data, accurate data – Comparable: consistency – Transparency: assumptions or estimates explained.

- How could the full range of KPIs give a balanced view of the company's performance from both a financial and non-financial perspective?

For GRI, you look at a balanced CEO statement, its bit about transparency and open about risks and issues that you encounter, how these issues happen, how you address them, these can be recurrent issues you need to be aware of – it depends on how fare the company goes, it presents itself the way it wants, trust can be an important concept.

- Financial services?

The impact on non-financial is more distant, indirect, different NFI since a service company (a people firm) – the link with NFI is done through their investment, if they take NF impacts risk in their investment decision – more difficult to think about the impact because more distant – assurance can be given on framework on responsible investment.

- To what extent should standardized indicators that may be used for benchmarking purposes be incorporated?

It easy to position yourself against peers on the market if you use the same performance indicators – stakeholders can compare – what it is encouraged by GRI, that you create comparability within sectors, but you have to be careful to not become too prescriptive to say there is only one way to do, but if you change the manner you take you data, the comparability within your firm might be lost, it's important to leave it to the firm, but not in every case it make sense to the firm – key to remain in the business mindset, does it make business sense, in terms of understanding my risks, improving performance, working better with my business partners.

- Quantification of financial impact?

Can be helpful and useful within the firm, to have top management support – also for readers, how it improves the performance, but how do you measure that: lost hours, opportunity costs – it can be very difficult exercise to get to the figure, figure will never be correct will be contested, ahead of time. SAP? The purpose is not to get the real figure; the objective is to get closer to understand a bit better. P/L of Puma: it puts things into perspective, sort of asking the right question, taking non-financials into account.

ix. Annex 9. IIRC Event on Corporate Reporting: Enhancing Transparency and Value

Paul Druckman, CEO, IIRC

Problem with investor's confidence in the information provided. Broader information. How business have value in short to long-term?

Capital markets have failed, not where need to be. Needs intervention for financial stability and sustainability development. Tragedy of horizons. Climate change impact on capital market. Not only NFI but about information relevant to markets.

Public interest. Better availability of credible information. But not F&NFI as <IR> is more about the thinking than the report. Connecting the information.

A step ahead, how we connect things and not only why. Not prescribed formats.

A call to action: being strategic, serious, valued communication (make investors read the reports) – fit within the business strategy, start with the business strategy.

Richard Howitt, Member of the European Parliament

About 'how', learning by doing.

The way companies account for themselves is changing this decade in a way that will affect the next 100 years. <IR> is about less reporting and more material. The Directive is a major signal in that direction. The philosophy of the Directive mirrors <IR>. The guidance can be helpful but get started, learn by doing.

Regulation is part of the answer, helps the level of reporting.

Reforming reporting: more relevant and material figures. Role of accountants, can ensure more sustainable business.

Erik Nooteboom, Head of Accounting and Financial Reporting, European Commission

Corporate reporting is very high on the agenda. Too much information in different forms and instruments. More reporting more efficient and more focused. <IR> should be one central point where we can find all this information. It's win-win, also for the board.

<IR> is a necessity, it is unavoidable and it will come because it forces companies at board level to consider the messages they wish to convey to the outside world. In an age of transparency, this is essential.

What should the EU do first? <IR> could solve the conflict between more transparency and more disclosure on core corporate reporting (what drives the companies). If we make the link, we can ask companies about what matters.

More guidance? Per sector? Erik Nooteboom: It's still in the mindset of the consultation. Pick best practices. Not overload, only material, add value. Paul Druckman: The data needs comparability but not the reporting. Let's get the reporting to the state the market is asking.

Comparability of process? Paul Druckman: The process is part of the credibility. Not trapped in 'the is how you have to do it". Comparability is not about strategy but data.

Demand for more reporting? Paul Druckman: More could be all elements of transparency. The core is the most important, what companies want to share. Overuse of the word 'materiality'.

Mark Vaessen, Chair, FEE Corporate Reporting Policy Group

Move toward compliance, better in the communication of a company.

About relevance, of the corporate reporting system, of information.

Growing audience, should reporting be for a broader group? What impact? (e.g. materiality)

Content of FNFI. More communicative. From NFI to multi-capitals. How can we streamline NFI and bring in a more coherent manner?

P. Druckman: Yes, multi-capital instead of FNFI!

Core and more. An overview about value creation, business model strategy.

Policy makers. Focus on technology. How users get access to the information.

If <IR> is done well it could become the core report.

Jyoti Banerjee, Leader of IIRC Technology Initiative

<IR> is the final outcome of the process of <IT>.

Enhance the visibility of NFI through ESG metrics.

Single information architecture accesses the organization. Establish the approach to IT: pick one metric. Operationalize the approach. Disclose the approach.

All the capitals are connected. The connectivity across the capitals makes the difference. Not a compliance burden. IIRC is an umbrella framework, how to take advantage of it?

Chris Zerlaut, Director, Solution Management, Sustainability Performance Management, SAP

<IR> led to IT. Analyze sustainability KPIs. Impact and connectivity of KPIs. 8 KPIS, calculate the financial impact. Multivariate regression. Goal have been integrated. Material to the business. Two questions: what are the positive or negative financial impacts, what are the levier to drive a financial impact?

Linked the materiality aspect critical for SAP to IIRC externalities.

It's not a revolution, start small, understand one KPI at the time, communicate with stakeholders.

Massimo Romano, Head of Group Integrated Reporting, Generali

No need of an additional report. Number of pages reduced. Internal <IR>. <IR> helps solving the puzzle of corporate reporting. Pre-financial indicators. Materiality has been the main driver.

x. Annex 10. The SEC and the Regulation S-K Concept

Disclosure reform needs to address the establishment of a standard for the disclosure of sustainability related to information in SEC-fillings

SEC hasn't examined disclosures of sustainability issues in detail since mid-1970s

Investor interest in sustainability issues: 60 trillion assets signatory PRI

Analysts need metrics and data to compare performance and risks, peer-to-peer comparison.

SASB: materiality as a basis for standard setting. SASB standards include issues with demonstrated evidence of impact on the financial condition and operating performance of a company

Macro trends, portfolio allocation, company benchmarking and security valuation

Companies face reporting fatigue, a market standard eliminated the possibility of selective disclosure

Relevant info: for stakeholders, all ESG topics of interests

Material info: sustainability factors likely to affect the financial condition or operating performance of a company. Alignment is key (ex. Consistent use of the description 'material')

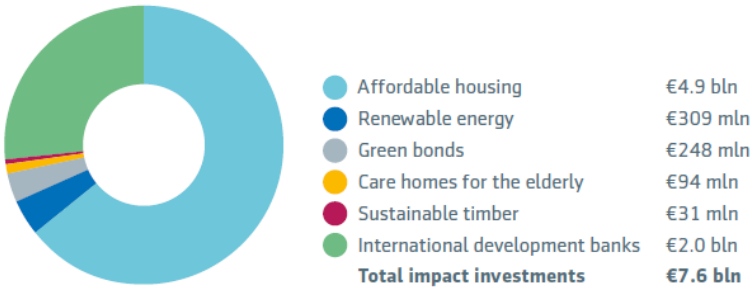
Different purposes, different audience

SASB standards and industry benchmark allow peer-to-peer comparison

Performance is evaluated with the context of industry value drivers

Issues concerns: Liability (good disclosures) – Attestations (audit) – controls.

xi. Annex 11a. Aegon's Impact Investments



Source: Aegon (2016a, p. 29).

xii. Annex 11b. Aegon's Responsible Investment

Source: Aegon (2016a, p. 30).

xiii. Annex 12a. ABN AMRO's Sustainability Strategy

Source: ABN AMRO (2016, p. 114).

xiv. Annex 12b. ABN AMRO's Investments in the StartGreen Capital Portfolio

Innovation in cleantech (B2C)	
Food	Ojah
Telecom/personal devices	Intivation
Solar power	Solesta
Bio-based + biodegradable	Rodenburg
Innovation in cleantech (B2B)	
Smart mobility	2Getthere
Sustainable Infrastructure	Fibercore
Sustainable IT	Visionsconnected and Eshgro

Source: ABN AMRO (2016, p. 118).

xv. Annex 13a. AEGON' Stakeholder Engagement Weighting

A materiality matrix is developed by an independent consultancy company to ensure impartiality. Very little change in stakeholders' groups composition in order to broaden the range of stakeholders which enhance the stakeholder engagement process accuracy. Stakeholders are given a stronger weighting depending on their relationship with Aegon's activities (Aegon, 2016b, p. 14).

Stakeholder group	Weight (in %)
Customers	25
Employees	20
Shareholders	20
Peers and industry associations	10
Financial and sustainability analysts	10
Government and regulators	5
NGOs	5
Academics and independent experts	5

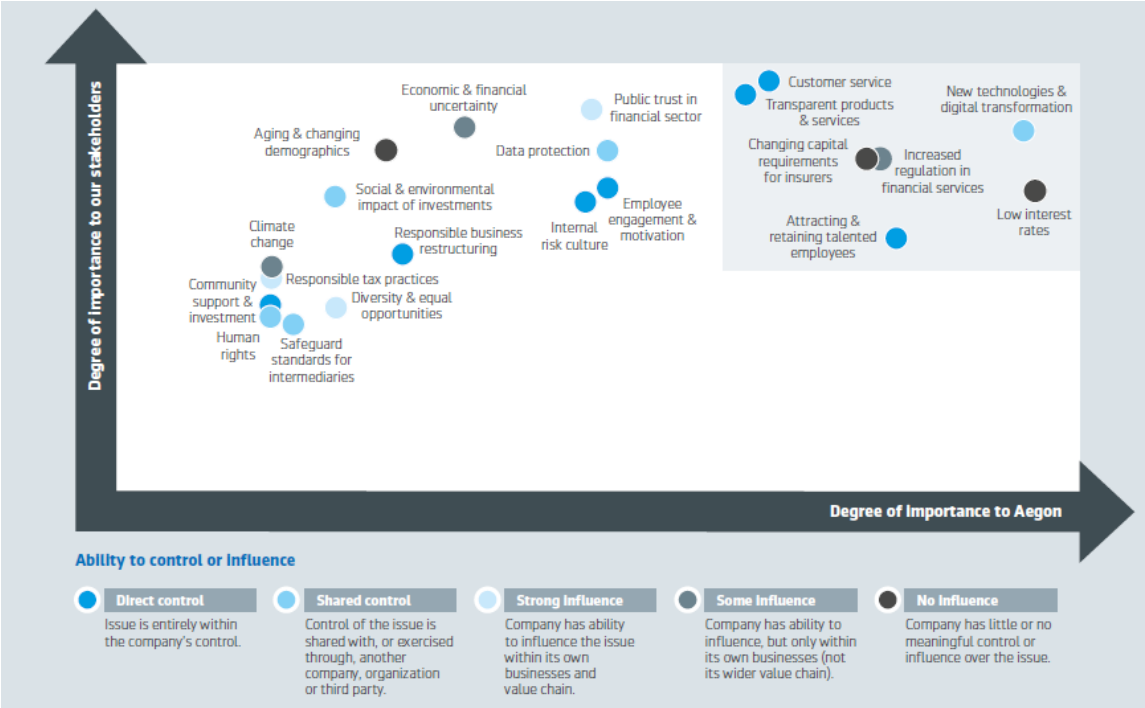
Source: Aegon (2016b, p. 14).

xvi. Annex 13b. AEGON' Materiality Assessment

Aegon describes its materiality assessment as follows: "*Material issues are first identified through internal discussions, through continuous feedback from our stakeholders, and from subjects discussed in the media, by academics and by analysts. Based on this input, we perform a materiality assessment through a survey conducted independently by consultancy firm Steward Redqueen. In this survey, we ask for the views of a broad, balanced and representative group of stakeholders, including customers, employees, investors, NGOs and academics. This year, over 400 individuals from 33 different organizations and 11 different stakeholder groups provided their views on what they think matters most to Aegon. Next, we asked our senior management and our Supervisory Board to go through the same exercise.*" (Aegon, 2016a, p. 15).

On the horizontal axis of the matrix, senior management's views are represented, while on the vertical axis it displays stakeholders' views. The following seven issues have been highlighted by Aegon's materiality assessment:

- New technologies and digital transformation
- Low interest rates
- Customer service
- Increased regulation in financial services
- Changing capital requirements for insurers
- Transparent product and services
- Attracting and retaining employees (Aegon, 2016a, p. 15).



Source: Aegon (2016a, p. 15).

xvii. Annex 14a. ABN AMRO' Stakeholders Analysis

In 2015, the stakeholder analysis has been formalized (interviews, check lists, etc.). The independent sustainability advisory firm helps in the process of deciding the procedure of the stakeholder dialogue. In 2015, four types of stakeholders group have been formed.

Stakeholder group	Stakeholder sub-group
Clients	Individuals
	Business and corporations
Investors	
Employees	
Society at large	Community
	Governments and regulators

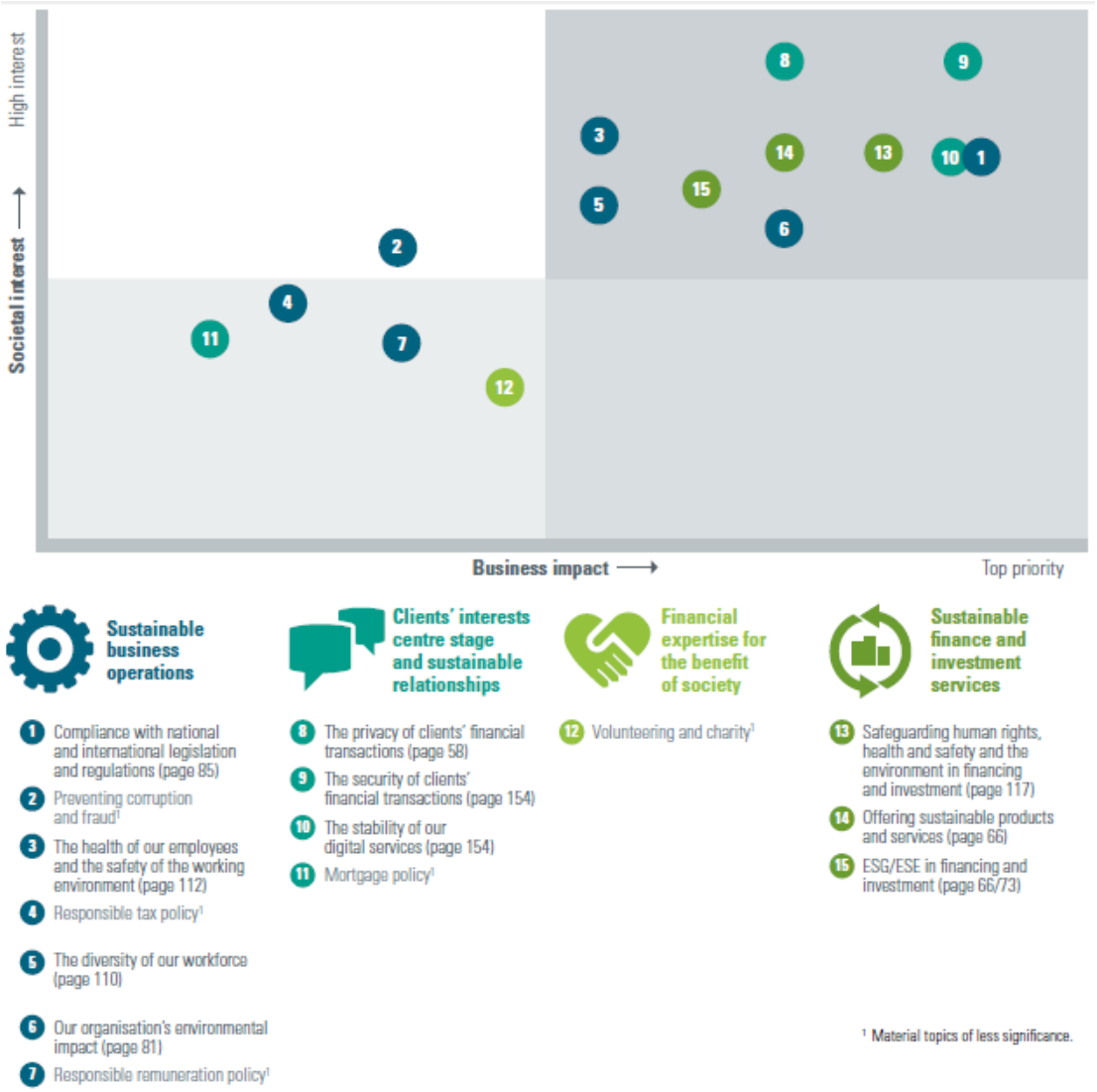
Source: ABN AMRO (2016, pp. 34-35).

xviii. Annex 14b. ABN AMRO' Materiality Analysis

ABN AMRO descripts the process as follows: "We began by asking external stakeholders to rate an extensive list of materiality issues. This was followed by a dialogue with a wide range of participants, including retail and corporate clients, a knowledge institution, a service provider, a financial institution and a trade association. Internal stakeholders were also asked to rank various topics and to explain their choices as part of a dialogue with senior managers from the different business lines." (ABN AMRO, 2016, 116).

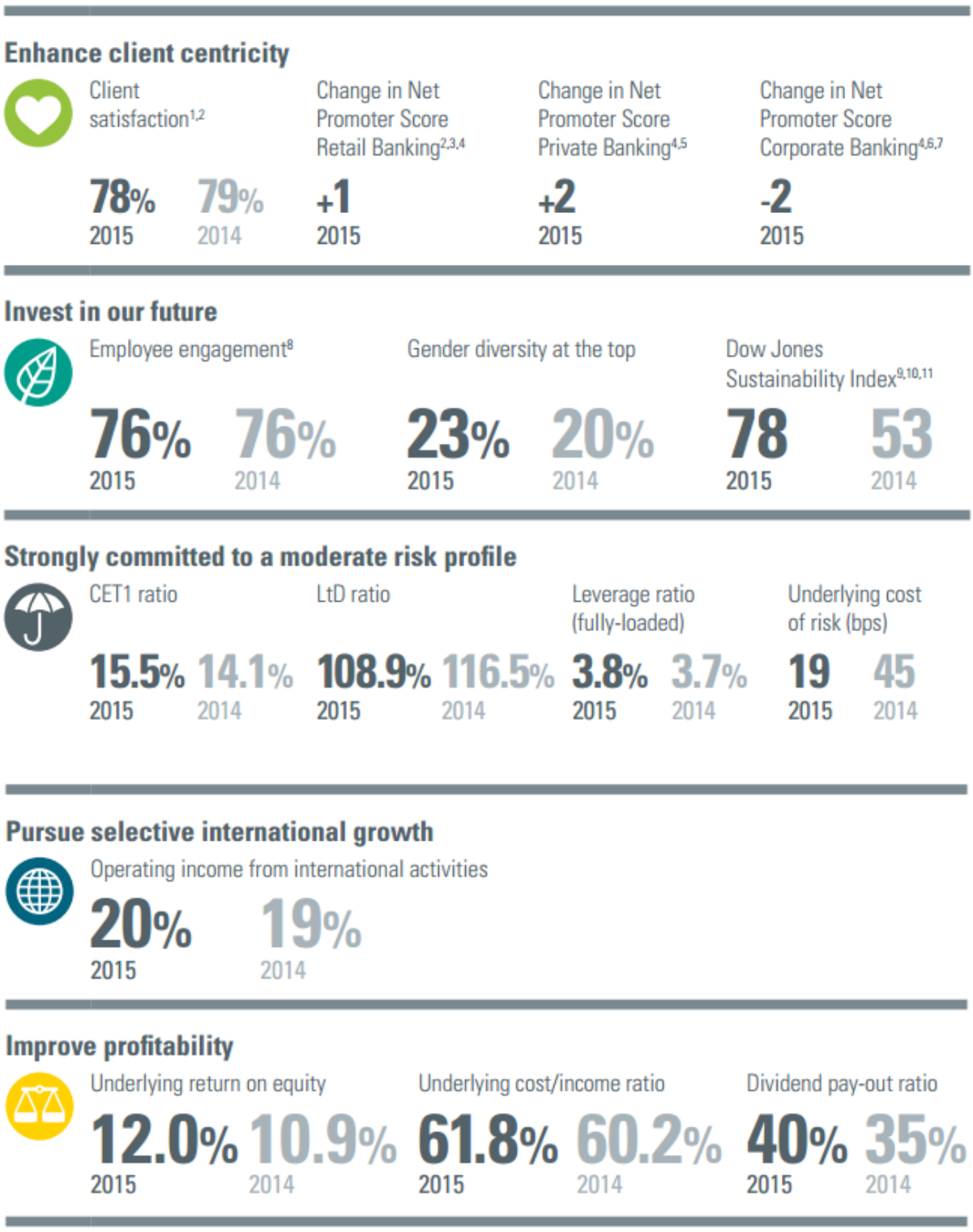
The ten topics that have both a top priority with regard to their business impact and a high interest concerning societal interests are the following:

- The security of clients' financial transactions
- Compliance with national and international legislation and regulations
- The privacy of clients' financial transactions
- The stability of our digital services
- Safeguarding human rights, health and safety and the environment in financing and investment
- Offering sustainable products and services
- Our organization's environmental impact
- ESG/ESE in financing and investment
- The health of our employees and the safety of the working environment
- The diversity of our workforce (ABN AMRO, 2016, 116).



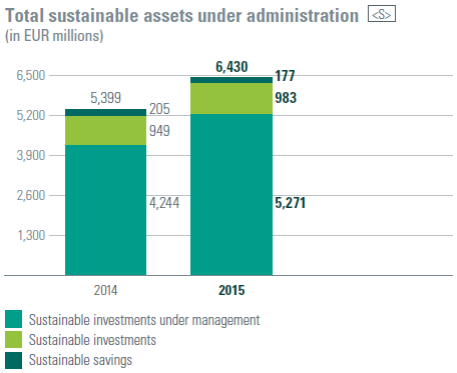
Source: ABN AMRO (2016, p. 116).

xix. Annex 15. ABN AMRO's Strategic KPIs

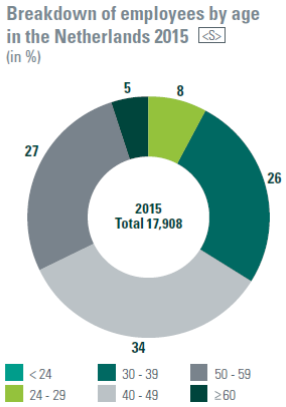


Source: ABN AMRO (2016, p. 27).

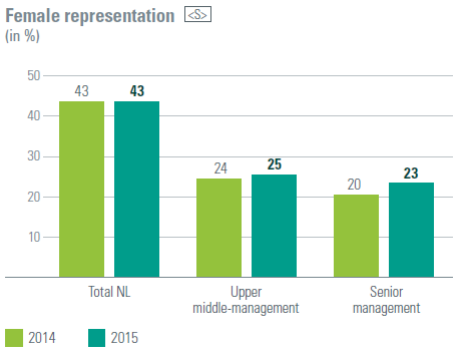
xx. Annex 16. ABN AMRO's Reviewed Sustainability KPIs



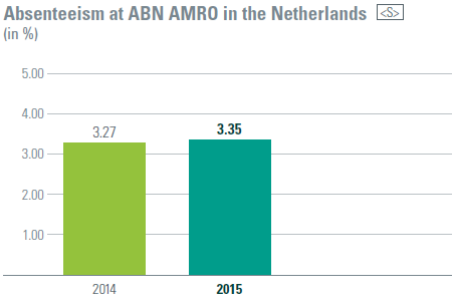
Source: ABN AMRO (2016, p. 66)



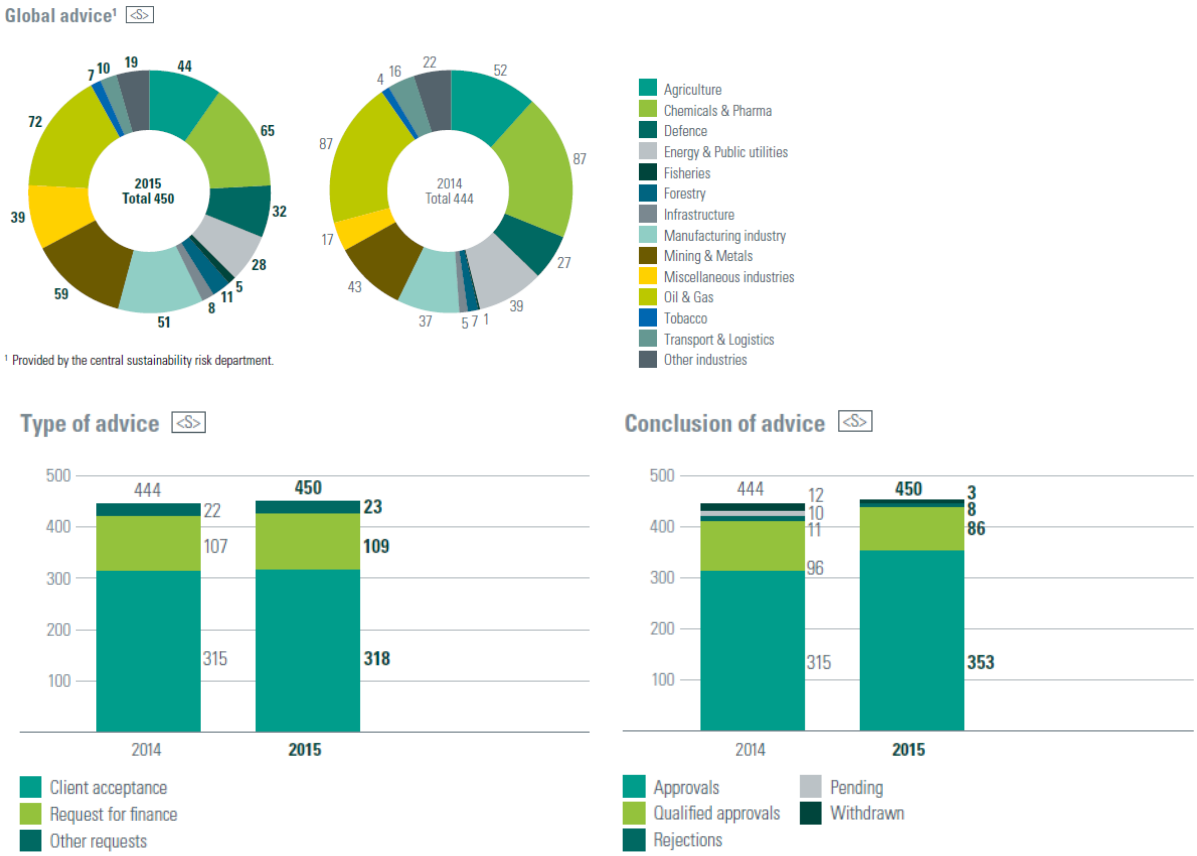
Source: ABN AMRO (2016, p. 107)



Source: ABN AMRO (2016, p. 110)



Source: ABN AMRO (2016, p. 113)



Source: ABN AMRO (2016, p. 166)

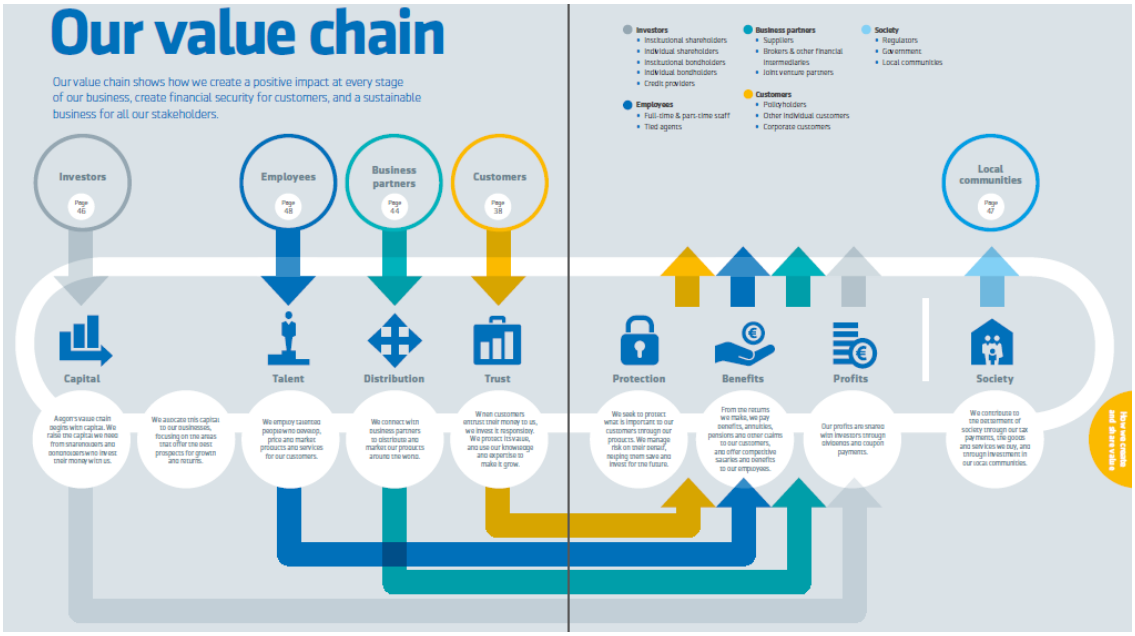
xxi. Annex 17. Aegon's Leading Non-Financial Indicators

	Definitions and Notes	2015	2014	Change	
Strategic Indicators[1]					
% of underlying earnings from fees	*Earnings from fees divided by underlying earnings before tax minus earnings from new business*	48%	39%	23.1%	●
% sales direct to customer	*Direct-to-customer sales include those made via affinity marketing, tied agents or online. Figure is based on forecast sales*	15%	21%	-29.5%	●
% of Aegon businesses using the Net Promoter Score to measure customer loyalty	*Weighted by IFRS capital allocated*	98%	99%	-1%	●
NPS performance by quartile[2]					●
• 1st quartile		2.4%	0.6%	NA	
• 2nd quartile		10.2%	47.2%	NA	
• 3rd quartile		38.1%	50.6%	NA	
• 4th quartile		49.2%	1.6%	NA	
Ratios of costs : assets	*Based on adjusted operating expenses divided by total average revenue-generating investments*	0.5%	0.6%	-10%	●
Ratios of costs : earnings[3]	*Based on adjusted operating expenses divided by underlying earnings before tax + adjusted operating expenses*	63%	58%	8.4%	●
Employee engagement (Hay Index)	*Based on annual survey of Aegon employees. Engagement measures the degree of employee motivation and commitment to the company*	71	73	-2.7%	●
Employee enablement (Hay Index)	*Based on annual survey of Aegon employees. Enablement measures the extent to which employees feel able to carry out their work effectively*	75	74	1.4%	●
Material Indicators[4]					
Total payments of dividends and coupons to investors	*Covers payments made during the calendar year*	€824 million	€797 million	1.7%	▲
Total customers claims, benefits and plan withdrawals		€43.3 billion	€34.0 billion	27.4%	▲
% of investments for which the exclusion policy applies	*The exclusion list applied is part of our Responsible Investment Policy. More information on this can be found on pages 29-31.*	27%	33%	-18.25%	▲
Total impact investments	*Impact investments are direct or indirect investments in businesses, organizations and projects, that meet existing risk and return requirements and are also intended to create a measurable social or environmental impact.*	€7.6 billion	€4.6 billion	65.3%	▲
% of those involved in investment decision-making who have completed RI training	*Percentage of employees who are involved in investment decision-making that have completed training on responsible investment provided by the UN PRI*	70%	NM	NA	▲
# of engagements related to social and / or environmental	*Number of unique companies engaged*	22	NM	NA	▲
# of employees	*Includes all employees including agent employees (who are directly employed by Aegon) and Aegon's share of any Joint Venture employees.*	31,530	28,602	10%	▲
% male employees		48%	48%	NA	▲
% female employees		52%	52%	NA	▲
% of employees who have completed our Code of Conduct training		89%	NM	NA	▲

NA – not applicable.
NM – not measured.
● ▲ For further information on these symbols, please see pages 74-75.
1 Reasonable assurance provided by external auditors.
2 Figures show NPS performance benchmarked against peers by quartile. Percentage of Aegon businesses weighted by IFRS capital allocated. Figures cover only businesses in the US, the Netherlands, Spain, the UK and Hungary where performance was benchmarked against peers.
3 Adjusted for model and assumption updates. Without these adjustments, our cost : earnings ratio for 2015 and 2014 would have totalled 64% and 61% respectively.
4 Limited assurance provided by external auditors.

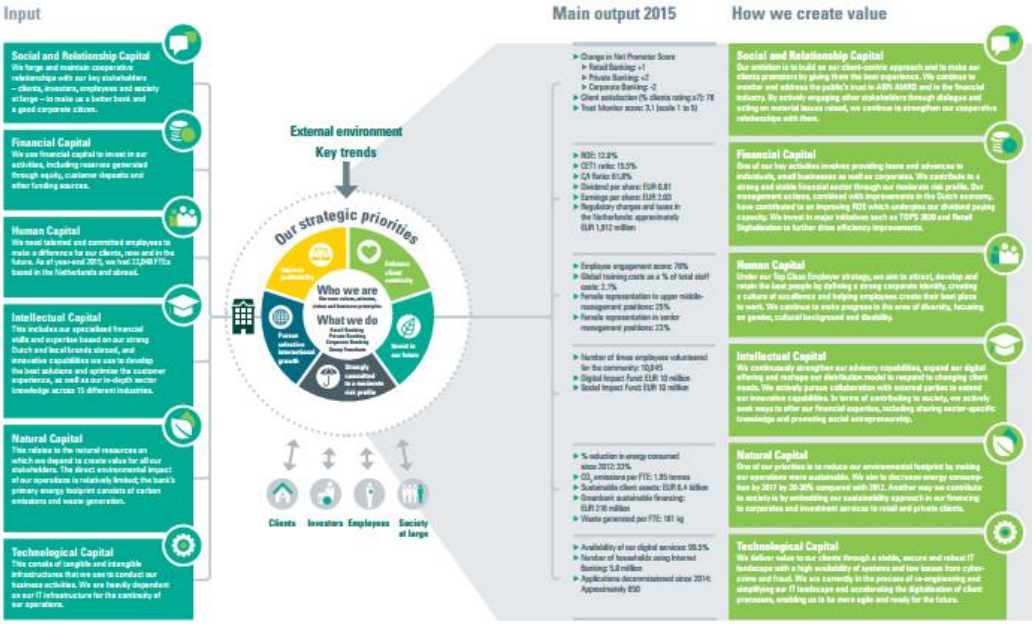
Source: Aegon (2016a, p. 63).

xxii. Annex 18. Aegon's Value Creation



Source: Aegon (2016a, pp. 36-37).

xxiii. Annex 19. ABN AMRO's Value Creation

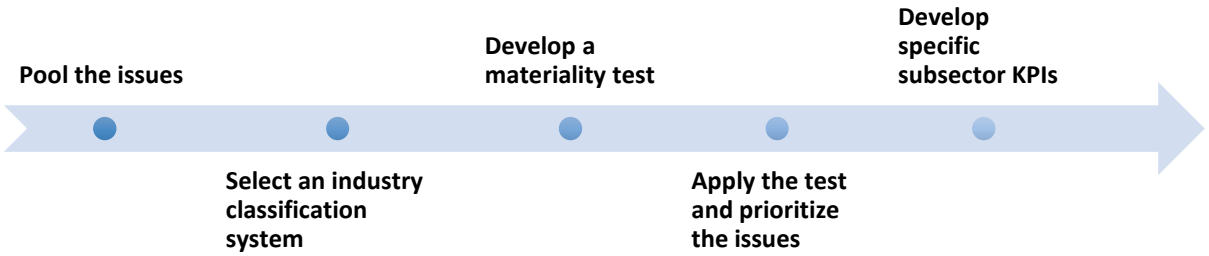


Source: ABN AMRO (2016, pp. 36-37).

xxiv. Annex 20. Process for Identifying Material KPIs

Source: Lyndenberg and Rogers (2010, pp. 244-250).

This process intends to detecting material KPIs for comparable firms regarding key risks and opportunities related to relevant sustainable issues for a particular subsector in which a company operates (Lyndenberg & Rogers, 2010, p. 246). The process consists of five steps:

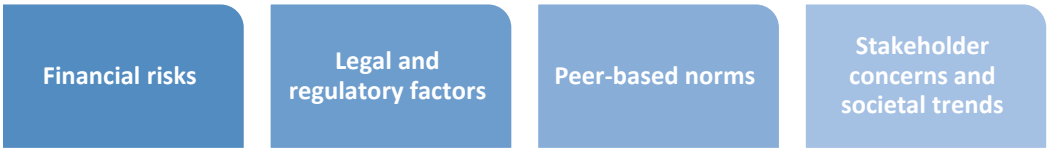


Source: Lyndenberg and Rogers (2010, pp. 247-248).

Step One: Assemble a broad set of sustainability risk and opportunity factors that could apply to all industries. The existing body of research on SR offers an excellent pool of issues from which to work (e.g. see GRI G4).

Step Two: Select an industry classification system. A number of industry classification systems already exist (e.g. see the Industry Classification Benchmark identified 114 industry subsectors worldwide46).

Step Three: Establish a definition of materiality for non-financial issues47. In order to extract the material indicators to assess the performance of each subsector, the materiality test could include these four following factors:



Step Four: Apply the materiality test to the sustainability issues applicable to each subsector, rank the materiality scores and establish a threshold defining the key issues. For each subsector, score the sustainability issues according to their relevance for each of the four aspects of materiality. Once the test has been applied, establishes an acceptable threshold for key materiality.

Step Five: Create a set of metrics for each of the KPIs that are most material for each subsector. Finally, it is necessary to determine for each of the material KPIs what the appropriate unit of comparative measurement would be.

The selection process should result in a set of material KPIs for each subsector. Mandatory <IR> would require to report on these metrics as a minimum basis for <IR> disclosure (Lyndenberg &

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[46] For example, the Financials industry is divided into four Supersectors (Banks, Insurance, Real Estate and Financial Services). Financial Services is then divided into three Sectors (Financial Services, Equity Investment Instruments and Nonequity Investment Instruments), each of which is further subdivided. The sector Financial Services is divided into five subsectors: Asset Managers, Consumer Finance, Specialty Finance, Investment Services and Mortgage Finance. It is at this subsector level that KPIs must ultimately be developed and applied.

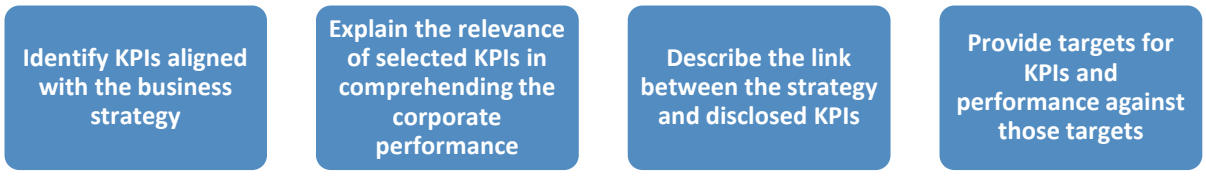
[47] The issue of materiality will be tackled in the *Discussion and Recommendations* part.

Rogers, 2010, p. 248). Furthermore, these KPIs will allowing benchmarking on material matters within subsectors. This process supports the analysis of multi-capital performance regarding inherent sectorial issues.

xxv. Annex 21. Corporate Performance

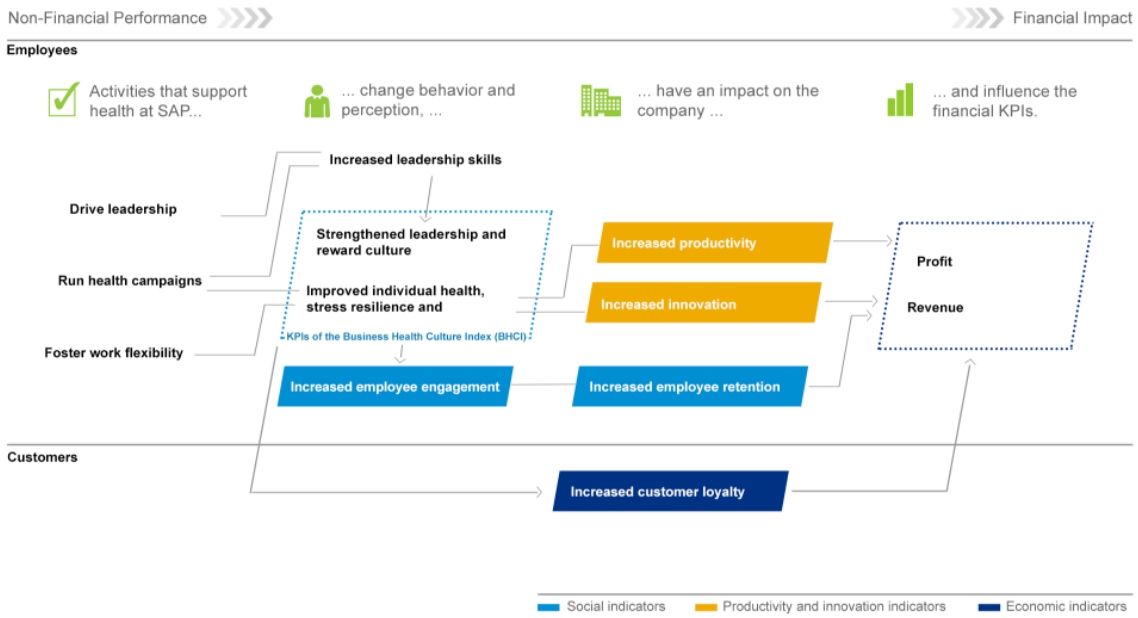
PwC' (2014) survey indicated that investment professionals value similarly operational KPIs than financial KPIs. In addition, enhanced linkage between the business model, strategy and (particularly operational) KPIs fills the gap (between the importance of the KPI disclosed and its perceived effectiveness) (PwC, 2014, p. 14).

PwC (2014, p. 15) proposed four specific actions:



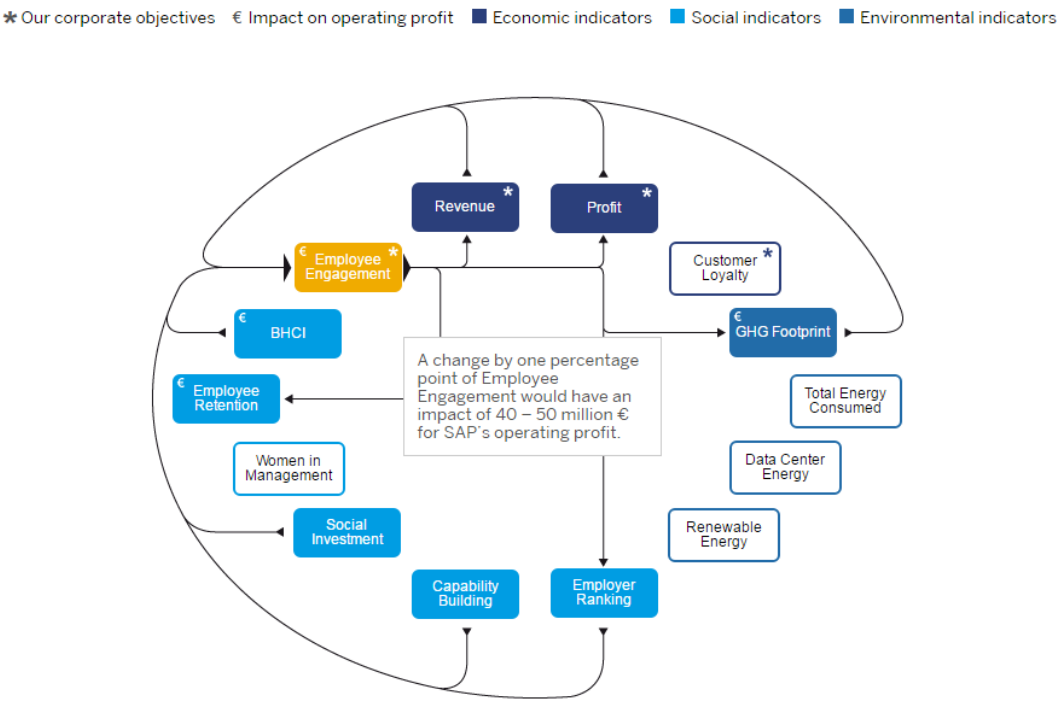
Furthermore, clearer links throughout reports could stimulate cohesion and emphasize interrelations with the corporate reporting and business model and enhance the <IR> effectiveness (PwC, 2014, p. 15). PwC (2014, p. 15) pointed out that clearer links supports investment professionals' business analyses.

xxvi. Annex 22a. Cause-and-Effect Chain for the Business Health Culture Index



Source: SAP (2015).

xxvii. Annex 22b. Integrated Performance Analysis



Source: SAP (2015).