Graduate School of BUSINESS
UNIVERSITY OF CAPE TOWN

MPhil

2019

An inductive analysis of ESG practices and assumptions of materiality amongst South African asset managers

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Abstract

South Africa is a country burdened by the overhang of apartheid and recent state capture, and desperately trying to balance economic growth with well-being of all stakeholders. This has opened the door for ESG practices to provide holistic solutions for both society and business. This is made particularly relevant by applying business resources to the most relevant ESG issues facing companies, the focus of this study. To achieve the objective of promoting positive societal outcomes through better corporate engagement with ESG, the study analysed 22 asset managers, 25 companies and 25 earnings call transcripts for the opinions of asset managers, companies and analysts on which issues were material to them across five industries. Alongside this analysis, asset managers were interviewed for their opinion of ESG as it is currently practiced in the South African market, where they saw barriers to its practice and where potential improvements could be made. The study found alignment between asset managers and companies on the majority of material issues, but little alignment with analysts, suggesting a break-down in conversation between investors and companies. In particular, the issue of governance was stressed as the most important issue category by asset managers across all industries, but was given little air-time by both companies and analysts. These findings were consistent with the literature on investor perspectives of ESG, company ESG disclosure and materiality. The author suggests a model for materiality be developed to gauge company response to material ESG issues more consistently and aide engagement.

Key words: ESG, sustainability, materiality, decoupling, disclosure

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1 Introduction

This study is a qualitative and inductive study focusing on the use of Environmental, Societal and Governance (ESG) investing as a tool to merge corporate returns with better societal outcomes. The research focuses on the current state of ESG practices, particularly ESG investing, in the South African market, with reference to global trends, as well as the more direct study of materiality perspectives amongst companies, asset managers and analysts across five different industries.

This research builds on the growing body of ESG and sustainability research from a South African context to understand how current ESG and its related tools may enhance outcomes for stakeholders in developing countries and the steps necessary to improve uptake of ESG investing strategies in South Africa in particular. Despite the growth of ESG as a global trend, recent corporate failures in South Africa point to a disconnect between companies, asset managers, analysts and the ESG concerns of stakeholders at large. The failure of Steinhoff in 2017 from shortcomings in governance, and community and labour break-downs at the Lonmin mine in 2012, are examples of corporate failures impacting on both investors and society – the former losing R200 billion in market capitalisation in the space of a week (as well as the loss to society of accompanying pensions and jobs) and the latter resulting in the massacre of 42 workers and security guards by police (and the eventual sale of the company).

ESG's lack of traction in the South African investing community doesn't serve the needs of companies, investors or stakeholders at large. Companies and investors both lose returns over ESG failings while stakeholders such as communities, labourers, customers and the environment are exploited for short-term gains. Sustainable business builds sustainable returns for all parties and better ESG practice is the key to unlocking this value for all concerned (Friede, Busch & Bassen, 2015; Singal, 2014).

The betterment of business for society requires a consistent approach to ESG and in particular an approach to determining materiality designed to help align the interests of investors and ESG advocates. Alignment of focus is more likely to demand better

performance from companies on their issues of common materiality, providing further clarity for those companies on where ESG performance is necessary and where it is immaterial.

To achieve the objective of promoting societal good through better corporate engagement with ESG, my study analysed 22 asset managers, 25 companies and 25 earnings call transcripts for the opinions of asset managers, companies and analysts on which issues were material to them across five industries. These industries are food producers, healthcare, mining, retail and telecommunications. Alongside this analysis, asset managers were interviewed for their opinion of ESG as it is currently practiced in the South African market and where they saw barriers to its practice and where potential improvements could be made.

Use of the term 'ESG'

Throughout this dissertation, I use the term 'ESG' as an abbreviation not only for its constituent parts, namely: Environment, Society and Governance, but also as a shorthand for the whole arena of ESG as a practice in which stakeholders, both within business and society, are involved. Most often, the phrase: 'the practice of incorporating ESG issues' may be substituted for the abbreviation 'ESG'. Further, as terms change over time, the use of the term 'ESG' in this dissertation may also stand in for the term 'CSR' (Corporate Social Responsibility), which some cited authors tend to use in place of ESG, but with a by-and-large similar meaning.

1.1 Research area

The research report explores three areas of ESG practice, first looking at the philosophy of ESG as a global trend, secondly ESG in a South African context, and finally the use of materiality within ESG as an under-utilised tool (only recently has materiality begun to be formally defined and articulated (Carroll, Pawlicki, Schneider (2013)) for promoting ESG investing and management, i.e. from the perspective of investors and corporate managers respectively.

1.1.1 ESG in a global context

ESG as a concept has its roots in the developing awareness for stakeholders rather than mere shareholder primacy, a concept generally attributed to Freeman (1984). The awareness of stakeholders gained further impetus in the drive for sustainable development in the 1987 Brundtland report: *Our Common Future*, a key outcome of which was to coin and

define the term ‘Sustainable Development’ as “the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Keeble, 1988).

Awareness of ESG’s contribution to company performance and society has since grown in the investing community through more engagement with companies and asset owners, broader standards (International Integrated Reporting Council, Global Reporting Initiative, King IV, etc.), more comprehensive ESG policies for asset managers and an estimated quarter of all professionally managed assets globally invested with a responsible mandate (Kell, 2018). The topic of ESG in a global context is further elaborated on in section 2.1.1 *A background to ESG.*

1.1.2 ESG in a South African context

ESG investing has yet to convince many asset mangers and analysts in South Africa however, with valuation models and asset allocation decisions still largely lacking significant ESG input and if so, at a very superficial and compliance level. South Africa, a developing country in the flux of its exit from apartheid and enduring troubles with state capture that have sapped the state of vital resources, is in dire need of sustainable business practices to drive a healthy economy. Unfortunately, the likes of the Lonmin massacre and Steinhoff collapse have had vast negative impact on society, a failing of companies and investors to adequately manage ESG risk.

This has been exacerbated by a lack of clarity around standards of behaviour providing confusing messaging for companies as to which issues should be addressed and how (Lin, et al., 2017), while asset owners’ demands for more responsible investment are met with the valid critique that the market in South Africa, particularly for listed companies, is so small that disinvesting from companies on account of shortcomings in ESG performance, would result in too narrow an investment universe. The primary short-coming of a narrow investment universe being the lack of investment options a concern for large asset managers who can rarely be divested from large stocks if the constitute a significant portion of the listed index. This is further explored in section 2.2 *ESG: making the financial case*.

1.1.3 Materiality: Some ESG issues are more important than others

Of all the tools available to practitioners (companies, investors and ESG advocates) materiality has provided the common sense approach for all parties when it comes to aligning the ends of ESG with those of the business. Materiality refers to addressing those issues of greatest probability of impact to the business first and foremost, with less attention given to those issues of limited impact. A definition of materiality provided by Carroll, Pawlicki and Schneider (2013: 2) is: "a matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization's ability to create value over the short, medium and long term."

Applying materiality as an ESG filtering tool is an attempt to discourage companies from greenwashing their reports to virtue signal their case for responsible business (Markowitz, 2008). Research has shown that companies that address their material sustainability issues outperform the market over time (Khan, Serafeim and Yoon, 2015).

The Sustainable Accounting Standards Board (SASB), Global Reporting Initiative (GRI) and International Integrated Reporting Council (IIRC) have all developed frameworks for companies to address materiality with SASB providing lists of individual issues for companies and investors to address across a range of industries (https://materiality.sasb.org).

Materiality provides the most common ground for investors, companies and stakeholders to understand pressures on individual companies rather than impact investing, screening and the host of ESG techniques that may confuse and obscure the true value of ESG (Khan, Serafiem & Yoon, 2015; Eccles & Serafiem, 2013; Eccles & Serafiem, 2011; Hummels & Timmer, 2004).

1.2 Research question

The aim of the research s to understand the extent to which the practice of ESG is commonly understood amongst investors and companies, both in terms of materiality between E, S and G issues within an industry, as well as taking into account perspectives on ESG issues across different industries. To do this the study will focus on understanding the conversation taking place between the three parties of asset managers, analysts and companies. In other words, for a particular industry, this research asks whether the same

issues are being raised as material by the three parties, or are there differences in perspectives of materiality by the different parties?

The research question, set out below, summarises this intention:

How can a better understanding of the differences in perspectives of material issues between the buy-side (asset managers), the sell-side (analysts) and companies themselves be used to improve company reporting and analyst research on Environment, Societal and Governance (ESG) issues in South African listed companies?

The perspectives of companies and analysts will be contrasted and compared to surveys of asset managers to provide insights into South African ESG practice and suggest improvements to meet the needs of both society and businesses.

1.2.1 Dissertation scope

The dissertation focuses on the South African listed market analysing the perspectives of 25 listed companies through a survey of their integrated reports, the perspectives of analysts through a similar survey of earnings call transcripts (the earnings calls of the same 25 companies) and semi-structured interviews with asset managers.

1.3 Research assumptions

This study assumed the five industries chosen would have different areas of material issues. The five industries included in the study are the Mining, Food producing, Healthcare, Retail and Telecommunications and technology (TMT) industries and the assumption is that each industry is facing different ESG exposures; with Mining and Food producing industries being more exposed to labour, societal and environmental issues, for example, while in the Healthcare, Retail and TMT industries customer issues would have more impact on both society and the business' long-term prospects.

The research also assumed that a sample size of five companies per industry across five industries and 22 asset manager surveys would be adequate to fully understand the differences in perspectives on material issues.

Finally, the study assumed that surveys of asset managers and coding of company reports and earnings calls were the best way to access information on materiality perspectives. The

survey of asset managers was convenient given my profession as a researcher which gained me access to their perspectives that would otherwise be hard to achieve. Companies on the other hand report annually and coding their reports provided better insight into their perspectives than trying to interview all 25 of them, which would also open the issue of not interviewing people at the same level within the organisation. Analysts' perspectives were gained by coding earnings calls where they asked of management, another convenient data source that was directly linked to the companies in the study.

1.4 Research ethics

Ethical clearance was given to complete the study given that no minors were interviewed, all participants gave consent to their interview and no personal questions were asked of any of the participants. All participants were kept anonymous throughout the study with no identifying details offered.

The convenience of access to asset managers is due to my profession as an ESG analyst, working in the industry since 2017. This allowed me to develop a network of asset manager contacts which I leveraged for use in this study. The benefits of the convenience of this sample group of asset managers is at the cost of a familiarity bias that may affect the interview data. Two forms of data were collected from asset managers, qualitative interview data and qualitative survey data.

Qualitative interview data

The qualitative interview data was collected in the form of an hour-long semi-structured interview using an interview guide to ensure that particular questions were addressed across all participants. The semi-structured nature meant follow-up questions and tangents could be pursued, but using an interview guide ensured each respondent was asked the same questions regardless of the familiarity bias that may exist.

Qualitative survey data

This survey, to understand where asset managers believe material issues lie in each industry, was completed at the end of the interview by the respondent without any other input beyond the instructions written on the survey. Doing this ensured each respondent was surveyed

under the same conditions with the same instructions. Refer to section 3.2 in the Research Methodology for further details.

2 Literature review

The purpose of the literature review is to understand the nature and quality of the conversation around ESG factors as inputs to the valuation process. How well does it function and deliver on its purpose? A higher quality conversation would lead to better valuation modelling, allowing asset managers to allocate investors' funds to companies that are better responding to ESG factors (societal concerns). The discussion goes further than this, for it should also provide a strong signal to company management to respond more effectively and timeously to emerging ESG concerns, thereby reducing the amplitude of crises to the benefit of both business and society.

My literature review is divided into three parts. In the first, I explore the development of ESG, how it has evolved to serve the interests of society and business, and how it is currently viewed in the literature. What evidence is there in the literature that ESG considerations make a difference to company financial performance? To what extent is this recognised by the stakeholders to the valuation conversation? What tools and strategies exist to facilitate this conversation and how effectively are they being used?

In the second part, I identify the various challenges and shortcomings inherent in the conversation, with particular reference to investors lack of commitment to full ESG adoption.

In the third part, I explore the difficulties in deriving materiality from the point of view of the various contradictions and misunderstandings that surround the topic of ESG. I explore the concept of materiality in the context of the conversation between asset managers and their analysts on the one hand, and companies on the other. A dysfunctional conversation around materiality allows for decoupling, whereby corporate reporters can misrepresent the state of the company's affairs to analysts and asset managers. I also explore the latest literature that builds on stakeholder theory to improve the conversation around materiality, including the role being played by the integrated reporting movement.

2.1 The development of ESG

The first of the spheres of research I will present is the development of the concept of ESG. This is covered by a background to ESG, commonly used tools and indices, and the necessity for ESG investing from both the perspective of business and society at large.

2.1.1 A background to ESG

The evolution of ESG as an input to the investor's valuation of a company follows parallel paths that remain in tension to this day – the paths of investor protection and societal and environmental well-being. Both paths include the twin lanes of environmental and social stewardship, as well as a third, corporate governance.

The first path originated after the Wall Street crash of 1929 and is focused on protecting investors from irresponsible management of firms listed on the NYSE. The second path has its official beginnings in 1983, when the UN General Assembly recognised a deterioration of the human environment and natural resources. Thus, this path has been focused more on the role of business' impact on society.

The US Congress created the Securities and Exchange Commission (SEC) in 1934 and empowered it to manage the disclosures of corporates material to the public interest and protection of investors. A key reporting document required by the SEC is the annual report Form 10-K, which includes quantitative and qualitative disclosures about market risks, as well as a discussion of risk factors material to the reporting company. Material issues are defined by the SEC as "those matters about which an average prudent investor ought reasonably to be informed" (Lydenberg, 2012).

In 2010, subsequent to the financial crisis of 2008, a number of regulations were put into effect to mitigate the effects of short-termism and reduce the likelihood of a similar crisis in the future, most notably the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dallas 2011).

In 2011 the Sustainability Accounting Standards Board (SASB) was founded to develop and disseminate sustainability accounting standards and provide guidance on what issues it deems are material in order to satisfy SEC filing requirements. Around the same time, the International Integrated Reporting Council (IIRC) developed the <IR> Framework, also

oriented towards the long-term needs of investors. Like the SASB standard, the IIRC's <IR> Framework recognises the primacy of providers of financial capital in the determination of materiality and the creation of value.

The second path, relating to business' impact on society, achieved significant impetus at the UN General Assembly in 1983, resulting in the Brundtland Commission, and the publication in 1987 of the Brundtland report: *Our Common Future*. A key outcome of this report was to coin and define the term 'Sustainable Development' as "the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Keeble, 1988).

Since the beginnings of ESG on these two paths it has grown exponentially, with a responsible investment estimated at a quarter of global professionally managed assets (Kell, 2018). These assets are invested across a variety of different strategies by many different actors in the market – private investors, public pension funds and institutional funds (Ezeokoli et al., 2017). The fact that multiple tools, strategies and indices exists as researched by Ezeokoli et al. (2017), points to ESG as a vibrant and growing niche of investing, but also possibly indicates that it hasn't taken shape as a compelling and standardised set of tools for investors.

2.1.2 ESG strategies and indices

In a review of the current field of ESG investment Ezeokoli et al. (2017) found seven distinct and most commonly used ESG strategies. Table 1 below reproduces their findings as an explanation of the variety of ESG investing techniques available to investors.

Table 1. Common ESG investment strategies (Ezeokoli et al., 2017)	
1. Positive screening/Best-in-class	Select investments into a portfolio based on positive performance against chosen criteria against peers
2. Negative or exclusionary screening	Starting with a given portfolio, take investments out based on exclusionary criteria (e.g. tobacco, alcohol or gambling companies)
3. ESG integration	Include ESG data in financial analysis and valuations
4. Impact investing	Select investments to generate explicit social and environmental positive outcomes along with financial outcomes (even if the financial returns are uncompetitive)
5. Thematic sustainability investing	Invest based on a particular sustainability theme (e.g. transformation or diversity)
6. Index based	Invest in or match the investments of established indices constructed of environmentally and/or socially conscious companies
7. Engagement and activism	Directly work with and engage corporates on ESG issues to promote positive ESG outcomes

Ezeokoli et al. (2017) found little academic insight into the methods and strategies used to assess ESG investments, when reviewing the literature on investor's ESG preferences. The bulk of the literature focuses rather on individual investors attitudes and approaches to ESG investing as a concept (Pasewark & Riley, 2010; Nilsson, 2008; Jansson, et al., 2011; Williams, 2007). This is unsurprising given ESG as a developing investing concept with few established strategies for investors to use reliably. According to the CFA Institute (2015), only about 10% of global professionals have formal training in considering ESG factors in investment analysis.

On the other hand, money managers and financial advisors rely on positive and negative screening and indices as their core investment strategies (Ezeokoli et al. 2017). Indexing relies on adjusting weights of investments in a portfolio based on their performance against certain ESG criteria and is an area of ESG research that has also developed considerably. In 2014, the Novethic Research Centre compiled a list of indices it regarded as useful to investors (Lin et al., 2017). The main indices included:

- The Calvert Social index
- CRD Analytics' Global Sustainability Index, Cleantech 100, Life Sciences
- Domini 400 Social Index
- ECPI indices
- FTSE4Good Index Series
- EthiFinance's Gaia Index
- Maplecroft's Climate Innovation Indexes
- MSCI ESG Indices and Barclays MSCI (Fixed Income Indices)
- oekom research's Global Challenges Index
- OWW's Responsibility Malaysia SRI Index, Responsibility Singapore SRI Index
- RobecoSAM's Dow Jones Sustainability Index (DJSI)
- Sustainalytics' Jantzi Social Index, STOXX Global ESG Leaders Indices
- Vigeo's ASPI Eurozone, Ethibel Sustainability Index, Euronext Vigeo
- Thomson Reuters Index

The development of accounting standards and rating indices in South Africa has also followed the parallel paths separated by the primacy of either the shareholder or society. Shareholder primacy has largely been a focus of the King Code of Governance mandating responsible business practices (Institute of Directors Southern Africa, (www.iodsa.co.za), while industry watch dogs and trade unions have held society front and centre. The King Report on Corporate Governance was introduced in 1994, initially focusing on governance, but by 2002, with the release of King II, a section also included guidance on integrated sustainability reporting. Since then, further editions of King have been released, with the most recent being King IV, released in 2016. King remains primarily a standard that guides the disclosure of corporate governance aspects, including ethical leadership and corporate

citizenship, board and directors, audit committees, IT governance, and compliance with laws, rules, codes and standards (Institute of Directors Southern Africa, (www.iodsa.co.za).

In 2004, the JSE launched its own SRI index, designed to be equivalent to the FTSE4Good and the DJSI. In order to be included on the SRI index, companies submitted information contained in a questionnaire that was weighted for relative environmental impact, depending on industry industry. Aspects covered included environmental, social, labour and governance. This index has fallen into disuse, largely due to its failure to exclude companies that, subsequent to their inclusion, destroyed value for society and their shareholders, and thus the market lost trust in the index's ability to differentiate between more, or less socially responsible companies (Johnson, 2016). The SRI Index announced in June 2015 that it was partnering FTSE Russell to further promote sustainability practices amongst listed companies.

The GRI Guidelines, released in 2002, were gradually adopted as a standard for sustainability reporting. The impetus for this in South Africa was the close association it enjoyed with the King Commission's guidelines. These recommended that SA-listed companies report against the GRI standard. By 2009, South Africa had 82 listed companies issuing reports in accordance with the GRI G3.1 Sustainability Reporting Guidelines. Only the USA (98) and Spain (123) had more companies reporting to the GRI standard (Rea, 2009). While this gap has closed in the ten years since the study, the evidence suggests South Africa is by no means a laggard in the area of sustainability reporting.

The manner in which institutional investors approach environmental, social and governance (ESG) issues is gaining increased attention around the world. The Governance and Accountability Institute (GAI) reports that approximately 81% of S&P 500 companies issued a sustainability report in 2015, compared to less than 20% in 2011. By 2016, over 13,000 companies had produced more than 80,000 reports globally as recorded by the Corporate Register (http://www.corporateregister.com). KPMG's 2017 survey reveals that sustainability reporting is standard practice for large and mid-cap companies worldwide (Blasco & King, 2017).

After the financial crash of 2008, markets became more sensitive to the need to improved governance as an overarching stabiliser of corporate behaviour. In South Africa, as in other

major financial markets, asset owners and managers began to realise that responsible investment practices should be applied as a general principle, rather than only to a small proportion of the investment portfolio. Following the PIC's adoption of the United Nations' Principles for Responsible Investing (UNPRI) in 2008, and the development of a local industry standard (CRISA), most managers of institutional funds adopted these principles, but the extent to which they are meaningfully applied has not yet been fully researched. In order to qualify to manage assets from the PIC, asset managers have to show compliance with the UNPRI. The six principles of the UNPRI provide only high-level guidance, largely relating to: incorporating ESG issues into investment analysis and decision making; being active owners (including promoting ESG reporting); and commitment to take various actions to bring about industry-wide adoption of the Principles (www.unpri.org).

At the same time, regulation of the pension fund industry in South Africa has also recognised the need for responsible stewardship of pension funds. In 2011, an amendment to regulation 28 of the Pension Funds Act now requires trustees and principal officers of retirement funds to "give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an environmental, social and governance character" (www.fsca.co.za).

2.1.3 Social motivations for improved ESG performance

Institutional investors could also push to improve firms' ESG performance levels because of social pressures they face. Guiso, Sapienza, & Zingales (2006) show pervasive effects of culture, a broad term that captures beliefs, values, and norms of a group or society, on a range of economic outcomes. In their paper, Guiso et al. (2006) focused on the pressure coming from social norms regarding firms' ESG performance. Akerlof & Kranton (2005, p. 12) provide a definition of norms ("peoples' views of how they, and others, should or should not behave") and show that social norms can significantly influence agents' behaviour. The necessary ingredients for norms to matter for investment managers are that managers identify themselves with a particular community, the community has views regarding appropriate firm-level ESG performance (ideals), and the investment manager receives social rewards for aligning his/her portfolio firms' E&S performance with community ideals and faces social penalties if there is weak alignment.

ESG investment could be value enhancing by providing a form of insurance against event risk or product market differentiation, or both (Servaes and Tamayo, 2013; Hong and Liskovich, 2016; Albuquerque et al., 2017; Lins et al., 2017). Many investors use such motivations to explain their ESG activism, and these investors often note that ESG spending is aimed at a long-term, instead of short-term, payoff. For instance, Norges Bank Investment Management, the investment fund managing Norway's Government Pension Fund Global, states that:

> "as a large, long-term investor, we engage directly with companies' board and management. … Our investment management takes account of environmental, social and governance issues that could have a significant impact on the fund's performance over time. We seek to further the long-term economic performance of our investments and reduce financial risks associated with the environmental, social and governance practices of companies we have invested in" (Norges Bank Investment Management, 2016).

2.2 ESG: Making the financial case

Following the introduction to ESG and the different tools and strategies available to investors, there is the altogether different task of convincing the investment community that there is a financial incentive to ESG investing, rather than merely addressing issues of societal concern. In this section I will review the reasons for investor's hesitancy to use ESG data as well as present the case for ESG as a link to financial out-performance.

2.2.1 Investor resistance to ESG

In order to determine the extent to which corporate and investor behaviour was changing to contribute to a more sustainable society, in 2011, Harvard Business School professors Robert Eccles and George Serafeim analysed data from over 2,000 companies in 23 countries (Eccles and Serafeim, 2011). Two aspects were looked at: the extent to which companies are adopting a more integrated approach to annual reporting, i.e. incorporating ESG issues as key influencers of their business strategies, and the number of times in two quarterly periods that investors accessed environmental and social performance metrics from Bloomberg.

Countries were then indexed as High or Low for both degree of integrated reporting and for investor interest in ESG, placing each country in one of four quadrants:

- Countries that ranked high on both counts included the likes of UK and Germany where there is a high degree of integrated reporting and a high level of investor interest in non-financial performance.
- The opposite end of the scale featured the likes of China, Hong Kong and South Korea. The study's authors contend these countries need a regulatory shock to break out of their current equilibrium.
- Countries with sustainability minded investors, but little integration of ESG issues in their companies' reporting, included India, Japan and the United States. Companies in these countries would, according to the authors, surely soon feel the pressure from asset managers to improve their approach to identifying non-financial issues and integrating their response, both in terms of strategy and reporting.
- Interestingly, South Africa joined the likes of Brazil and Sweden in the quadrant where the perception was that there was a high degree of integrated reporting by companies, but very little interest by investors in non-financial performance metrics.

Whilst the authors of the study describe the countries in this last quadrant as being characterised as 'Sustainable Companies', it is possible South Africa's presence high up the scale may have had more to do with a compliance response to regulatory pressure from the King Committee process and South Africa's early involvement on the International Integrated Reporting Committee (IIRC) (Mungoni, 2014).

There is evidence to suggest that this is changing however. In a survey of publicly traded firms across more than 40 countries, Dyck et al. (2018) offers new evidence that institutional investors push for stronger firm-level ESG performance around the world. That is, firms are stepping up their E&S performance because investors are asking for it. Voices could be publicly observable, such as in shareholder proposals and voting, or could be used in private engagements between investors and firms. Annual reports of major institutional investors and investor groups provide anecdotal evidence that private, not public, engagement is the primary mechanism to obtain E&S changes. This is consistent with recent evidence showing that institutional investors engage firms through private channels (McCahery et al., 2016; Amel-Zadeh and Serafeim, 2017) and that private engagements could be the most effective type of activism (Becht et al., 2009). This may be the case in selected countries, however in the context of South Africa the guidance of Eccles and Serafeim (2011) would suggest that

investors are yet to buy in to ESG in the same way that it is being addressed in more developed global regions.

Ezeokoli et al. (2017) raised a critique of current ESG methods, which may contribute to the break-down between companies and investors, as the difficulty to identify and appropriately weigh ESG factors for their inclusion in investment selection. Drawing on the work of David Vogel (2005) they identify four reasons for this:

- *Inclusivity:* Funds tend to be too inclusive of ESG criteria, including too many companies in their portfolios the result being a lack of diversity between funds (Hawken, 2004), including companies with controversial practices (Billiteri, 2008) and those with positive ESG performance in certain areas even though they have negative performance in others (Delmas & Doctori Blass, 2010).
- *Dubious criteria:* Lack of agreement on values preferences as well as a general lack of consensus about basic aspects of ESG has confused many investors about the best way to approach ESG (Chatterji, 2014; Dunfee, 2003).
- *Information quality:* Many investors struggle to get access to information that would determine whether that company operates within the values of the investor (Hummels & Timmer, 2004). There is also the opportunity for bias as some companies with good ESG performance will over-disclose information while others disclose none at all (Dhaliwal et al., 2011).
- *Short-termism:* Investors focussed on returns tend to overlay ESG onto investments after a financial analysis. This can exclude companies with good ESG performance focussed on long-term growth for better performing companies in the short-term (Vogel, 2005).

Dubious criteria, Information quality and Short-termism with the notable absence of Inclusivity are relevant in the context of South Africa. Not only is there a general lack of agreement over the Social aspects of ESG (Dubious criteria), but varying levels of information quality obscure comparison between firms, which is all compounded by the short-termism of investment practices. Inclusivity on the basis of ESG is less of a problem in South Africa given the relatively small market, making portfolios more prone to ESG as a form of diversification.

Short-termism has plagued and rewarded investors as capital became more liquid over time. It is worth noting the literature on short-termism, an added pressure to the ESG investing case.

Shareholders demand accountability for their invested capital from a firm's board members who in turn expect performance from executives (Barton & Wiseman, 2014). The authors go on to specify that it is not just performance that is demanded, but particularly short-term performance. Ideally, decisions by managers are taken with a long-term view in order to achieve long-term performance (Porter, 1992). However, short-term performance metrics, such as quarterly reporting to shareholders on earnings, are largely measures of financial capital only, neglecting other capitals of value creation.

A recent *McKinsey Quarterly* survey gauged the perceptions of over a thousand C-suite executives and board members with regard to short-termism and performance time horizons (Barton, Bailley & Zoffer, 2016). The authors found that not only did 79% of correspondents feel pressure to prove strong financial performance in under two years in 2013, but that number rose to 87% in 2016. It was also found that 55% of executives and directors, at firms that lacked a strong long-term culture, said they would delay undertaking a new project in order to hit quarterly targets, regardless of sacrificed value.

Barton, Manyika & Koller, et al., (2017) provide further evidence for increasing short-termism using a Corporate Horizons Index (CHI) methodology: a five-factor model based on indicators that relate to a firm's long-term mind-set, such as higher and more consistent investment expenditure, and earnings that reflect cash flows rather than accrual. They found that across 615 firms (separated into either short- or long-term categories based on their CHI score), CHI scores became increasingly short-term, from 50% to 57% between 2000 and 2015.

Research by Cox (2013) and Graham, Harvey & Rajgopal, (2005) supports the hypothesis that firms are incentivised to pursue short-term value drivers that result in the neglect and lack of development of capitals. By delaying projects, suppressing wages, cutting R&D budgets for new projects, or avoiding expenditure on environmental responsibility, managers can free-up capital to pursue quarterly earnings goals. This rarely pays off for firms in the long run (Bhorjaj, Hribar, Picconi, et al. 2009).

Short-termism adds further pressure to the disconnect between companies and investors when it comes to discussing ESG issues in the same terms. PwC's ESG Pulse 2016 surveyed investors (ESG/governance officers, proxy voting officers, and portfolio managers) and companies (chief sustainability officers and people working in the companies' sustainability divisions) to understand their perspectives on ESG issues. According to PwC, companies focus on growth, while investors focus on risk. However, investor analysts have difficulty in connecting ESG data from the reporting organisation with their understanding of risk. Difficulties include arriving at a consistent definition of ESG and comparing sustainability-related issues across companies. The problem may be exacerbated by the disparity between company and investor views on sustainability. While 60% of companies believe their sustainability disclosures facilitate investors' comparison of companies, 92% of investors do not agree. When asked about the quality of sustainability reporting, all the corporate organisations report they are confident with the quality, whereas 71% of investors report they are not confident (Strott & Carey, 2016).

According to the survey, some investors believe that ESG reporting should be relevant to operational and financial performance and how companies manage it to achieve long-term financial sustainability and offset long-term risks. But until we get to a common framework and set of standards, inconsistent disclosure will undoubtedly affect the usefulness of ESG data. Accordingly, companies will need to more fully consider the needs of investors when deciding which sustainability information gets disclosed and what format these disclosures take. Some investors and corporates believe that ESG issues relevant to business performance should be included in an integrated report or integrated into fundamental company communications, publications, and disclosures. PwC concludes that if companies believe they have a compelling ESG story that could improve long-term prospects and mitigate risk, they should make more effort to tell that story to investors (Strott & Carey, 2016).

2.2.2 ESG provides financial out-performance

A second critique of general ESG methods raised by Ezeokoli et al. (2017) (the first being the difficulty to identify and appropriately weigh ESG factors in section 2.2.1) was the finding that investors believed there to be trade-off between financial performance and ESG factor performance. This critique is supported by many examinations into individual investor attitudes towards ESG, the majority of which suggests investors believe there to be a

performance trade-off when pursing ESG investing strategies (Riedl & Smeets, 2014; Paetzold & Busch, 2014; Nilsson, 2008; Williams, 2005; Mackenzie & Lewis, 1999).

These investor attitudes are not supported by the literature however. In a meta-analysis conducted by Friede, Busch & Bassen (2015) aggregating evidence from 2200 studies linking ESG to corporate financial performance (CFP), they not only found that 90% of the studies had a nonnegative ESG-CFP relation, but the large majority of studies had a positive relation. These findings have been supported by other meta-analyses such as Humphrey & Tan (2015) and Lu & Taylor (2016).

Two examples are outlined below: the financial crisis (a global context) and the Marikana mine disaster at Lonmin (South African context) to illustrate veracity of the link between a company or industry, its stakeholders and its financial performance.

Despite the growing awareness of the need to improve reporting on ESG issues, especially after the Enron collapse, a property valuation bubble emerged in the USA, partly encouraged by low interest rates and finance practices that developed ahead of regulatory oversight. One of the root causes was irresponsible lending to home buyers in the sub-prime mortgage market, a societal issue in the ESG universe. Another was the development of an investment instrument based on collateralised debt obligations (CDOs), whereby investment banks deemed aggregated sub-prime debt to be a lesser risk than individual mortgages, an assumption that could only hold true while property prices continued to increase. The resulting market failure not only destroyed individual businesses, such as Lehman Brothers, but also threatened the entire financial system and by extension, society itself (Dallas, 2011).

This example is given to illustrate how the management of a societal issue, in this case responsible lending that shows a concern for home-owners' ability to repay their mortgages, can influence the sustainability of a company, in this case a bank. And that if this bank is large enough, it represents a counter-party risk to its peers, thus potentially putting the entire financial system at risk.

In South Africa, the 2000s saw not only a sharp increase in voluntary sustainability reporting, ESG standards and indices such as the JSE SRI, but also in tightening social legislation for the mining industry, encapsulated in the Mining Charter. Amongst its requirements was that

mines invest in local economic development (LED), aimed at improving the infrastructure and social conditions in the communities surrounding the mines. Considering the challenges in engaging effectively with local municipalities and provincial government, mines largely failed to win the co-operation of their local communities, resorting instead to spending the Charter's required budget on infrastructure. While they retained their licence to operate, their social compact with their platinum industry workforce and related communities disintegrated into general violence and ultimately a stand-off that resulted in the massacre of nearly 42 miners at the hands of the South African Police Services (Farlam, Hemraj & Tokota, 2015).

Both the financial crash of 2008 and Marikana in 2013 occurred despite the rise in sustainability reporting and the increase in the number of ESG standards and indices on the market during the 2000s. The question arises as to the quality of the conversation being promoted by the entire ESG industry. Giamporcaro and Putter (2018) have presented the difficulties faced managing Lonmin under a responsible investing strategy.

Unruh et al. (2016) notes that as more investors seek to allocate their capital based on sustainability performance, corporate leaders should recognise the importance of connecting their companies' ESG activities with financial success. Unruh notes that this response should take into account the emergence of new assessment tools that are being designed by investors and "a diverse community of toolmakers, consulting groups, and multinational organisations."

2.3 Materiality: Aligning investors, companies and stakeholders

In this section, I explore the concept of materiality. Materiality as a key to ESG addresses both the difficulty in identifying and appropriately weighing ESG factors and the link to financial performance by providing more focus to the conversation between investors, companies and stakeholders. However, a dysfunctional conversation around materiality allows for decoupling, whereby corporate reporters can misrepresent the state of the company's affairs to analysts and asset managers.

I will present the literature on materiality in three sections: First developing the concept of materiality from that of the stakeholder addressing the contested nature of materiality across socially inclusive and shareholder focused perspectives. Secondly I will address the issue of decoupling as it refers to materiality exploited by companies, investors and ESG advocates.

Finally, I will present the literature on materiality and its uses to further develop and drive ESG, including the areas necessary for further research.

2.3.1 The development of materiality as a corner stone of ESG

An important milestone in our understanding of the role of businesses in an economy and how value is created arose through the development of stakeholder theory, initially voiced in Edward Freeman's (1984) book *Strategic Management: A Stakeholder Approach*. Freeman offered an alternative to the Input-Output Model (resources flow in as costs, profits flow out) of firms by suggesting that firms are made up of stakeholders such as employees, government and political interests, trade unions and communities, each holding intrinsic value in relation to the firm. Despite critique from the likes of Goodpaster (1991), who argued that it was illegitimate for corporate decision-making on ethical values of stakeholders to extend beyond a strategic level to a multi-fiduciary level, Freeman's stakeholder theory has been widely used as a model for understanding business' role in society. More recently, stakeholder theory has been further expanded upon by the enlightened stakeholder theory/enlightened value maximisation concept, which holds that trade-offs and relationships between stakeholders should be governed by firms' motivation to maximise value over the long term (Jensen, 2001; Porter and Kramer 2011).

While Donaldson and Preston (1995: 87) had argued that the claim that "stakeholder management contributes to successful economic performance…is insufficient to stand alone as a basis for the stakeholder theory", Turban and Greening (1997) found that investing in sustainability performance led to attracting a higher calibre of employees, while Cochran and Wood (1984); Waddock and Graves (1997) found it led to better resource acquisition.

Jonathan Haidt has explored perspectives on capitalism, illustrating two contradictory narratives: one which regards capitalism as exploitation, and therefore demands strong government controls. This narrative prizes human decency, and is willing to sacrifice some dynamism to protect innocent victims (Berkley Haas, 2017). The other story sees capitalism as liberation, demanding that government step back and let entrepreneurs "work their magic" with only minimal interference. This view prizes dynamism, and is willing to tolerate some exploitation in order to prevent stifling protection. Haidt argues that capitalism can be understood as a form of liberation, unleashing humanities' powers of innovation, so long as societies and governments are vigilant against exploitation. This they can do by taking a

stakeholder view of business relationships. When leaders take a stakeholder view, they take the long view and try to cultivate their relationships with all relevant parties.

Developing the concept of the stakeholder and subsequent enlightened value maximisation concept allowed for the hierarchical establishment of materiality that was impossible under the previous shareholder primacy (where the shareholder came first, before anything else).

Even though the enlightened stakeholder concept has largely won out over shareholder primacy there still exist different perspectives regarding CSR, sustainability, business/corporate materiality and responsible investing. These differences have been represented between perspectives that take a more socially inclusive view on the one hand, and a more shareholder-focused view on the other in Table 2.

Table 2. The contested nature of CSR, sustainability, reporting materiality and responsible investing	
More socially inclusive	Sustainability is about creating shared value (CSV) and this is defined as "creating economic value in a way that also creates value for society by addressing its needs and challenges." – Porter, and Kramer, (2011)
	Sustainability is "an approach to creating value that sustains or enhances the resources or processes (systems) on which that value depends" – Hanks, Blesener, Faria, et al. (2013)
	CSR recommends businesses "round up their operations in an ethical manner, i.e., doing the right thing, being fair and being just, and to be a good corporate citizen, i.e., to be charitable and help members of society who are less fortunate." Komaran (2011)
	CSR is a pyramid of economic, legal, ethical, and philanthropic responsibilities – Carroll, (1991)
	"Ethical investing has major ethical impact goals that trump financial performance targets." Schramade, (2016)
	"Sustainable development is the kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Keeble, (1988) [The Brundtland Report]
	Quoted from 2006: Material aspects are "those that reflect the organisation's significant economic, environmental and social impacts; or substantively

	influence the assessments and decisions of stakeholders." Global Reporting Intiative (2018 (a))
	Quoted between 2014 and 2018: "Relevant (or 'material') topics for a reporting organization should include those topics that have a direct or indirect impact on its ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders, the environment, and society at large." Global Reporting Intiative (2018 (a))
More shareholder focused	"The term "material," when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters about which an average prudent investor ought reasonably to be informed." Lyndberg, (2012)
	Pension fund trustees should "give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an environmental, social and governance character." Amendment to Regulation 28 of the SA Pension Fund Act, 2015 (South Africa, 2015)
	"A matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organisation's ability to create value over the short, medium and long term." IIRC, 2013
	"An organisation's ability to create value over time depends on many factors, including its strategy; the resilience of its business model; the sustainability of the financial, social, economic and environmental systems within which it operates; the various opportunities and risks to which it is exposed, as well as on the quality of its relationships with its stakeholders." IIRC, 2013
	"Materiality from an investment perspective means that the issue can change an investor's investment decision as it has a decent probability of seriously affecting the company's value drivers and valuation." Schramade, (2016)
	"Even if the company's current operations are not sustainable in the long run, the company itself might be sustainable if it has the capacity to adapt and make its operations more sustainable. With sufficient societal pressure (regulation, taxes, willingness to pay), competition will drive company level improvement and one ultimately moves towards planetary sustainability." Schramade, (2016)

	CSR is defined as "international, private business self-regulation" Sheehy, (2015)
	"Investment in social responsibility that is not value adding to the company is equivalent to imposing a tax on the company. Unless the entire industry has an equivalent tax imposed upon it, a single firm may put itself at a disadvantage in the competitive marketplace." Friedman, 1970
	"The social responsibility of business is to increase its profits" – Friedman, 1970

Table 2 is by no means an exhaustive analysis, but aims to articulate the differences between the perspectives of those more shareholder focused and those more socially inclusive. As we can see in Table 2, the literature on SRI, RI and ESG suggests significant confusion for both companies and investors. Given this confusion, it is perhaps not surprising that corporate leaders themselves appear confused as to how they should apply the principle of materiality in the context of ESG. Shephard (2018), in criticising the CEO of Unilever for making the statement that "…Unilever has been forced to compromise on strategy and that this has had detrimental consequences for long term, sustainable value creation", declares that it is the board and management who must have the clearest picture of how to drive value creation and sustainability, and that they that "must take the lead in determining what is important."

2.3.2 Materiality decoupling

Understanding that there are material and immaterial issues that provide for superior firm performance begs a number of questions: Which issues are more or less material than others? And, as posed by Carroll, Pawlicki, Schneider (2013), how do firms assess the impact and relevance of each issue to their business for reporting to stakeholders? These questions are at the heart of the study and the answers will be explored in the Findings and Discussions sections. Before exploring these questions, it is worth investigating the literature for reasons why companies might not represent their material issues in the best interests of the business and its shareholders. Goodpaster (1991); Pruzan (2001); and Porter & Kramer (2006) found evidence to suggest that companies invested in a CSR vision and activities were vulnerable to CSR contradicting the company's business mission and activities. Aside from these conflicts of mission, what other reasons are there for decoupling materiality?

Decoupling materiality by reporting a torrent of irrelevant data

In South Africa, Rea (2011) found that companies listed on the JSE responded to the GRI G3 guidelines by attempting to report on as many of the GRI G3.1 indicators as possible, thus signalling compliance with the standard. By 2010, 32% of all 392 listed companies on the JSE were producing reports at Level C Compliance with the G3 standard. Perusal of Rea's (2011) annual research into GRI compliance by companies listed on the JSE, found scant evidence that this increase in reporting on materiality (by the GRI's definition), showed any correlation with more responsible behaviour in terms of managing relationships and resources. While the average G3 compliance score achieved by the companies surveyed in 2011 was 25%, several companies that achieved significantly above-average scores were on the cusp of destroying significant value for both shareholders and society. Examples include: African Bank, with a score of 62%, cost 5,700 jobs and destroyed significant value due to reckless lending (Myburgh, 2016) and while Lonmin achieved 93% compliance, its inability to resolve worker disputes resulted in the death of 42 mine workers and civilians (Farlam, Hemraj, Tokota, 2015). Other significant value destroyers included Altron (69%), Altech (68%), and State-Owned Enterprises Transnet and Eskom. Such a disconnect between scoring and behaviour suggests either that the GRI issues being rated were not material to sustainable value creation, or that the reporting companies were engaged in misleading reporting behaviour.

Deception is a behaviour also observed by Markowitz (2008), who found that of the ten most common stocks selected by socially responsible mutual funds, nine companies were simultaneously praised in areas they were condemned (specifically in the US market). For example, the Rain Forest Action Network named Bank of America a winner amongst its peers in reducing greenhouse gases at its facilities, while concurrently being condemned for lending money to businesses involved in crude oil exploration by Riskwaters group.

In surveying South African companies, Mungoni (2014) found that firms' interaction with stakeholders is less 'engagement' and more 'management' – a one-way interaction mainly for the purposes of gathering data for sustainability reporting. This suggests, as Markowitz (2008) found, that companies' ESG performance can become decoupled from their reporting on ESG.

Lyon & Montgomery (2015) found increasing claims of environmental performance by companies was accompanied by an increasing tendency to mislead people into "forming

overly positive beliefs about an organisation's practices or products." This practice of greenwashing, according to Oreskes & Conway (2010), is being met with increasing scepticism by consumers, while employees seeking genuine career fulfilment are negatively affected by the practice.

These studies illustrate the competing and conflicting demands on reporting and how this could incentivise companies to be misleading in their reporting of these issues to their stakeholders.

Faced with complexity, closed standards encourage superficial compliance

Christensen (2017) argues that sustainability is by its very nature open-ended, since problems, challenges, and issues change across time and context. Sustainability is necessarily a "moving target" (Guthey & Morsing, 2014) "in a state of continuing emergence" (Lockett, Moon, & Visser, 2006). Precisely because of its ambiguous nature, it allows for sense-making and participation from many different stakeholders with diverse interests and expectations (McWilliams, Siegel, & Wright, 2006). Despite this open-ended nature, Christensen notes a trend towards closed standards. Rasche (2010), criticizes such standards as being characterized by detailed and accurate specification of practices and behaviours, thus lacking sensitivity to local conditions. In such cases, compliance may be reduced to annual exercises of "ticking the boxes," thereby excluding necessary reflection on the standard's limitations and discussions about potentially better practices. South Africa is no different when it comes to ticking boxes, although since the end of Apartheid certain areas of society have seen significant sensitivity to local conditions, including the Mining industry with its Mineral and Petroleum Resources Development Act No. 28 of 2002 and its subsequent ammendement bill in 2018 itemising specific practices in the industry.

Decoupling materiality through closure by the past, by design and by routinisation

Christensen (2017) identifies the propensity towards closure and the various drivers that restrict organisations in their use of sustainability standards:

- *Closure by the Past*: When standards are formulated to achieve consistency, they become entrenched, with compliance more oriented towards the past time in which the standards were formulated. This creates a decoupling between declared programmes and action, and inconsistencies between past promises and current behaviour, also described as "greenwashing" (Delmas & Burbano, 2011).

- *Closure by Design:* Certification standards, by design, tend to define performance criteria in order to achieve their seal of approval. Examples include Social Accountability 8000, FairTrade, ISO 14001 Environmental Management Standards and Forestry Stewardship Council. This can dissuade companies from pursuing different strategies to best deal with an issue if there is already a prescribed standard that must be met.
- *Closure by routinisation:* By routinely revisiting compliance with open-ended principle-based sustainability standards, such as the United Nations Global Compact (UNGC), or the Principles for Responsible Investment (PRI), companies develop defensive routines that turn such open-ended standards into manageable routines that are tantamount to closure.

Complexity reduces clarity, allowing companies to misrepresent their response

In his essay on decoupling, Frank Wijen (2014) describes the common practice whereby industry stakeholders develop voluntary sustainability standards governing business behaviour in an attempt to solve complex socio-environmental concerns. The idea is that such voluntary standards endorse those businesses that comply, enabling them to signal their higher performance to customers and society, and thus gain legitimacy in the marketplace.

Wijen's research focused on the conditions required for voluntary standards to achieve the goals set by their developers and what this might mean for how standards should be designed to encourage businesses to achieve societal goals.

Wijen concluded that the more opaque the field, the less likely that sustainability standards will be adhered to by companies, thus rendering them ineffective. This is because in a more opaque field (i.e. containing complex challenges that resist resolution) it is hard to draw causal links between company behaviour and societal outcomes. Further, companies often choose to adopt different ways to achieve compliance and, according to Wijen, may even get away with making a pretence of complying, and thus not contribute substantively.

To solve these problems, institutions often set stricter rules and procedures, devise incentives, accompanied by stringent monitoring and social pressure to comply, and train organisations to apply standard methods deemed to be the best practices for the industry.

However, stricter rules and standardisation often produce unintended consequences for society, forcing companies to make a trade-off between stakeholders. In such cases it may be more appropriate to allow organisations to find their own innovative solutions to such societal challenges.

Thus, the need to reduce vagueness in setting rules, devising incentives and imposing best practices, is at odds with the need to allow flexibility and innovation required to achieve solutions to 'wicked' problems.

Wijen concludes that where companies get to grips with issues through genuine stakeholder engagement, they may be more likely to comply substantively, with genuine commitment to resolve the underlying challenges and thereby achieve the desired societal outcomes.

Decoupling by ESG advocates/analysts

Schramade (2016) makes the case that materiality is the main source of misunderstanding between investment analysts and sustainability analysts. Quite often, according to Schramade, the sustainability analyst "doesn't understand investment needs and he (or she) will bombard his investment counterpart with all available sustainability data on a firm. Most of that data will prove of little use to the investment analyst, who may unjustly become cynical about all sustainability data."

Grewal, Serafeim and Yoon (2016) found that ESG activism has not traditionally been founded on an assessment of materiality. Rather, they found that activist investors choose a topical issue, such as climate change or diversity, and then engage with a wide range of companies across industries based on criteria such as financial holdings, performance on the focal issue by the target companies, and/or the size of the target companies (Blackrock and Ceres, 2015). They cite the example where an investor might target many large companies with poor performance on diversity issues, as part of a diversity campaign. Some of the shareholder proposals based on such campaigns are likely to be less relevant for some companies than for others, considering that the issue's materiality would differ from one industry to another. They learned further that other reasons for investors submitting proposals on immaterial sustainability issues include that the engagement team responsible was focused on objectives that did not include an overriding financial consideration. They cited, as an

example, the CEO of a prominent responsible investing asset management firm that they interviewed. He discussed "how the head of the engagement efforts, who had a human rights background, was placing emphasis on human rights issues in submitting shareholder proposals without applying an investment lens on whether, how and under what conditions human rights could affect the financial performance of a company."

Indeed, in their 2016 study analysing 2,665 shareholder proposals that address ESG issues, Grewal et al. (2016), found that more than half of proposals (58 percent) focused on immaterial ESG factors, suggesting notable inefficiencies in the engagement efforts conducted by many investors. Grewal et al. (2016) found proposals on immaterial issues were associated with subsequent declines in firm valuation. Their research showed that companies increase performance on immaterial issues because of agency problems, low awareness of the materiality of ESG issues, and attempts to divert attention from poor performance on material issues.

Losing sight of the drivers of financial value for the firm through a pre-occupation with societal issues may therefore pose a danger to the firm's sustainability. As Friedman (1970) pointed out, investment in social responsibility that is not value adding to the company is equivalent to imposing a tax on the company. Unless the entire industry has an equivalent tax imposed upon it, a single firm may put itself at a disadvantage in the competitive marketplace.

2.3.3 Materiality and further ESG development

Following the development of the SASB (Sustainability Accounting Standards Board) materiality model, Khan, Serafeim and Yoon (2015: 1), found that "firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues." By contrast, and as noted earlier, Rea's records of GRI compliance (2011) showed South African companies were more concerned with superficial compliance across the GRI indicator table, than on specific investment in a smaller and more material subset of issues. No study has yet been done to determine a correlation between these scores and long-term financial performance.

Khan, Serafeim and Yoon's (2015) first evidence on materiality was driven by guidance from SASB, which used firms' Securities and Exchange Commission (SEC) and Form10-k filings to inform working groups of industry and issue-specific experts of "known trends, events,

and uncertainties that are reasonably likely to have material impacts on their financial condition or operating performance" (Securities and Exchange Commission (SEC), 2003: 1). These working groups were responsible for providing feedback on SASB's draft sustainability accounting standards and ultimately creating the materiality heat-maps for 45 industries. 2,100 experts were represented on the working groups consisting of one third corporations, one third market participants, and one third other stakeholders.

However, the starting point for determining materiality by the working groups was the "evidence of interest" based on the reporting firms' own SEC declarations. Given what we have seen from the analysis of GRI reporting earlier, and the tendency to decoupling through the bombardment of information that fails to discriminate between material and immaterial, as described by Schramade (2016), there is little evidence to suggest that self-reported issues are necessarily material. Indeed, in examining risk factor disclosures provided by companies in the Form 10-K and other SEC filings, the IRRC Institute found that firms "tend to represent a listing of generic risks, with little to help investors distinguish between the relative importance of each risk to the company." (IRRC Institute, 2016: 3).

Notwithstanding Khan, Serafeim and Yoon's (2015) findings of correlation between financial outperformance and performance on material sustainability issues, it is unclear whether this implies causation. Other factors may be at play here, for example that companies that report in more detail, regardless of the materiality of the issues being reported on, are more likely to manage their firms more responsibly than those with minimal reporting.

Eccles and Serafeim (2013: 4) endorsed the concept of a firm building a sustainable strategy by addressing the interests of all stakeholders. "To do that", they argued, "[the firm] has to increase shareholder value while at the same time improving the firm's performance on environmental, social, and governance (ESG) dimensions." Indeed, Hoepner et al (2016) showed that ESG shareholder engagement can reduce downside risk and that successful engagement, particularly on environmental and social issues, can improve accounting performance, governance, and increased institutional ownership (Dimson, Karakas and Li, 2014).

Cognisant of the concern that stakeholder issues were losing their influence by being confined to sustainability reporting, a number of international role-players began to discuss

the case for integrating non-financial information into company annual reports, the primary reporting vehicle used by shareholders to hold public companies accountable for their actions. The movement towards the "one report" (Eccles & Krzus, 2010) underlined the shift in perspective on how materiality should be defined. By 2013, following broad consultation involving interested stakeholders to the process, the International Integrated Reporting Committee (IIRC) launched its International <IR> Framework. Central to this framework is the IIRC's definition of materiality: "a matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization's ability to create value over the short, medium and long term" (Carroll, Pawlicki, Schneider, 2013: 2). Eccles, Kastrapeli & Potter (2017) found, in their survey of institutional and retail investors, that of the wide range of ESG issues of concern to a company's many stakeholders, not all are of interest to investors. They found that investors were interested in material issues as defined by the IIRC's <IR> Framework.

Following a survey of 582 institutional investors (evenly split between asset owners and asset managers) and 750 retail investors, Eccles et al., (2017) found the results strongly supported the importance of materiality. 92 percent of institutional investors want companies to identify what they consider to be the material ESG issues and to report on their performance on them. That is, investors want to be able to match their own view of materiality with the company's view, providing a basis for engagement. Eccles et al., (2017) further found that two thirds of institutional investors want the board to determine which issues are material, with less than one third citing the CEO. Eccles et al., (2017) conclude that "full ESG integration can lead to the creation of value for both investors and society as a whole." And they recommend that if investors ask companies to provide integrated reports, they would be helping both companies and themselves.

Eccles et al., (2017) offer a five-element model for adopting ESG integration by investors:

- Take ownership at leadership level, including the board, the CEO and the CIO,
- Industry portfolio managers and financial analysts need to become educated, rather than leaving proxy voting and compliance to ESG analysts who may not have influence in investment decisions,
- Lengthen the time horizons for portfolio performance from the current 1 – 3 years to 3 – 5 years and even beyond, in order to better match investment time horizons,

- Investors need to engage more meaningfully with company management and boards, asking for ESG disclosures and thus determining which issues the companies believe are material. It should then follow that the quality of ESG data would improve and become more informative to the discussion,
- Industry portfolio managers and their analysts should be responsible for determining materiality and then building investment models that incorporate both financial and ESG factors.

2.4 Conclusion to the literature review

The literature review has explored the development of ESG as an investing concept, looking at the tools and strategies available to investors and companies. The corporate financial case was made for ESG strategies before the constraints to its full adoption were presented, most notably shortermism and a lack of clarity on company disclosures of sustainability issues. Finally, the literature on materiality was presented as a corner stone of the ESG conversation. The link between materiality and financial performance was established as well as the decoupling between companies and their reporting and ESG analyst and the investment case.

The literature review has found a strong increase in the levels of interest in ESG issues, partly in recognition of the role it can play in mitigating risk. Notwithstanding this trend, there appears to be a wide gap in understanding of ESG between business and the investment community. There is lack of agreement around definitions, reporting frameworks are not standardised and little credence is given to the information reported by companies. Firms face pressure from investors, demanding short-term financial performance, and ESG stakeholders, demanding performance across a range of metrics, when reporting on their value creation story. Creating value for a broad range of stakeholders also creates paradoxical tensions as the needs of stakeholders are not perfectly congruent with one another. This gap suggests an opportunity to develop a framework (the praxis model) to facilitate the conversation between the key stakeholders such that all parties develop a common understanding of the issues most material to business. A key input to this model is the understanding of ESG materiality in the South African market – what it means to companies on the one hand and to asset managers and their analysts on the other. I conclude that further modelling, based on the work being

pioneered through the integrated reporting movement is needed to answer the demand for a more effective conversation around ESG.

Further, this research responds to Adams, Coulson & Emmelkamp, et al., (2013) in their background paper to capitals for the IIRC where they refer to the need expressed by investors for companies to put capitals in strategic context: "The IIRC is considering a research project to examine report users' information needs, focusing on the commonality and differences between the needs of investors, as providers of financial capital, and the needs of broader stakeholders, to understand how much difference there is in practice and how much information needs vary within and between stakeholder groups" (Adams, Coulson & Emmelkamp, et al., 2013: 20).

Table 3 outlines the literature review and consistency matrix. For the sake of brevity, I have included only those studies providing unique insight into the research question. Where multiple studies are referenced making the same link to the research question only one explanation is provided.

Table 3. Literature review matrix

Thematic Area	**Study**	**Methods**	**Theoretical Underpinning/ Research Findings**	**Link with Research Question**
The background to ESG	Lydenberg, 2012	Report developing lists of material sustainable issues across a variety of industries	Development of fact-based materiality tests with leading sustainability, rather than financial, KPIs	Developing an understanding of materiality from a sustainability perspective
	Dallas, 2011	A study of short-termism in the context of the financial crisis	A description of the types of underlying factors that promote shot-termism and suggestions for structural changes to mitigate them	To better understand how short-termism has contributed to the growth of ESG and investor reluctance to full ESG adoption
	Keeble, 1988	A report examining critical global issues of environment and development	The report suggested proposals for dealing with these issues at national and international level	Understand the basis upon which the sustainability movement was built and where it has come since

ESG strategies and indices	Ezeokoli, Layne, Statman & Urdapilleta, 2017	1. A study of ESG investing in relation to pensions, strategies and performance 2. An environmental scan of ESG investment tools	1. A lack of ESG incorporation into retirement savings 2. Uncovering 28 tools siloed into four categories	Categorisation of general ESG tools and strategies to understand the variety of ESG investment techniques available in the market
	Pasewark & Riley, 2010	Study of personal values in investment decisions	Traditional wealth maximisation doesn't account for personal values	Understanding the literature on individual investor preferences towards ESG strategies
	Lin, B. B., Romero, S., Jeffers, A. E., DeGaetano, L., & Aquilino, F. 2017	A study comparing leading sustainability rankings.	A lack of transparency and consistency means capital markets are still impeded	Categorising sustainability indexes to further understand different ESG approaches and contextualise ESG practice
	Blasco & King, 2017	A survey of 4,900 companies' corporate responsibility and sustainability reporting across 49 countries and regions.	A range of results, from tracking growth in assurance, issues reported on, countries seem growth in reporting, etc.	Understanding the state of sustainability reporting by companies in a global context.
Social motivations for improved ESG performance	Guiso, L., Sapienza, P., Zingales, L., 2006	Studying the causal effects between culture and economic outcomes	Culture, through differing preferences impacts economic outcomes	Cultural preferences, particulary from a diverse society can impact firms' operating contextx
	Akerlof & Kranton, 2005, p. 12	The paper proposed constructing an economic model of identity and work incentives to capture missing motivations	Firms providing workers with a sense of identity need not reward nor punish workers as much as other firms	Defining societal, cultural and identity norms to understand societal motivations for business outcomes
	Servaes and Tamayo, 2013	A study of firm CSR and customer awareness	CSR activities can add value but only in certain conditions	CSR and ESG can add value, particularly in mitigating against risk
	Eccles and Serafeim, 2011	A study of the state of art of	The authors categorised countries	Presenting data on the disconnect

		integrated reporting	by investor demand and company disclosure of sustainability information	between investors and companies with regard to sustainability information
Investor resistance to ESG	Dyck, Lins, Roth, & Wagner, 2018	A study of whether shareholders drive E&S performance of firms worldwide	Institutional ownership is positively related to E&S performance with evidence suggesting the relationship is causal	Investors have power to drive E&S performance at firms
	Amel-Zadeh and Serafeim, 2017	A study of the reasons investors use ESG information	Primarily they consider it financially material to investment performance	Strengthening the link between investors and ESG information use
	Strott & Carey, 2016	Understanding the gap in understanding between corporates and investors on ESG	There is a significant gap in many areas between what ESG information investors want and the information being supplied by corporates	This provides direct evidence of the existence of a disconnect between investors and corporates over ESG
ESG provides financial out performance	Friede, Busch & Bassen 2015	Making the business case for ESG through a meta-analysis of 2000 studies connecting ESG and CFP	90% of studies found a nonnegative ESG-CFP relationship with a large majority finding a positive relationship.	Making the business case for ESG to justify investor and corporate focus on ESG issues
	Unruh, Kiron, Kruschwitz, Reeves, Rubel, Zum Felde, 2016	A survey of over 7,000 investors to gauge the perspectives of practitioners on ESG	Investors are increasing in their appetite for ESG information	The trend for investors is towards more ESG information
The development of materiality as a corner stone of ESG	Freeman, 1984	Offered an alternative to the shareholder primacy/Input-Output model	Freeman developed the concept of stakeholder theory as an alternative	Materiality leverages off the stakeholder model, making Freeman's work critical to materiality as a concept
	Jensen, 2001	Research examining the corporate objective function and the necessity to balance stakeholders	Developed the 'enlightened value maximisation' model for stakeholder theory	This next step in understanding stakeholder theory starts to make implicit connections with materiality

Materiality decoupling	Christensen (2017)	Study of the openness and closure of standards and the impact on the sustainability agenda	The development of the 'licence to critique' – a managerial philosophy leveraging off employees and managers to benefit organisations and the sustainability agenda	Further evidence of standards in their current form as a bottle-neck to the development of sustainability and ESG outcomes
	Frank Wijen (2014)	Establishment of conditions for achieving institutional goals in opaque fields	The disparity between means and ends may be enhanced by entrepreneurs attempting to remedy policy-practice decoupling and vice versa	Policy and practice and means and ends decoupling both conflict with the ends needing to be achieved by materiality adoption
	Schramade (2016)	Integrating ESG into financial analysis by linking ESG issues to their impact on business models	The average target price impact is 5% overall. Integration also meant more in-depth analysis of companies and a better view of risk	ESG integration is a key step to avoid decoupling with materiality fitting into the impact on the business model
	Grewal, Serafeim and Yoon (2016)	A study of material versus immaterial shareholder ESG proposals on ESG and financial performance	58% of shareholder proposals are classified as immaterial. Proposals on material issues are associated with a rise in financial performance and vice versa for immaterial proposals.	Materiality can combat the negative symptoms of decoupling – shareholder proposals on immaterial issues
Materiality and further ESG development	Khan, Serafeim and Yoon (2015: 1)	A study of firm sustainability issue disclosures for performance against material issues	The authors found the company performance against material issues was positively correlated with share price returns	There is evidence that materiality is related to CFP
	Eccles and Kastrapeli (2017)	A global survey of 582 investors to analyse barriers to ESG integration	The most commonly cited barrier is the lack of quality information	Understanding investor perspectives is what the research paper is about and this further cements the case that investors and companies aren't on the same page

3 Research Methodology

This research methodology section outlines the proposed research including a review of the research design and research instruments used. Sampling, data collection and analysis will then be discussed, followed by an assessment of the research criteria.

I will be collecting two sets of qualitative data to be analysed separately and likewise present their findings separately. In the discussion section I will discuss how these findings relate to, and build upon, one another.

Throughout each section of the research methodology I will be providing an overview of my approach for that particular section as well as for the two sets of qualitative data:

Part one: Asset manager interviews
The first set of qualitative data refers to data to be collected through semi-structured interviews with asset managers over an hour long interview. This data will form the ground work for describing the ESG industry with the second set of data building on part one.

Part two: Materiality scoring exercise
The second set of qualitative data will be collected from company reports, analysts earning calls and asset manager surveys to understand the differences in perspectives on materiality between companies, analysts and asset managers.

3.1 Research Approach and Strategy

My research approach is an inductive approach using a mixed-methods strategy for data collection and analysis. The data collected in part one of my analysis will provide a supporting role to the data in part two, with both contributing to answering the research question in it's entirety.

I have be collected both primary and secondary data (primary data only in part one and a mix of primary and secondary data in part two). Figure 1 displays the three sources I will be collecting data from, namely companies, analysts and asset managers with the industries in the centre of the figure representing what the data collected refers to. All data collected from

companies and analysts was secondary and all data collected from asset managers was primary.

3.1.1 Part one: Asset manager interviews

My interviews with asset managers produced two sets of data. The first will be used in part one of the analysis and findings (the transcribing and coding of interviews) while the second set of data I will refer to in part two (this data will be collected through a filled out survey).

The interviews support my inductive research approach as they will provide context to the ESG environment in South Africa and allow for more insightful conclusions to the findings presented in part two. It is important that the landscape of ESG is presented by the asset managers themselves (in particular presenting a South African context to ESG) as they are at the forefront of investment decision making in South Africa both in constructing funds and utilizing internal and third party research.

3.1.2 Part two: Materiality scoring exercise

The data collected in the second part of my analysis is a mix of both primary and secondary data. The primary data, referred to above, will be collected using a survey asking asset managers to weight how material they believe different issues are across five industries.

The secondary data refers to the data that will be collected from companies and analysts, both in the form of coding – annual reports and earnings call transcripts respectively.

Five companies in five industries (25 companies in total) will be used as the sample for this study. Figure 3 is a visual representation of the three data sources, each having data collected that is relevant to the five industries in the centre of the visual diagram. For clarity the industries are Food Producers, Healthcare, Mining, Retail and Telecommunications, Media and Technology (TMT).

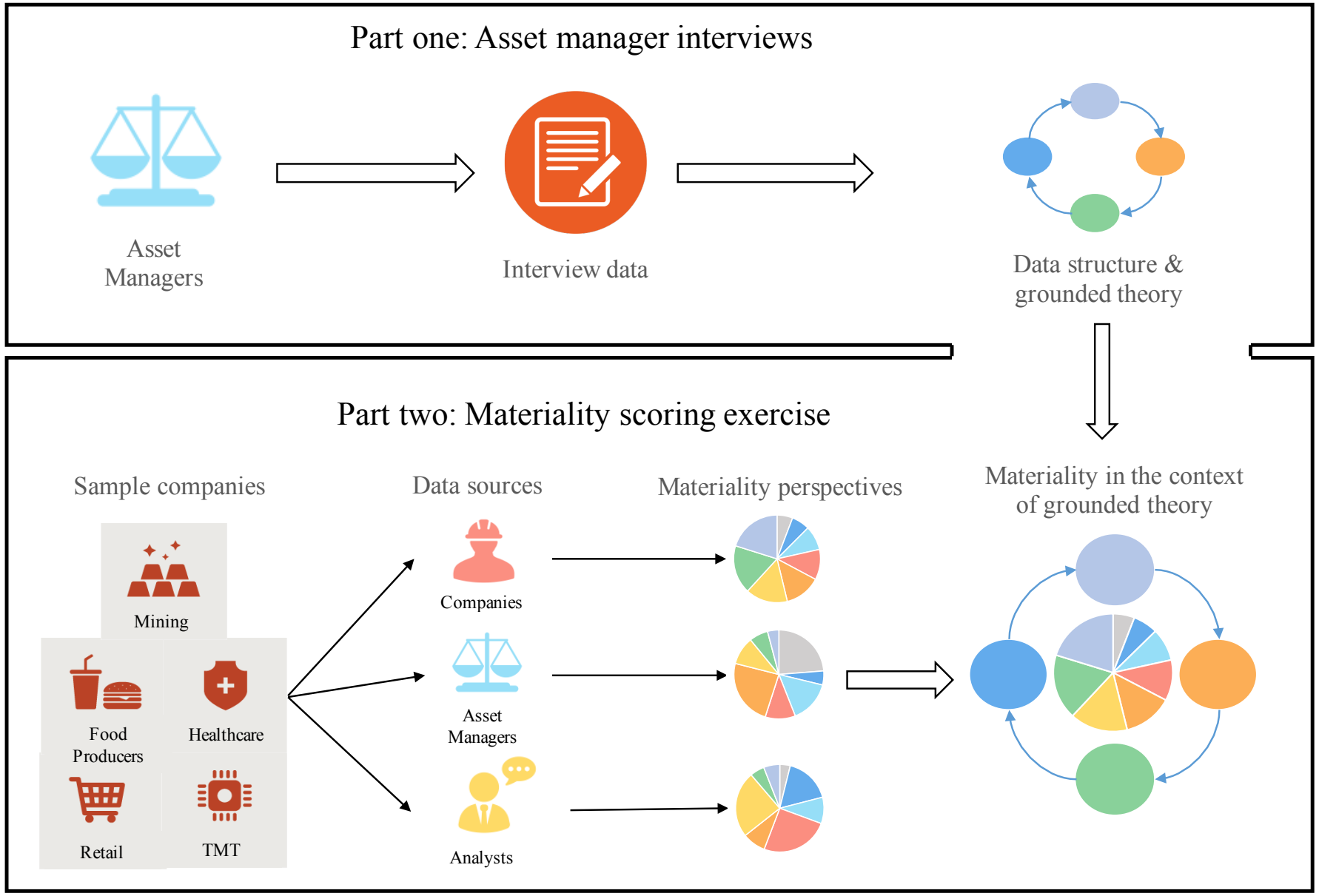


Figure 1. Data collection sources and the interaction between the two parts of the study

3.1.3 The choice of an inductive approach – and rejection of deduction and abduction

The choice of an inductive research approach was fairly straight-forward. The relative infancy of ESG as it is being currently practiced in the South African market means that both deductive and abductive research approaches would require data on a scale outside of the scope of this study. The availability of ESG data notwithstanding, I believe the inductive research approach best compliments the research question and ultimate goal of building a praxis model in this industry.

Using an inductive research approach across two sets of complimentary data I will be able to first understand how ESG is used, whether it serves the needs of the investment community and where they might be improvements or constraints to the current ESG practice in the industry (part one). This context will better colour the answer to the research question of what the different perspectives on materiality are.

A common critique of inductive research is that it lacks the rigour of deductive approaches, however the rigidity of deductive approaches detracts from the creative element of inductive approaches that allows for the surfacing of new concepts (Gioia, Corley & Hamilton, 2012). While this approach may detract from the validity of the findings, the ability to theory craft in an area of investment where little is known (especially in South Africa) is arguably more important.

The rigidity of a deductive approach in the testing of theories or hypotheses to reach a conclusion of validity or falsification was not suitable for my research question. Even though the focus on determining differences in materiality could have followed a deductive path, I believed the outcomes and conclusions would not be as insightful as an inductive approach. Rather than asking whether there are differences in materiality perspectives, it is more important to understand why there might be differences and subsequent to that, how that information can be used to better service the investment industry with ESG information.

The abductive approach was rejected for the main reason the inductive approach was chosen. The infancy of ESG in the South African investment industry (and across the world for that matter) makes the prerequisites for an abductive research approach less appealing. The prerequisite being that the research process answers (or attempts to answer) ‘incomplete observations’ or puzzles specified at the start of the paper. Setting up an abductive research

process when so little is yet understood about ESG wouldn't be the best way to extend the research area and was unlikely to provide far-reaching insights for the praxis model.

3.2 Research Design, Research Instruments and Data Collection Methods

This section describes how I designed my research process and necessary research instruments in order to collect the relevant data. I chose to follow Van de Ven and Johnson's (2006) research design due to the practicality of it's objective to bridge the gap between theory and practice, which aligns comfortably with my objective to bridge the gap between thesis and praxis.

I designed three research instruments to assist with data collection. The first is a simple interview guideline used in part one of the data collection (asset manager interviews), while the second is a more complicated tool used for coding in the second part of the research process. This tool is a materiality table used to code the annual reports and earnings call transcripts (to understand company and analyst perspectives on materiality respectively). The third tool is a derivative of the second – a survey of material issues for asset managers to complete, providing data on what they believe are the most material issues across each industry.

3.2.1 Research Design

As this study is designed with the idea of praxis model in mind, my research design will follow that of Van de Ven and Johnson (2006) in their paper *Knowledge for theory and practice.* Not only do Van de Ven and Johnson (2006) speak directly to bridging the gap between theory and practice as an outcome of the research process, but also during the research process.

The issue Van de Ven and Johnson (2006) address here is the so-called 'knowledge transfer' problem, the difficulty with which practitioners adopt the research and theories of academics. This reason I think this is of particular relevance to my research is that the wealth of research currently available across a spectrum of ESG topics has found little traction in practice. In particular, my focus is on improving the ESG conversation between companies, asset managers and analysts and in doing so I need to bridge the gap between my research and those my praxis model could likely impact.

Table 4. Following the four steps of knowledge transfer Van de Ven and Johnson (2006)	
Van de Ven and Johnson's 2006 four steps for greater quality and impact of research	**My response to each of the four steps to achieve greater quality and impact of research**
1. Confront questions and anomalies existing in reality	Address the question of underserved stakeholders in the context of an industry that supposedly practices ESG investing to find out if and why there might be a difference in access or value attached to ESG information.
2. Organise the research project as a collaborative learning community of scholars and practitioners with diverse perspectives	Include practitioners (asset managers) I have worked with in the qualitative element of my study to provide personal insights into the current practice of ESG in the market.
3. Conduct research that systematically examines not only alternative models and theories but alternative practical formulations of the question of interest	Research the ESG landscape for the current state-of-the-art in ESG modelling as well as discuss with the relevant practitioners about their use if ESG to understand the alternatives to my area of interest (differences in perspectives of ESG)
4. Frame the research and its findings to contribute to knowledge, academic disciplines and one or more domains of practice.	Develop a praxis model that will not only contribute to the active practice of ESG, but also generate enough consistent data to contribute to academic theory through further iterations of the research process.

Table 4 describes the steps suggested by Van de Ven and Johnson (2006) to ensure greater quality and impact of their research. I have provided my 'responses' to these steps to drive the impact of my own research. In a nascent field like ESG the avenues of potential research are plentiful, but it is also critical to make that research relevant to practioners. Including asset managers in the interview process, in my opinion, strengthens the research as it becomes grounded in the reality of the practice as it stands.

3.2.2 Research instruments

It is important to disclose here my professional occupation, how it relates to this paper and consequently any limitations or conflicts of interest that might exist. I work for FarSight Firms, a research house focussing on ESG issues, using a model to assess company integrated reports for response to ESG issues by company leaders.

The model used was developed by my father and I have used it as my 'inclusive innovation' upon which this research paper is based. The development of the research instrument will build into the development of the praxis model as per the requirements of the MPhil Inclusive Innovation degree. The process of developing a praxis model, supported by the research, can then be taken to market more confidently.

Research instrument 1: The asset manager interview guideline

The first research instrument of the three I will be developing over the course of this research methodology is the interview guideline used in the semi-structured interviews with asset managers that forms a part of my primary data. This simple guideline allows me to ask consistent, but broad questions of my respondents allowing them the opportunity to speak tangentially and openly discuss topics of interest relating to ESG. This flexibility also allows me to maintain consistency with my inductive research approach, exploring the possible dimensions of ESG I might not have been aware of from the literature alone.

The full interview guideline (Appendix 1) follows some standard questions to start including job title, specialisation at the firm and the number of stocks under coverage. My guideline asks how investment decisions are made, the type of information and research involved and how ESG fits into this process. Finally, I provide some more thought-provoking questions about ESG relevance, its connection to performance and where the respondent might see

improvements or constraints. All of these questions are open to follow-ups and some may be more insightful or interesting to one asset manager over another.

Research instrument 2: The universe of material issues

By and large, ESG issues are regarded as those that pose a threat to society as a consequence of business operations. However, in order to establish a universe of issues, it is necessary to list the broadest range of issues and refine the categories to which these issues belong in order to create a classification system that is neither clumsy in its breadth nor lacking in insight due to it's simplicity. The establishment of this universe of issues will be used to construct our research instruments for data analysis across asset managers, analysts and companies.

Traditionally, issues of concern to society are categorised as falling under Environment, Society and Governance (ESG). In order to accommodate the investor perspective, we should add to these categories of an Operational and Financial nature. While these are not issues by virtue of ESG externality, they nonetheless have a significant impact on the wellbeing of the business and consequently all its stakeholders. Managing these issues is necessary to avoid the consequences to the economy of significant business or industry failure, which is bad for all of society, not only for the businesses' shareholders.

While the term 'ESG' has become common usage, the main standards authorities rarely use this categorisation. For the purposes of our model development, we have drawn on two main sources, the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Authority (SASB). The former was initiated in Europe (with input from South African advisors), while the latter is a US standards body designed to become the de facto standard for the Securities and Exchange Commission (SEC).

These two sources have been chosen as they have attempted to categorise ESG issues using working groups and advisors and as such represent a good foundation for the universe of issues. Comparing these two sources for similarities is the first step in identifying the universe of issues. Note that the IIRC has been left out of this process. This is because they provide a methodology for understanding and self-diagnosing materiality at a company-specific level, but do not provide a list, or even categories of specific issues to be weighted. The IIRC provides useful tools to guide companies in performing a materiality analysis, but

unlike SASB and GRI, it has not committed to a list of issues that might comprise the universe of issues.

In Table 5 below I have provided the issues put forward by the GRI and SASB. This table is useful for understanding how the two entities have similarly grouped and categorised issues, as well as where there have differed in categorising or including issues.

Table 5. Categories of material issues from the GRI and SASB				
GRI category	**GRI 'Topic specific standards'**	**SASB overarching categories**	**SASB category**	**SASB sub-issues**
Economic	201: Economic Performance	Governance	Business Model & Innovation	Long-term viability of core business
	202: Market Presence			Competitive & ethical behaviour
	203: Indirect Economic Impacts			Research, development & innovation
	204: Procurement Practices			Accounting for externalities
	205: Anti-corruption			
	206: Anti-competitive Behavior			
			Leadership & Governance	Regulatory & legal challenges
				Policies, standards & codes of conduct
				Shareholder engagement
				Board structure & independence
				Executive compensation
				Lobbying & political contributions
Environmental	301: Materials	Environmental		Fuel management & transportation
	302: Energy			Water use & management
	303: Water			Biodiversity impacts
	304: Biodiversity			GHG emissions and air pollution
	305: Emissions			Waste management & effluents

	306: Effluents and Waste			Climate change & natural disaster risks
	307: Environmental Compliance			Environmental accidents & remediation
	308: Supplier Environmental Assessment			
Social	401: Employment	Social	Employees	Recruitment & retention
	402: Labor/Management Relations			Employee health, safety & wellness
	403: Occupational Health and Safety			Training & development
	404: Training and Education			Diversity & equal opportunity
	405: Diversity and Equal Opportunity			Labour relations & union practices
	406: Non-discrimination			Child & forced labour
	407: Freedom of Association and Collective Bargaining			Compensation & benefits
	408: Child Labor			
	409: Forced or Compulsory Labor			
	410: Security Practices			
	411: Rights of Indigenous Peoples			
	412: Human Rights Assessment			
	413: Local Communities		Community	Community development
				Communications & engagement
				Impact from facilities
	414: Supplier Social Assessment		Supply Chain	Supply chain standards & selection
	415: Public Policy			Supply chain engagement & transparency

				Raw material demand
	416: Customer Health Safety		Customers	Customer health & safety
	417: Marketing and Labeling			Disclosure & labelling
	418: Customer Privacy			Marketing & ethical advertisement
	419: Socioeconomic Compliance			Customer satisfaction
			Products & services	Product societal value
				Product life cycle use impact
				Packaging
				Product pricing & target materials
				Product quality & safety

The areas of noticeable difference between the GRI and SASB in the table above are that the GRI includes no governance or product issues at all and only one overarching community issue. The SASB on the other hand has many more issues across these categories.

The GRI has three topic areas: Economic, Environmental and Social. Under these are 33 'Topic-specific Standards'. It is clear that the GRI's topic list is weighted more towards societal than purely business or even environmental concerns just by mere number of issues included within the Social category.

SASB's issues are classified under six categories within the classic ESG framework:

Environmental issues – Environmental category
Social Issues – Community, Employees and Customer categories
Governance issues – Leadership and Governance, Business Model and Innovation, Products and services, Supply Chain issues

Under SASB's six categories are a total of 39 issues. Interestingly, SASB has included 'products & services' and 'supply chain' issues as governance issues. The context for SASB's categorisation (being a U.S. entity) may provide some insight into this categorisation, however in a South African context these issues are likely to be classified as 'Societal' issues. The reason for this change in classification is that the vast inequality in wealth and representation in the skilled workforce has made both customer protection (to avoid exploitation due to wealth differences) and transformation (to rectify non-white representation in the workforce) key societal issues in South Africa.

The Protection of Personal Information Act, No. 4 of 2013 (POPI), Customer Protection Act, No 68 of 2008 (CPA) and Broad-Based Black Economic Empowerment Act, No 46 of 2013 (BBBEE) were all drafted to provide for more representation and greater recourse for exploitation to the less privileged in South African society.

A SASB issue such as 'Product quality and safety' might be categorised as a governance issue in the U.S., but in the context of goods sold to the poorest communities in South Africa this is more realistically a customer issue within the broader societal arena. Take for example the listeriosis outbreak that saw the death of 183 of the most vulnerable of poor communities

including children, pregnant women and the frail (World Health Organisation, 2018). This is a product safety issue directly related to the company's stakeholders (their customers) and should be treated as such.

Likewise, 'Product pricing & target materials' includes customer issues in a South African context such as ensuring that the poorest communities have access to products and services and are not prohibited by exorbitant pricing. The #Datamustfall campaign in South Africa exposed the pricing scheme of telecommunications companies whereby data bought in large bundles was cheaper than data bought in small bundles. This meant that the poorest communities who were buying data in small increments were paying more per megabyte than richer communities. This is an issue that directly deals with customer issues in the larger context of society as a stakeholder.

In deriving the universe of issues to be used as a research instrument it is first necessary to acknowledge that there are an infinite number of issues facing businesses. Each sub-issue presented by the GRI or SASB can be further fractured to account for ever smaller nuances across industrys, geographies and specific companies. Miles' (2012) study of the stakeholder concept as being essentially contested, referenced Freeman's (1984) definition of a stakeholder as those who affect a company or are affected by a company. This broadest of definitions means that any individual may be named a stakeholder and therefore some structure needs to be applied to work through this study on a practical and consistent basis.

Following the lead of the GRI and SASB I have created a two-tier framework to account for a sensible number of issues within overarching categories. The natural question at this stage is why develop a new instrument if there are already two available to use? I have chosen to develop my own research instrument for a number of reasons:

i. As we can see from Table 5, there is some confusion and difference between the materiality tables for the GRI and SASB. Choosing between one or the other may have been justified, but I believed both to have relevant elements for the purposes of understanding materiality fully. As I will go on to explain, some issues refer to expected regulation or responses rather than to the underlying issue (e.g. regulation isn't an issue per se, rather the underlying issue that demands regulation be put in place is what is at the core of the issue).

ii. Given that this study takes part in a developing country context and the SASB materiality table in particular was developed in the USA, I didn't feel that it adequately dealt with issues relevant to economies outside the first world. In particular, issues presented in a South African context, such as the King Code for Governance issues, which require companies (at least all listed companies) to disclose in their reports.

iii. In following Van de Ven and Johnson's (2006) 3rd point for impactful research (systematically examining alternative practical formulations of the question of interest) and pursuing the ultimate goal of developing a praxis model, I chose to merge and refine the issues presented by SASB and the GRI into a more manageable set of categories defining the ESG universe.

The first tier is the overarching categorisation such as 'Governance', 'Society' or 'Environment', while the second tier consists of the individual issues within each first tier category. Issues need to be generic and applicable across industries and geographies. Issues were discarded if they were proximate rather than ultimate, or underlying, fundamental issues. For example, the GRI's '307: Environmental Compliance' and '419: Socioeconomic Compliance', and SASB's 'Regulatory and legal compliance' are issues that refer to regulation in general rather than regulation of a specific issue. Issues were also discarded if they form part of the expected response such as the GRI's '308: Supplier Environmental Assessment' and '414: Supplier Social Assessment' as this dictates how businesses should respond to issues rather than dealing with the underlying issue.

In keeping with the determination to list only fundamental issues (those issues of generic application across industries, as guided by SASB and GRI), I have subordinated issues relating to the supply chain within fundamental issues of fair labour. In this case, a company should respond to fair labour issues (as human rights) not only within the employee body, but also under the control of labour brokers or suppliers. This principle also applies to localisation issues (within society) and environmental supply chain issues.

Business issues were added to account for the perspective of investors who are concerned about the business drivers from an economic, short-term perspective rather than an ESG, medium to long-term perspective. This was done to present a broad universe of issues that

might be of interest to the interview subjects in order to capture the full materiality landscape of issues and avoid bias in the weightings.

Table 6 provides the issue framework to be used in the study, excluding economic issues, alongside a cross comparison with the GRI and SASB categorisations. The heading 'Research instrument issues' refers to the categorisation used in the analysis with 'issue definition' providing some insight into what each particular issue includes. These definitions are brief and somewhat generic to provide as much context as possible in a succinct format.

Appendices 6 and 7 provide the GRI G4 and SASB standard disclosures and indicators respectively, with comments as to how they have been treated in this study's categorisation. The issue framework used in this study has included two Economic categories (Operational and Financial), two Governance categories (Governance and Ethics), three Societal categories (Labour, Society and Customers) and one Environment category. This covers the broad universe of issues a business might face with relative importance being based on the materiality of each issue given the business-specific exposures.

Table 6. Development of ESG issues for the research instrument				
Research instrument issues			**GRI** (refer to Appendix 5)	**SASB** (refer to Appendix 6)
Issue definitions			Categorisation	Categorisation
Governance				
1	**Board balance & effectiveness**	Composition, independence, balance and competence of the directors of the board	G4-34 – 41	Leadership & governance: Board structure & independence
2	**Audit independence**	The independence of the internal audit team and external auditors (affected by tenure or other related factors) of external auditors		
3	**Leadership selection and preparation**	Necessary succession planning to support new directors and executives particularly at the Nomination committee		
4	**Remuneration & incentives**	Executive pay, incentives and bonuses and their alignment with (particularly minority) shareholder interests	G4-51 – 55	Leadership & governance: Executive compensation
5	**System integrity**	IT governance and integrity of the business systems to operate functionally		

Ethics				
6	**Moral DNA of the organisation**	Authenticity of the values the business stands for, business integrity, "walking the talk"	G4-56 – 58	Business model & innovation: Competitive & ethical behaviour
7	**Theft, fraud and corruption**	Conflicts of interests amongst company officials and how unethical behaviour may lead to theft, fraud and corruption (e.g. of government officials)	G4-EC4 G4-SO3 – SO5 G4-SO6	Business model & innovation: Competitive & ethical behaviour Leadership & governance: Lobbying & political contributions
8	**Anti-competitive behaviour**	Marketplace behaviour • Actions taken to dominate a market (for example the formation of cartels) • Abuse of dominant market position, for example through price gouging IP rights of third parties Actions to infringe on the IP rights of others, such copyright infringement, or patent violations	G4-SO7	Business model & innovation: Competitive & ethical behaviour

Labour				
9	**Fair labour**	Employee engagement & relations • Includes engagement with unions and collective bargaining councils Fair labour practices • Working conditions, including human rights, child labour, forced labour, freedom of association & expression, discipline, employee benefits, housing/living conditions • Skills development (life skills, career development especially for post-employment) Labour disruption • Management of retrenchments, replacement of labour by robots and artificial intelligence Fair remuneration Including post employment obligations (retirement funds)	G4-LA1 G4-LA2 G4-LA4 G4-LA14 – LA15 G4-LA16 G4-HR1 G4-HR2 G4-HR4 G4-HR5 G4-HR6 G4-LA9 – LA10 G4-LA11 G4-HR10 -11 G4-EC3	Supply chain: Standards & selection Supply chain: Engagement and transparency Employees: Compensation and benefits Employees: Labour relations and union practices Employees: Compensation & benefits Employees: Labour relations & union practices Employees: Child & forced labour
10	**Occupational health & safety**	Safety, health and wellness	G4-LA5 – LA8	Employees: Training & development Employees: Employee health, safety & wellness

Society				
11	**Community**	Impact on community Community engagement, relations and development Impact of corporate security forces on community Impact of societal instability on community Impact of natural disasters, extreme weather events, climate change on community	G4-EC7 G4-HR7 G4-HR8 G4-SO1 G4-SO2 G4-HR7	Supply chain: standards and selection/Engagement and transparency Community: Communications & engagement/Development/Impact from facilities
12	**Internal equity**	Equitable (local*) ownership Equitable (local) employment equity * 'Local' means representative of the diversity of the local population (gender, race and other potentially disadvantaged groups)	G4-EC5/G4-EC6 G4-LA1 – LA2 G4-LA12 G4- LA13 G4-HR3	Supply chain: Standards and selection/Engagement and transparency Employees: Diversity & equal opportunity
13	**Industry equity (and health of industry)**	Supplier development • Includes preferential procurement, small business development in the supply chain Equitable use of industry resources • Allocation of quotas and illegal use of industry resources Development of local downstream industry &management of illegal industries not under regulation Taxes, dues and contributions to government Development and maintenance of industry infrastructure Effect of social instability on industry infrastructure (involuntary migration, dread disease, violence, rioting) Effect of political instability, such as a failure of national governance, interstate conflict, terrorism, state collapse, resulting in business friction, e.g., airport security checks, SIM card registration, etc.	G4-EC1 G4-EC8 G4-EC9	Supply chain: standards and selection Supply chain: Engagement and transparency

Customers				
14	**Product suitability**	Quality of product/service Health impact of product/service Abuse of content • Management of content to prevent undue influence of public or limit freedom of speech. Credit affordability	G4-PR1 – PR2 G4-PR6	Products & services: Product quality & safety Customers: Customer health and safety
15	**Treatment of customers**	Customer experience • Customer satisfaction, response to complaints Ethical promotion, advertising and product labelling Responsible credit & lending practices • Promotion of credit at POS, management of debt post-sale, interest rates and other charges Ethical sales practices Terms and conditions, warrantees, non-interest charges, admin fees, etc.	G4-PR3 – PR4 G4-PR5 G4-PR7 G4-HR7	Customers: Customer satisfaction Customers: Disclosure and labelling Customers: Marketing & ethical advertisement
16	**Access to products & services**	Local access to products and services How companies provide for, or prevent, access to their products and services		Products and services: Product pricing & target materials Customers: Access to services
17	**Customer ID protection and data privacy**	Abuse of user data/violation of privacy • Protection of user data gathered at POS or on platform/system for commercial interests Protection of user data • Protection of user data from cyber-attacks and ransom-ware Government intrusion Management of government interference, such as censorship and monitoring	F4-PR8	Customers: Customer privacy

Environment				
18	**Energy**	Utilisation of non-renewable energy • Sustainable utilisation of non-renewable energy Generation of renewable energy	G4-EN3 – EN7	Environment: Fuel management & transportation
19	**Water**	Sustainable utilisation of water stocks	G4-EN8 – EN10	Environment: Water use & management
20	**Bio-impact**	Direct impacts on environment • Bio-resources (forests, fish, land) • Pollution or spoilage of the natural environment from effluent, waste and emissions, including carbon, dust, SO2, NO2, etc. as a result of the company's direct operations Life-cycle impacts on environment • As above, but referring to impacts on the environment from products and services during their productive life and beyond Supply chain impacts on environment As above, but referring to impacts of suppliers on the environment	G4-EN1 – EN2 G4-EN11 – EN14 G4-EN15 – EN21 G4-EN22 – EN26 G4-EN27 – EN28 G4-EC2	Supply chain: Raw material demand Supply chain: standards and selection Supply chain: Engagement and transparency Products and services: Product life cycle use impact Products and services: Packaging Environment: Environmental accidents & remediation Environment: Fuel management & transportation Environment: GHG emissions & air pollution Environment: Waste management & effluents Environment: Biodiversity impacts Environment: Climate change & natural disaster risks

While SASB and the GRI provide categorisations for Governance issues such as ‘Board balance and effectiveness’ and ‘Remuneration and incentives’, the issues of ‘Audit independence’ and ‘Leadership selection and preparation’ are not provided for by either of SASB or the GRI.

These issues come directly from the King IV Report on Corporate Governance in South Africa, 2016 (the King Code). The King Code provides guidance to companies on governance and governing body structuring to best facilitate good governance for companies. This is achieved through recommendations for best practice as well as certain principles being codified by the JSE into their listing requirements (Giles, 2017).

The King Code speaks directly to the issues of ‘Leadership selection and preparation’ and ‘Audit independence’. ‘Nomination, election and appointment of members to the governing body’ speaks to leadership selection and preparation, while the ‘Audit committee’ specifically mentions the necessity to have an independent external and internal audit (Institute of Directors Southern Africa, 2016).

The King Code also covers the other issues under governance and ethics, including recommendations for board composition and how the governing body should steer the company with regard to it’s core purpose.

The rationale for including economic issues as mentioned previously is to provide investors with a more complete universe of issues from which determine the materiality of certain issues relative to others. Naturally the GRI and SASB are more weighted towards ESG issues in their coverage, however the GRI does provide an ‘Economic’ category with issues such as 201: Economic Performance, 202: Market Presence and 203: Indirect Economic Impacts.

In order to provide the same granularity to economic issues as has been applied to the other categories, the economic category has been split between a company’s operations and the management of financial capital relating to those operations. Table 7 illustrates this split with a description of each issue and what sub-issues are included in each. Tables 6 and 7 combined provide the entire universe of issues which will be used to code the companys’ annual reports, earnings call transcripts and survey investors for their own relative weightings between different economic groups.

Table 7. Development of Operational & Financial issues for the research instrument		
Research instrument issues		
Issue definitions		
Operational		
21	**Business action**	Mergers & acquisitions: Integration of new businesses, unlocking synergies, digestion issues Market expansion: Vertical integration, horizontal integration, new products, new geographies New business strategies: Turnaround strategies/programmes
22	**Business Partnerships**	Business partnerships: Joint ventures, partnerships, vendor/major suppliers Major franchisees
23	**IP & Manufactured capital**	Talent: Acquisition, development, retention (remuneration and incentives) IP acquisition, R&D, patents Business continuity risk Threats to business model and IP Threats of disruptive technologies
24	**Inputs and resources**	Resources: Stock and availability of non-biological resources (stranded assets) Key material inputs Stock and availability of key material inputs
25	**Productivity**	Doing more with less, increases in efficiency, utilisation of company resources, e.g.: energy, water, natural resources, human capital, manufactured capital, intellectual property, technology and systems and logistics

Financial		
26	**Capital outlay**	Dividends Capital expenditure Free cash flows Listings Margins Growth rates Costing and cost structures Raising debt or equity
27	**Market risks**	Rates and price volatility: Interest rates, foreign exchange rates, price volatility, government currency control Market health Economic health in operating markets
28	**Capital risks**	Capital adequacy/liquidity risk Leverage and funding risk Counterparty/credit risk

Using the 28 ‘Research instrument issues’, I will assess each company’s annual report against the issue universe. Drawing only on each company’s risk and material issues tables, I will code the annual reports using my categorisation to determine what issues are most highly weighted by the companies themselves. More details of the coding process are provided in Section 3.5 *Data Analysis Methods*. Similarly, I will code questions asked by analysts of company executives in the earnings call transcripts by the same method. An explanation of earnings calls, how they take place and what relevant information is presented there, is provided in the section below.

Research instrument 3: The asset manager survey - A derivative of the issue universe

Respondents were only required to rate the eight categories (financial, operational, governance, ethics, labour, customers, society and environment) rather than the entire universe of sub issues used to code the company reports and earnings call transcripts. This was done to conserve time in the interview process. Respondents had to rate how material they thought individual categories of issues were for each industry in the format displayed in Figure 3.

I have included the five companies sampled from that industry to aid the respondents in their weighting. For example, in Figure 2, which shows the mining industry, I have included Anglo American Platinum, AngloGold Ashanti, Gold Fields, Harmony Gold Mining and Sibanye Gold. Asset managers might recognise particular companies and be aware of specific risks facing them in order to aid their weighting of particular categories.

I have provided further contextual clues to aid respondents in filling out the survey by providing some industry specific issues in each category. This is to help asset managers, who might be unfamiliar with a specific industry. They can then weigh those issues against others in the same industry. For example, in Figure 2, ‘LABOUR’ lists artisanal mining, labour unrest and worker indebtedness amongst the issues, which are specific to the mining industry. The entire survey (Appendix 3) lists all the issues in each of the five industries provided to the the respondents.

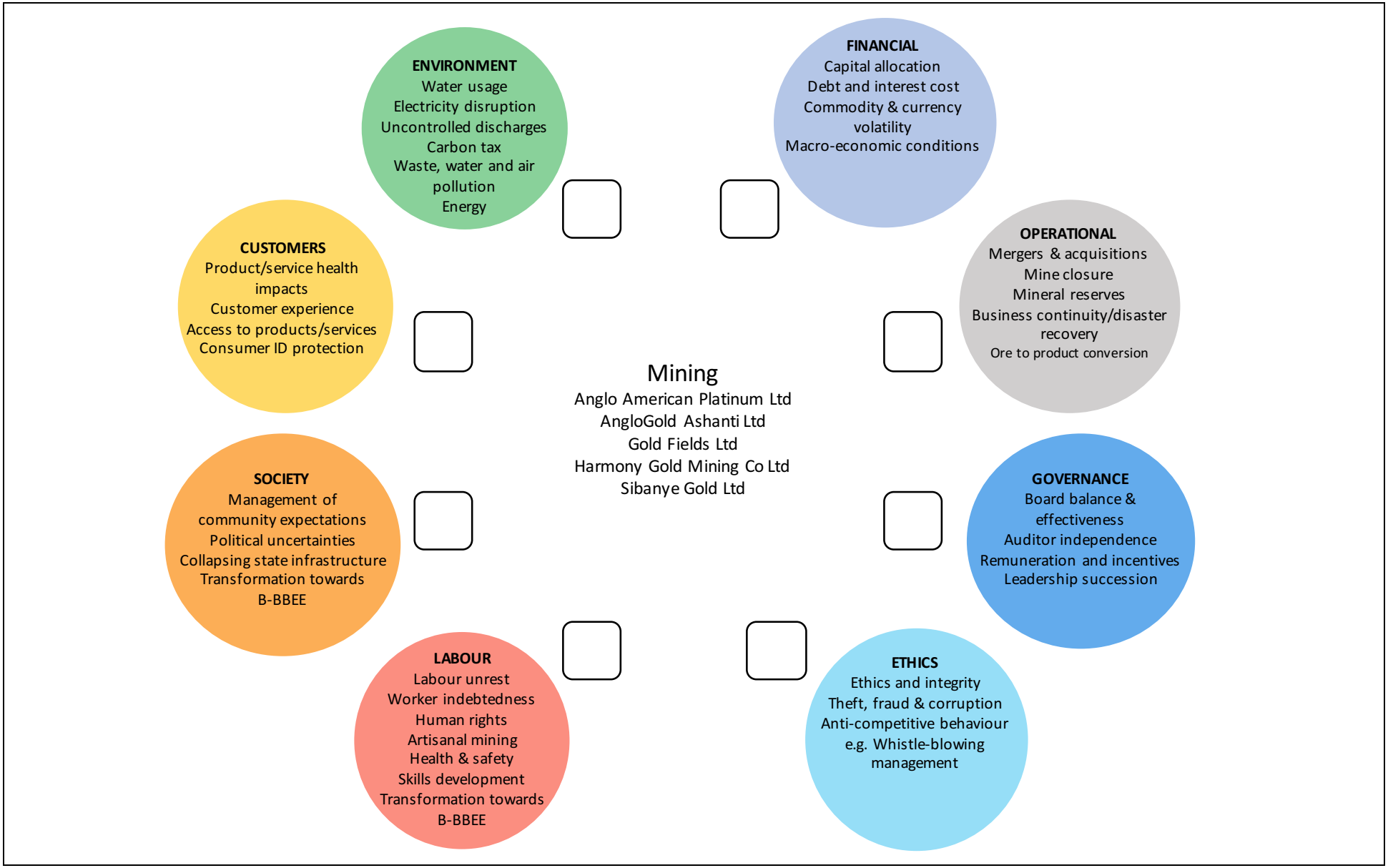


Figure 2. Example of one of the industries, Mining, in the asset manager survey

3.3 Data collection methods

As described earlier, I have be collected both primary and secondary data in this study. For ease of visualisation Figure 3 (a slight manipulation of Figure 1) describes the sources of primary data while Figure 4 describes the sources of secondary data.

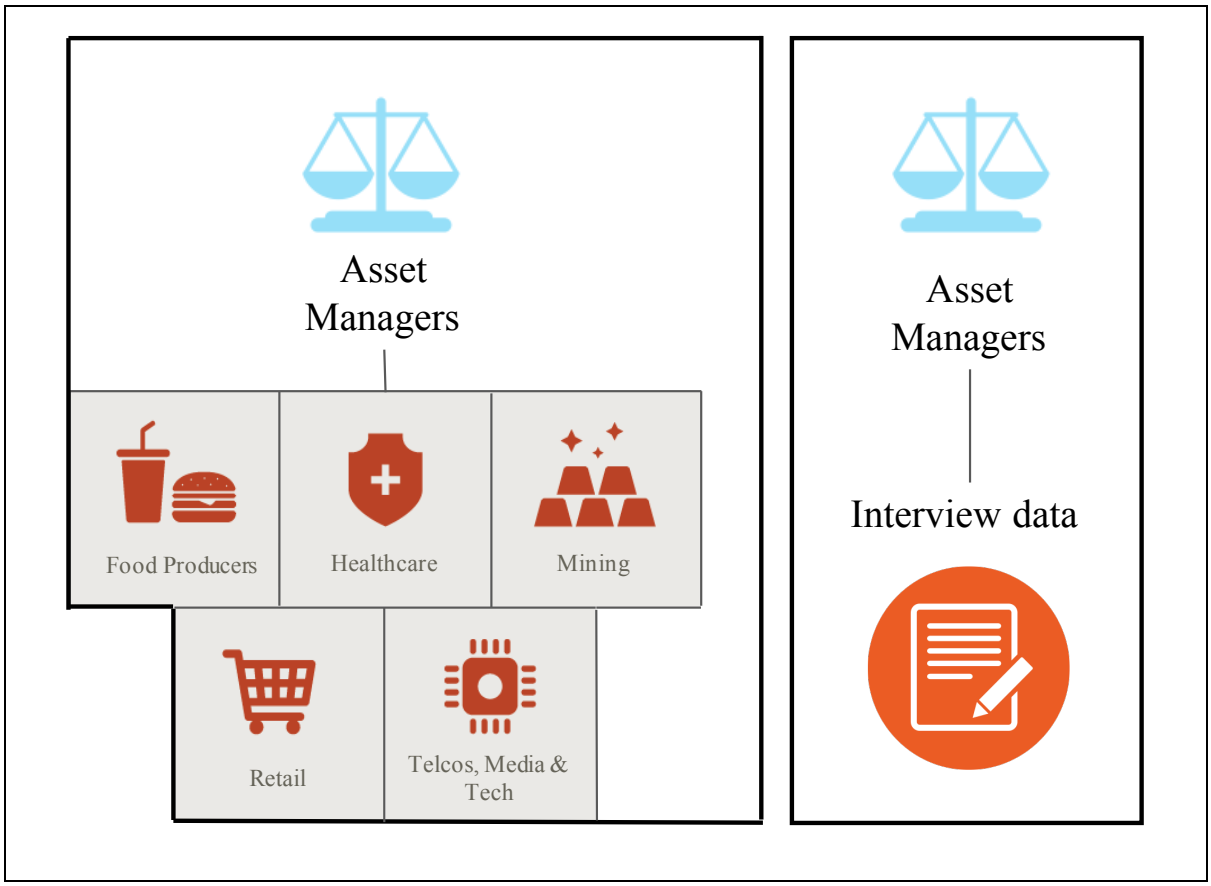


Figure 3. Sources of primary data

The interviews with asset managers formed part of my primary data (Figure 3) and this data are entirety of part one of my analysis: Asset manager interviews.

Figure 4 describes the sources of secondary data. These data, collected from company reports and analyst earnings calls, will comprise the data used in part two of the analysis: Materiality scoring exercise along with the asset manager surveys in Figure 3. In other words, the materiality scoring exercise will include both primary and secondary data.

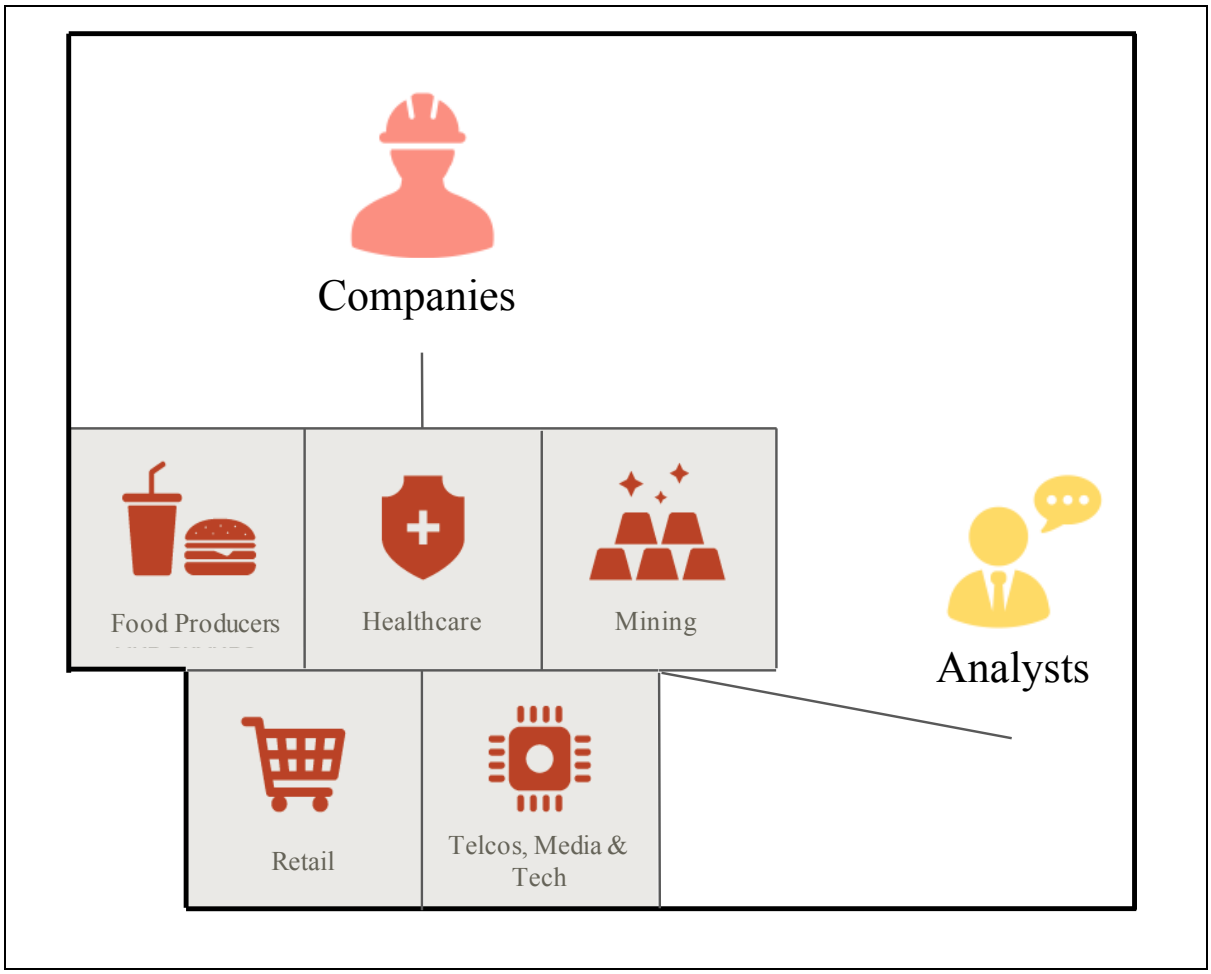


Figure 4. Sources of secondary data

I have separated my research into five industries in the South African market. In doing this I am attempting to provide some control for the differences in perspectives of ESG issues across actors in the market. Under the assumption that there are differences in perspectives of ESG across the actors in my study (companies, analysts and asset managers), I need find out whether these differences are consistent across different industries.

I chose five industries for analysis to get an adequate variety of perspectives without making the data set too large. The data on each company and industry being selected is cross-sectional in that it refers to data relevant to each company's financial year end (ranging between 28 February 2017 and 31 December 2017).

The data will be collected from three sources – Company reports, asset manager interviews and analysts' earnings calls with company management. Here I will describe how each of the sources of information is relevant to the study.

3.3.1 Primary data: Asset manager interviews and survey

I chose to interview asset mangers primarily for two reasons. The first is that I have a convenient access to asset managers given my professional relationships with them working in the industry. While this convenience sampling has the benefit of allowing me to reach out to many asset mangers in the industry, it does introduce my own personal bias in the interview with regard to how I ask questions, what follow-up questions are asked and so on. I have therefore used a semi-structured interview process to contain bias by asking questions of asset managers and asking them to complete a survey whose data will then be compared to the two other sources (company reports and analyst earning calls).

The second reason is that while many asset managers disclose ESG and responsible investing policies on their websites, this is by no means an industry standard and almost none disclose anything close to a materiality weighting across industries, making the data incomparable to either of the other sources. By interviewing the asset managers personally, leveraging off my associations with them, I am able to collect comparable data to the other two sources in this study.

The data collected will form part of the discussion in providing insight into how ESG is practiced in the industry and why there might be differences in perspectives of materiality between asset managers, companies and analysts.

The survey data will be collected through a ranking activity in which respondents will be asked to rate, on a scale of zero to ten, how material an individual category of issues is with zero being completely immaterial and ten being extremely material. The use of a ten point scale was for the purpose of understanding as it is intuitive for people to understand and provides more nuance for differentiation than a 3 or 5 point scale.

3.3.2 Secondary data: Company reports and analyst earning calls

Company annual reports allow for data to be gathered in it's most succinct form about what the companies' themselves believe to be the most material risks to them individually. Looking at five companies in each industry allows me to average the self-declared issues out across the industries to see which issues companies believe to be most material in their industry.

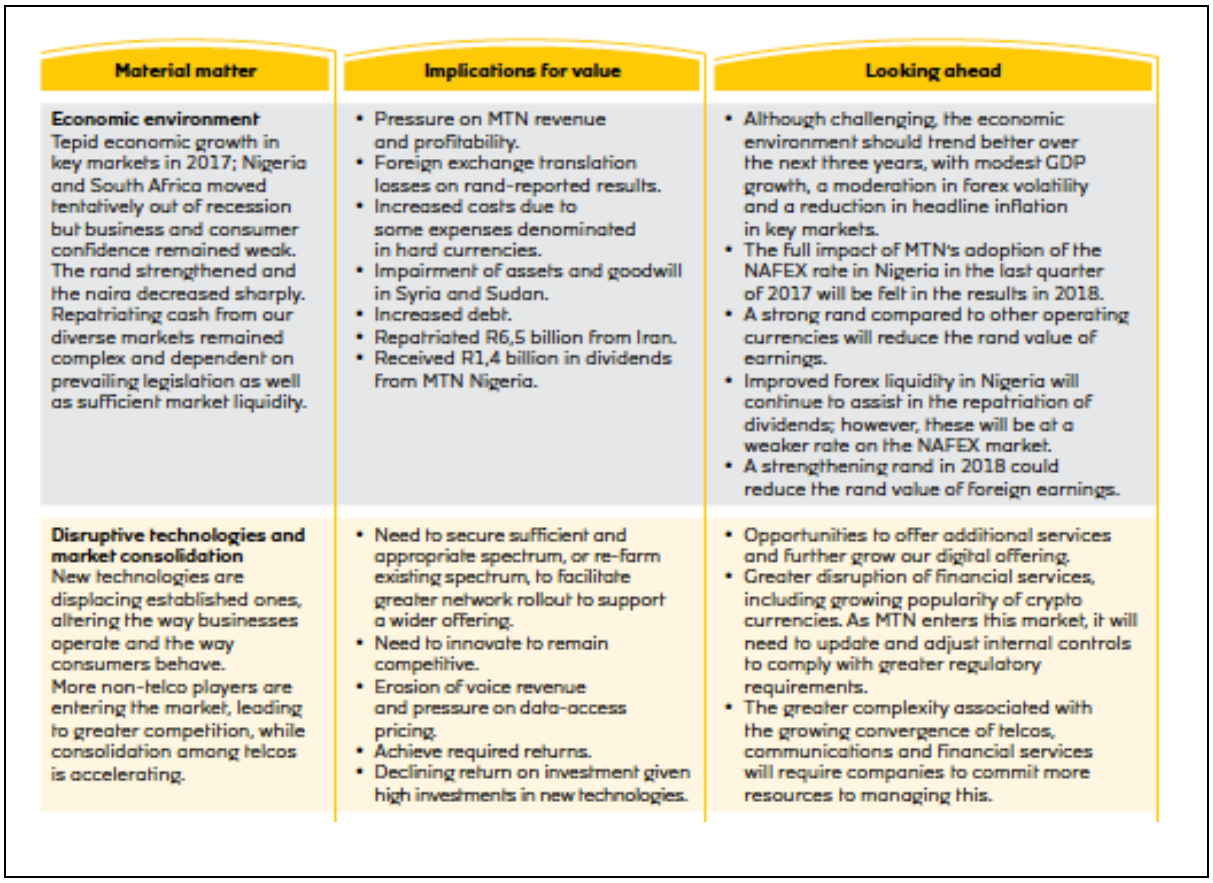
The reason company reports were selected for data collection rather than interviewing executives, for example, is due to the simplicity in collecting data. The annual report is a culmination of the company's own data collection process and stakeholder engagement to ultimately arrive at their materiality or risk table.

There is also the threat of bias if you meet a particularly charismatic executive, the possibility that I might not be able to reach all twenty-five executives, or that I reach executives and managers at different levels within companies skewing the access to information some respondents might have over others.

For these reasons, the company reports and risk and materiality tables were specifically chosen as the sources of data for what companies' are declaring as material issues in the industry. This is by no means a perfect data source as some companies may choose not to disclose their material risks, but had to be included in the study based on their market capitalisation (the selection criteria for the sample). In such cases I have noted that no material issues or risks were disclosed by the company.

Only the risk table and material issues table will be coded for each of the companies. The consistency across companies to report in either or both of these formats means that the data will be more consistent across the sample. The reason the entire report isn't coded is because the variance in reporting styles and scope of the reports becomes unmanageable.

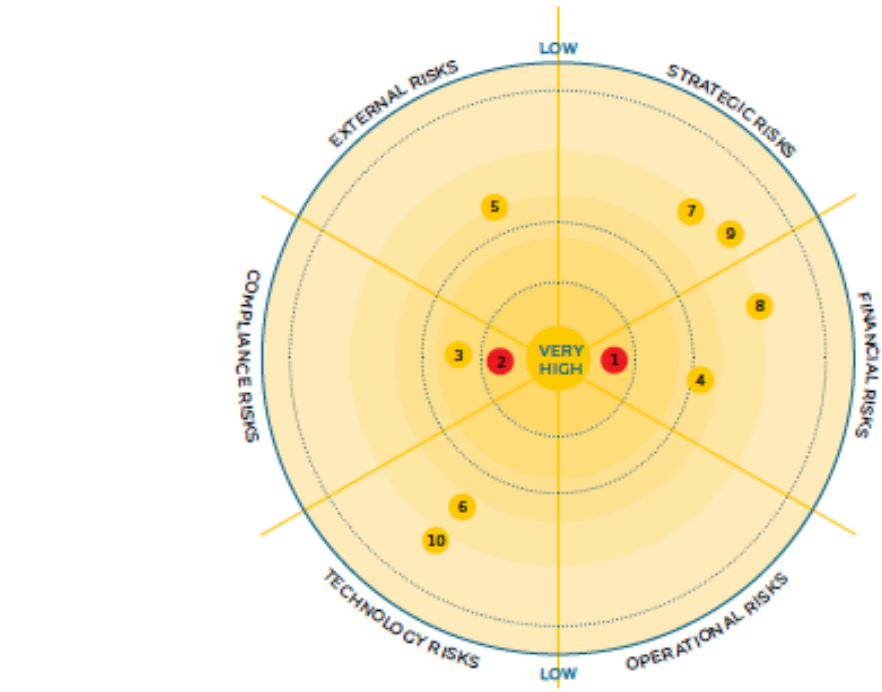
I will code each company's materiality and risk table against my universe of issues to see what common issues are identified by companies as being most material to them, and in aggregate, their industry.



Material matter	Implications for value	Looking ahead
Economic environment Tepid economic growth in key markets in 2017; Nigeria and South Africa moved tentatively out of recession but business and consumer confidence remained weak. The rand strengthened and the naira decreased sharply. Repatriating cash from our diverse markets remained complex and dependent on prevailing legislation as well as sufficient market liquidity.	• Pressure on MTN revenue and profitability. • Foreign exchange translation losses on rand-reported results. • Increased costs due to some expenses denominated in hard currencies. • Impairment of assets and goodwill in Syria and Sudan. • Increased debt. • Repatriated R6,5 billion from Iran. • Received R1,4 billion in dividends from MTN Nigeria.	• Although challenging, the economic environment should trend better over the next three years, with modest GDP growth, a moderation in forex volatility and a reduction in headline inflation in key markets. • The full impact of MTN's adoption of the NAFEX rate in Nigeria in the last quarter of 2017 will be felt in the results in 2018. • A strong rand compared to other operating currencies will reduce the rand value of earnings. • Improved forex liquidity in Nigeria will continue to assist in the repatriation of dividends; however, these will be at a weaker rate on the NAFEX market. • A strengthening rand in 2018 could reduce the rand value of foreign earnings.
Disruptive technologies and market consolidation New technologies are displacing established ones, altering the way businesses operate and the way consumers behave. More non-telco players are entering the market, leading to greater competition, while consolidation among telcos is accelerating.	• Need to secure sufficient and appropriate spectrum, or re-farm existing spectrum, to facilitate greater network rollout to support a wider offering. • Need to innovate to remain competitive. • Erosion of voice revenue and pressure on data-access pricing. • Achieve required returns. • Declining return on investment given high investments in new technologies.	• Opportunities to offer additional services and further grow our digital offering. • Greater disruption of financial services, including growing popularity of crypto currencies. As MTN enters this market, it will need to update and adjust internal controls to comply with greater regulatory requirements. • The greater complexity associated with the growing convergence of telcos, communications and financial services will require companies to commit more resources to managing this.

Figure 5. Material issues declared by MTN, a telecommunications company in the study

Figure 5, above, is an example of how a company might display their material issues (or in this case described as 'Material matters'), while Figure 6 displays the declared risks by the same company. These will provide some context for how companies present the two sets of information.



RISK	RISK DESCRIPTION
1	Foreign exchange volatility and weakening currencies
2	Operational and compliance risks
3	Increased regulatory pressures
4	Suboptimal cash generation and upstreaming to the group
5	Political and economic risk in our key markets: South Africa, Nigeria and Iran
6	Spectrum cost and availability
7	Ability to successfully execute large group strategic and change programmes
8	Returns on capex deployed
9	Optimisation of investment portfolio
10	Increasing cyber and information risks

Figure 6. Risks declared by MTN

The coding will be in a binary format of either ‘included’ or ‘not included’. If a company declares a risk or material issue, this will be coded as 1 in the relevant category of the universe of issues. Multiple companies declaring the same issue to be a risk or of material

interest then increases the score for that category of issues cumulatively. Higher cumulative scores would then indicate a higher materiality for that issue in the industry.

3.3.3 Secondary data: Analyst earning calls

Earnings calls happen throughout the financial year. Companies can choose to hold quarterly or half-yearly earnings calls, but the majority hold annual earnings calls. Annual earnings calls are held by the majority of listed companies (on the JSE) where the company executives, usually the Chairman, Chief Executive Officer and Chief Financial Officer, recap the company's performance over the last year and field questions from analysts about factors that lead to their performance results and possible future plans they have for the company.

Analysts use this information to then forecast their own projections of the companies, build models to value them and ultimately sell their research into the asset management industry and provide recommendations for stock selection. Analysts can of course collect information from multiple different sources and many use the earnings calls' 'Q&A' to merely provide clarity on assumptions or facts that they have previously researched.

The reason I have chosen to code their questions against my universe of issues is because the amount of questions asked per company will provide for a large enough data set to compare to those of the company reports and the format of the earnings calls is consistent across all companies listed on the JSE. Bloomberg, the global company data tracker, has access to these earnings calls and has also transcribed the calls and made them readily available on their terminals. The access to this data makes it ideal for my collection purposes.

Similarly, to the coding of the company material issues and risks tables, the analysts' questions will be coded as being 'included' in a specific issue category. Once all the questions have been coded the cumulative total for that category will then represent it's waiting against the other issues and show to what extent it is on the mind of investors.

The research instrument (rubric) will help to provide some structure to the investor interviews as well. By asking each investor to select or rank the issues they deem most important in a industry we will be able to compare these data to the company reports and earnings transcripts for similarities or differences.

The rubric will comprise of categories and sub-categories to account for the universe of possible issues a company might have to deal with. While these headings might be general, their purpose is to allow for application across different industries. For example, a 'Customer' (category) issue (sub-category) such as 'Product suitability' refers to drug efficacy in the Healthcare industry and sugar content or obesogenic foods in the Food Producing industry.

3.4 Sampling

There are two separate samples to be drawn for data collection in this study. The first sample is the companies to be analysed (analysis of each company's integrated report and earning call transcripts). The second sample is the investors and analysts to interviewed.

3.4.1 Economic groups and companies

In constructing the first sample (the 'companies sample'), 25 companies have been selected across 10 industrys. These 10 industrys have been grouped to form five economic groups each with five representative companies. The economic groups, industrys and representative companies can be seen in Table 8 (as classified by the JSE).

Table 8. Companies and their economic groups in the sample

Economic Group	**JSE Industry**	**Company Name**	**Ticker**
Mining	Mining	Anglo American Platinum Ltd	AMS
	Mining	AngloGold Ashanti Ltd	ANG
	Mining	Gold Fields Ltd	GFI
	Mining	Harmony Gold Mining Co Ltd	HAR
	Mining	Sibanye Gold Ltd	SGL
Food Producers	Food Producers	AVI Ltd	AVI
	Food Producers	Pioneer Foods Group Ltd	PFG
	Food Producers	RCL Foods Ltd	RCL
	Food Producers	Tiger Brands Ltd	TBS
	Food Producers	Tongaat Hulett Ltd	TON
Healthcare	Health Care Equipment & Services	Life Healthcare Group Holdings Ltd	LHC
	Health Care Equipment & Services	Mediclinic International PLC	MEI
	Health Care Equipment & Services	Netcare Ltd	NTC
	Pharmaceuticals & Biotechnology	Adcock Ingram Holdings Ltd	AIP
	Pharmaceuticals & Biotechnology	Aspen Pharmacare Holdings Ltd	APN

Retail	General Retailers	Mr Price Group Ltd	MRP
	General Retailers	The Foschini Group Ltd	TFG
	General Retailers	Woolworths Holdings Ltd	WHL
	Food & Drug Retailers	Shoprite Holdings Ltd	SHP
	Household Goods & Home Construction	Steinhoff International Holdings NV*	SNH
Telecommunications and Media	Mobile Telecommunications	Blue Label Telecoms Ltd	BLU
	Mobile Telecommunications	MTN Group Ltd	MTN
	Mobile Telecommunications	Vodacom Group Ltd	VOD
	Fixed line Telecommunications	Telkom SA SOC Ltd	TKG
	Media	Naspers Ltd	NPN

- *The decision to include of Steinhoff was prior to the company collapse and while it may have fallen out of the market capitalisation criteria subsequently, was still relevant to the study at the time.*

The economic groups selected are Mining, Food Producers, Healthcare, Retail and Telecommunications and Media. The justifications for the selection of these economic groups is that they represent a diverse array of ESG and business issues as well as being important in the context of a growing South African economy.

Mining has been a historically contentious industry in South Africa employing large numbers of labourers represented by some of South Africa's largest trade unions (Leonard, 2019; Kane-Berman, 2017). Retailers and Telecommunications and Media economic groups have high exposure to end consumers across many LSM (Living Standards Measure) categories, which raises issues regarding fair and equitable access to products and treatment of customers. Healthcare also raises issues of access to products and treatment of patients and includes interactions with the government. Food Producers on the other hand deal with issues regarding health impact and labelling of food.

These economic groups are also under different amounts of regulatory pressure, with the Mining and Healthcare companies experiencing far more government oversight than Food Producers, Retailers and Telecommunications and Media. This may provide a difference in the issue landscape and the severity with which issues in certain industries outweigh others.

The selection of the sample of companies was based solely on their market capitalisation as listed on the JSE as at 30 September 2017 (the month end of the acceptance of my research proposal). The reason for this is two-fold. Firstly, the study of each company requires an

integrated report of sufficient length and depth to provide adequate data. Larger market capitalisation companies tend to have the necessary resources to compile such reports as they are able to engage with stakeholders, out-source much of the structure and design and collect and track more KPIs than smaller companies. Secondly, larger companies are also more visible to the public eye, which increases the scrutiny by society and consequently the possibility of reputational value destruction or accretion. Increased public exposure and higher market capitalisation mean that the sampled companies are both more likely to be exposed to ESG issues and have greater facilities to respond to these issues.

For each of these companies their integrated report will be used (reports available at 31 December 2017), as well as all earnings call transcripts relating to the company's financial year.

3.4.2 Asset managers

The second sample is the asset managers who I will be interviewing. The respondents employed by asset and fund managers perform the task of stock selection for investment or disinvestment. My particular respondents may be employed as portfolio managers, analysts or even perform specific functions like compliance officers. I will refer to all of these respondents as 'asset managers'. Asset managers are given a portfolio of stocks that either cover a range of industries (generalists) or form part of one industry (industry specialists). The benefit of generalists is that when asset managers meet to discuss stock selection they each have understanding of each industry and can effectively critique stock selection, whereas the benefit of industry specialists is that they each have a much deeper understanding of the industry under their watch.

The ESG function at these asset and fund managers is performed in a variety of ways. Some require the analysts themselves to conduct ESG screening using prescribed ESG tools or using data from ESG research houses, others have an internal ESG team that performs ESG screening and investing separately to its analysts, and some may have no significant in-house or outsourced ESG research function.

My sample of asset managers will be from 22 separate asset or fund managers to cover a range of different investment and ESG approaches. At each asset or fund manager I will interview one employee, preferably the portfolio manager, hence the 22 interviews. Each

interview will be an hour long given the time restraints of the respondent. The 22 interviews will give me a good range of industry specialists, generalists and internal ESG analysts.

Given the small sample size of 22 interviews to be conducted in person, a response rate of 100% is required. My interaction with asset managers as a sell-side research analyst gives me access to industry analysts and ESG analysts to approach as interviewees. I will book interviews with asset managers and ensure I get the required number of analysts to meet the 100% response rate (22 interviews) required. There is the opportunity for bias in selecting asset managers based on their availability, however if respondents are unavailable a suitable replacement will be contacted to ensure a 100% response rate.

3.4.3 Analysts

Analysts aren't included as a sample group for the simple reason that their identification or selection wasn't required for the study. Analysts 'self-select' by attending earnings calls at the companies in the sample and therefore selecting a sample of analysts wasn't required in the research design. This research could have included a sample and survey of analysts, but such data collection was outside the scope of this study.

3.5 Data Analysis Methods

The data analysis comprises two distinct parts. *Part one: Asset manager interviews* describes the transcribing, coding and development of a grounded theory model while *Part two: Materiality scoring exercise* describes the comparison of material issues across companies, asset managers and analysts.

3.5.1 Part one: Asset manager interviews

In the analysis I will describe how the process of coding the interviews for themes under Gioia, Corley and Hamilton's (2012) *Grounded theory model*. This will set the foundation for how the findings will be described and presented.

The coding of the interviews leads directly into the findings section which will provide some context to the major themes and sub-themes present in the interviews. I will not be discussing the findings and how they relate to the literature, but rather presenting the facts of what was relayed to me by the asset managers I interviewed. The findings will be compared to the prior

literature in the Discussion section of the dissertation. The interview guide I will use in all my interviews can be found in Appendix 1 (Interview guideline).

Interviews will be free-flowing, with only a few set questions being asked consistently. This free-flowing style means a pure quantitative analysis of the results will provide poor comparisons between respondents for example, asking what percentage of the interviewees responded to a particular question – some may have answered that particular question while others may not have. However, allowing the discussion to flow freely will result in interviewees being possibly freer with their thoughts and less inhibited in their insights.

The analysis of the qualitative data follows Gioia, Corley and Hamilton's (2012) notes on inductive research and grounded theory. Essentially the authors speak to the issue of thematic research (the practice of coding research into themes) being too simplistic and lacking in academic rigour. While themes are useful to isolate areas of commonality and difference between respondents, it fails to provide insight into how this creates academic theory.

Gioia et al. (2012) developed a data structure and consequent grounded theory model to address this issue (to address the issue of simplistic themes in their own research) and I will be using their model to provide insights into my data as well. The first step in the analysis is to establish '1st order concepts' and '2nd order themes' from the transcribed interviews. Figure 7 shows Corley and Gioia's (2004) own data structure, a model I will be using with my own data.

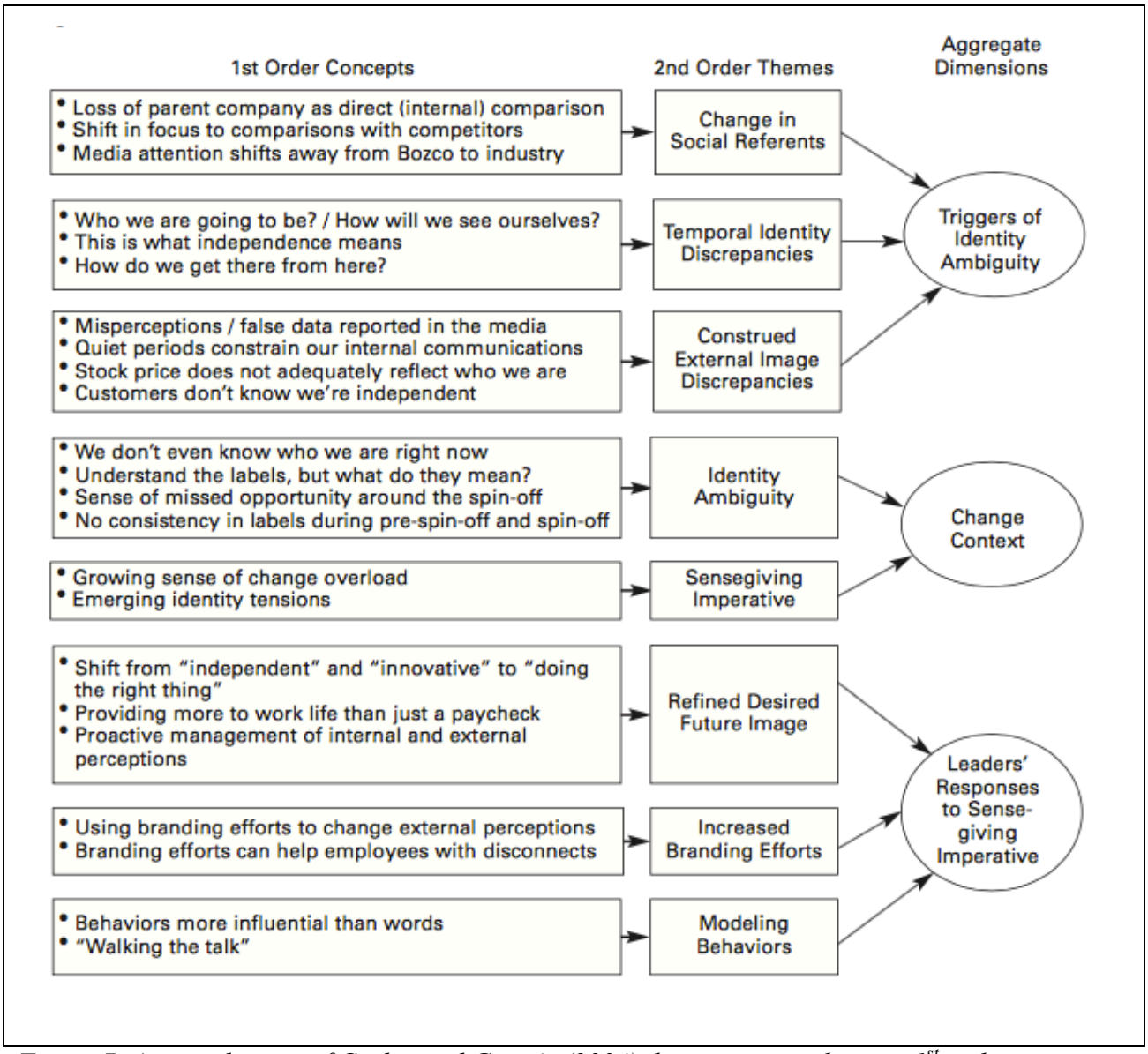


Figure 7. A reproduction of Corley and Gioia's (2004) data structure showing 1st order concepts, 2nd order themes and aggregate dimensions.

As far as possible the 1st order concepts will keep the wording used by asset managers to avoid jargon that I, as the interviewer, may have picked up from the literature. This first step will have many concepts, but through grouping them by 2nd order themes and narrowing down the concepts slowly I will able to structure the data more coherently.

The next step will be to sort the 2nd order themes into aggregate dimensions. This will allow me to put together the data structure with the aggregate dimensions representing the pivotal

areas of relevant discussion. Gioia, et al. (2012) refers to this as making a static image into a motion picture (Figure 8).

Analysing the data in this way will allow me to make more insightful comments on the quantitative findings and place them in the context of how the industry currently operates.

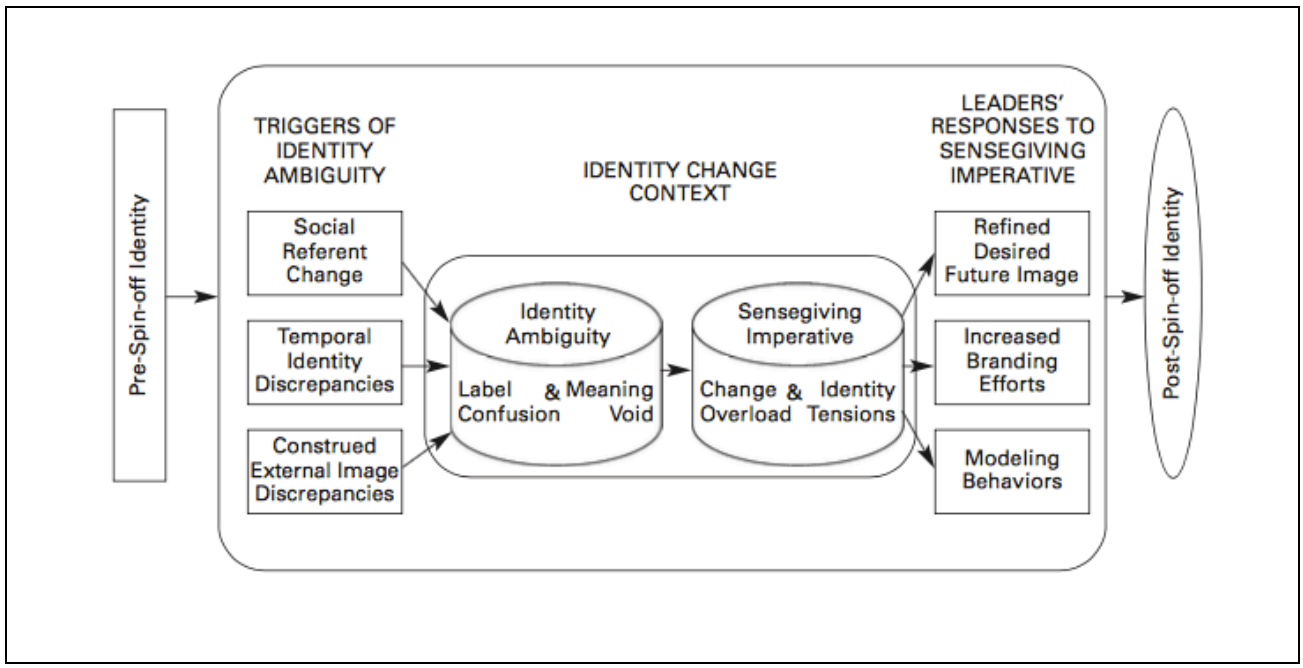


Figure 8. A reproduction of Corley and Gioia's (2004) organizational change process. This figure details the 'dynamic' data as a construction of 2nd order concepts and aggregate dimensions.

3.5.2 Part two: Materiality scoring exercise

Company Annual Reports

The first question to ask when considering the perspectives on materiality of issues is what issues are the companies themselves disclosing as being material? To answer this question, I will use the disclosures in the company annual reports to determine what the companies considered to be material issues. Aggregating the results from each company within an industry will then provide the answer as to what issues were considered material, or at least what the companies wanted to portray as material, in each industry.

The five industries under scrutiny in this study are the Food producers, Healthcare providers, Miners, Retail and TMT (Telcos, Media and Tech). Within each industry five companies'

annual reports were coded and these companies were selected by largest market capitalisation on the Johannesburg Stock Exchange (JSE). The 25 individual companies included in the study (five companies in each of the five industries) can be found in Table 8.

How to determine what companies found material?

In accordance with the IIRC Framework and GRI guidelines, South African companies in particular have been pushed to disclosing their risks and material issues more clearly in their annual reports (or 'integrated annual reports'). I have chosen to code both the company material issue disclosures and the risk disclosures.

The reason for this was two-fold; firstly, I think it is important to know whether there might be differences in what companies consider to be risks versus what they consider to be material issues. Secondly, this style of reporting is relatively new and as companies get to grips with how best to report, in a style that suits them, there may be some confusion as to what to disclose as risks and what to disclose as material issues. It is prudent to code both in order to avoid missing out on issues companies deem important, but have classified as risks rather than material issues.

Recording disclosures

I have coded risks and material issues separately and for the purposes of comparing these discloses to the data from asset managers and analysts I will aggregate the two. The coding of risks and material issues will be completed using the research instrument found in Appendix 2.

Each issue disclosed by the company, whether a risk or material issue and no matter it's rank within the company's own disclosure, will be recorded as one and all other issues not disclosed will therefore be zero. The reason I haven't placed higher weighting on issues companies disclose first or rank as 1 versus rank as 10 lies again in the variability of reporting that we see across industries and companies. Some companies may choose to rank 20 issues by their materiality, while others disclose the issues, but implicitly give them equal rank by not disclosing any priority. In order to ensure that companies are viewed fairly I have chosen a binary approach to recording their disclosures of either one for a disclosure or zero for non-disclosure.

Analysis of company disclosures

Each company report will be analysed against the research instrument (Appendix 2) to code their risks and material issues into the relevant issue categories. The five companies within an industry will then have their totals aggregated to get an industry score and this industry score will be contrasted with the scores presented by asset managers and analysts, the other two data sources.

In order to account for variances in individual company reporting styles, i.e. some companies reporting very succinct lists of issues and others more verbose and repetitive lists I will adjust the data for the companies so that each company represents only 20% of the industry total (given five companies per industry). This will ensure that a company that over reports issues and contributes a majority or even a significant minority of the industry disclosures in this study doesn't unfairly weight issues towards what that company deems material. The quantum of disclosures doesn't indicate the materiality of the particular issue, rather the relative number of disclosures to other issues disclosed in the report is, I believe, a better indicator of materiality.

Each company only accounting for 20% of the industry disclosures will contain any bias that might arise from a company that discloses multiple times for different aspects of a single issue compared to a company that discloses once and deals with the different aspects as sub-issues – a coding task outside the scope of this study.

I will not be repeating this scaling process at an industry level for two reasons. Firstly, the issues inherently material to a certain industry or 'materiality landscape' are those issues that are disclosed more and in greater proportion to other issues in the reports of all companies within an industry, thus materiality is determined by proportionate disclosure within an industry. This proportionate disclosure (a percentage of total industry disclosures) would be the same whether or not the values were scaled at an industry level.

Secondly, it may be useful to comment on those industries with higher overall disclosures when compared to those with lower overall disclosures. While this isn't as useful to comment on at a company level where the disclosure styles can vary wildly, an industry-wide trend to under- or over-disclose issues can provide some interesting insights into what financial and

non-financial issues are being faced in these industries and what the companies within them are doing about fronting up to those issues.

Asset Managers

How to determine what asset managers found material?

At the end of each interview conducted with my sample group of asset managers I will present them with a survey to be completed in the time remaining, estimated between 10 to 20 minutes. The survey can be found in Appendix 3, but I will provide a brief summary of the objectives of the survey. The five industries were presented on individual pages, with the five sampled companies represented on the page to provide context to the respondent for that industry.

The respondents will then be asked to weight how material they think the eight issue categories (Operational, Financial, Governance, Ethics, Labour, Society and Environment) are to the industry on a scale of zero to ten (zero being immaterial to 10 being highly material). The respondents won't be asked to weight each individual issue for materiality, because the length and complexity of the survey would become unmanageable.

The respondents will also be given industry context for the each of the issue categories to avoid unnecessary confusion during the survey. The aim ultimately is to get the opinion of the respondent as to what they believed to be material issues to an industry, with some contextual knowledge as to who the different stakeholders in an industry are and what issues they might bring to the fore.

Recording disclosures

In recording the disclosures, I will perform a simple exercise of aggregating the counts of asset managers who score issue categories as zero then one then two and so on, until I had counts for each issue category and each industry.

Analysts

Analysts are the final data source I will be using in this study. I chose analysts as a data source because of the vital role they serve as sell-side researchers getting information from companies and selling it to asset managers (the buy-side). Using the questions analysts

ask companies at their annual results presentations as a proxy for the type of issues analysts are concerned about, I will code them against the same research instrument used to code the company annual reports (Appendix 2).

How to determine what analysts found material

Companies hold earnings presentations throughout the year from quarterly, half-yearly to yearly earnings presentations. Here the executives, and usually the chairman, present the company's performance for the period under review to analysts in the room who have an opportunity to ask questions about the company's performance at the end.

Using these earnings calls, which have been converted into transcripts by Bloomberg, I will code the analyst questions using the research instrument in Appendix 2.

Recording disclosures

I have chosen not to scale the data in the same way that I did for the company reports. The data will be scaled for company reports largely because the difference in reporting styles means it would be unfair to use the pure quantum of issues raised as a proxy for materiality and I would rather use the relative priority of reporting to determine the materiality.

In the case of analysts, I believe the quantum of questions asked around a particular issue is more likely to be a proxy for the issue's materiality. There is also the potential issue of the wide variance between the number of questions asked at each company earnings presentation. I think it is important to keep these differences in the data, otherwise the weighting might be skewed towards companies that had only a handful of questions asked on a specific issue compared to other companies that had more questions asked across a broad range of issues.

Piecing the overall materiality scoring exercise together

The final step of part one is to compare the results collected from the company reports, asset manager surveys and analyst questions in earning call transcripts. These comparisons at an industry level will then expose any differences or similarities in what the three parties considered material issues.

In order to look at the results of the companies, asset managers and analysts as a like-for-like comparison, I will calculate the Z-score for each industry, data source and issue category. By

looking at the data in this way I am able to compare the data collected as a number of questions or risks and material issues with data collected as a rating from asset managers, which is otherwise an apples-to-oranges comparison.

The Z-score for an issue tells you how many standard deviations that score was from the mean (positive if the score was above the mean and negative if it is below the mean). The mean and standard deviation values used to calculate the Z-score are particular to that industry and that data source only, in other words any particular Z-score only indicates how many standard deviations above or below the mean that issue score was compared to the other values collected from that data source in that industry. Issues with a positive Z-score are considered to be more material than those with a negative Z-score and the higher the Z-score, the more material the issue.

3.6 Research Criteria

The research should be both credible and believable. Internal credibility will be ensured by replicating the interview using a set number of questions, all of which will be asked in the interview. While the semi-structured nature of the interview will result in different questions being asked, the core interview questions will all be asked to maintain data collection uniformity.

Given the cross-sectional and small sample size nature of the research the external validity of the research as 'generalisable' is unlikely. However, the purpose of the research is not to prove a generalisable causal link between company reporting and investor valuations.
In order to ensure reliability both interviews (for industry-specific and ESG analysts) will be tested on a trial basis with a willing correspondent in the industry. Any refinements will then be made to ensure there is no ambiguity in questioning.

3.7 Limitations

There are limitations in each of the areas of the study: the interviews, the investor calls transcripts and the company annual reports.

Given the small sample size for interview purposes, the research is heavily reliant on the availability of each individual. Every effort will be made to ensure all scheduled interviews happen as planned, but cancelations are a likely possibility. Starting the primary data

collection phase as soon as possible will ensure create a greater likelihood of ensuring a 100% response rate.

Coding the company annual reports for material issues being reported on by the company's leadership confronts a number of challenges: issues are raised in a variety of sections in the report, dealt with in different levels of response detail, and at different levels of corporate authority.

Different public stock exchanges around the world also have different reporting requirements, further complicating the way material issues are reported on. Companies listed on the JSE have similar reporting requirements to the UK, Europe and Commonwealth countries, while in the US, the Securities Exchange Commission requires the submission of Form 10-K, which standardises material information in set framework. Exchanges in the East, including Russia, China, India, Japan and South-East Asia, adopt their own standards that may result in further difficulties interpreting the disclosure of material issues affecting reporting organisations.

I believe I have contained the limitations of this study insofar as they might inhibit the validity of the study.

4 Findings

The broader goal of this project is the development of a praxis model designed to improve the honesty of conversation between investors, analyst, companies and the public, in terms of how companies create sustainable value. In order to do this, I have collected two sets of qualitative data to explore where the differences in this conversation might lie. First conducting interviews with asset managers to get an understanding of how ESG is currently conducted to develop grounded theory for understanding the second set of qualitative data - the differences in perspective on what issues are material by asset managers, companies and analysts themselves.

My findings are accordingly split into two parts. The first is the development of grounded theory through the coding and analysis of the asset manager interviews, while the second part of my findings tallies the different perspectives as to which issues are material across the five considered South African industries.

Part two responds directly to the immediate goal of determining whether the conversation about how companies create and destroy value places the weight on the same issues from the perspective of asset managers, companies and analysts. The answer to the question asked in part two is either yes, these parties are talking about the same issues across financial and ESG categories or no, these parties place materiality on different issues in each industry. Ancillary to this rather straight-forward answer is insight into where particular groups place their materiality and how companies in particular report on issues as ‘Risks’ or ‘Material issues’.

I have structured my findings in this way to provide the most insight into the practice of ESG in South Africa. The research question seeks to understand the differences in materiality perspectives in order to drive ESG relevance for companies, asset managers and analysts. By first understanding what asset managers understand about ESG, how they believe it is being driven by their clients, companies and the general public, as well as understanding other aspects of its relevance to the investment process, my findings in part two will be better informed by the ESG landscape set out in part one.

Summary of findings for Part One

In analysing the interviews with asset managers, I found three dimensions emerged:

1. Feelings about ESG as it stands
2. Inherent and systematic implementation conflict
3. ESG practice confusion

With regard to the first dimension, what is ESG and its role, I found that asset managers recognised dramatic differences in opinion amongst their key stakeholders, both on the side of the asset owners, as well as with regard to companies themselves. While few asset managers could agree on what is ESG, most were open to its relevance, declaring Governance to be of overriding importance, compared to Societal and Environmental issues, as it indicates ethics and integrity in leadership. Further, asset managers felt Governance and Environmental issues were easier to understand and consequently to research, than Societal issues.

Leading on from the uncertainty around the definition and role for ESG, the second dimension that emerged from interviews with analysts, revealed the limitations of its usefulness. These emerged as conflicts, such as its relevance for long-term investment, but at the expense of short-term performance, increasingly demanded of them, and the difficulties for both buy- and sell-side analysts to maintain independence where their continued business may depend on their relationships with management. Further, I found that asset managers recognised the dangers of promoting ESG as a signal of responsible investing behaviour without having a sincere understanding of its implications. It was felt that younger, emerging practitioners were more likely to drive the implementation ESG as a key ingredient of the investment function.

The third dimension explored the different roles that are emerging for ESG, revealing conflicts and confusion. Four roles for ESG emerged in my findings: as an input to risk analysis, though most asset managers declare difficulty in understanding how to apply ESG to their evaluation models; to comply with client demand, in particular to signal virtue as a responsible asset owner; as a lens through which to assess the quality of a company's leadership; and as a tool for engagement with company leadership either directly, or by proxy voting on management resolutions.

4.1 Part One: Asset Manager interviews and the development of Grounded Theory

The ultimate goal is to develop a praxis model aimed at improving the honesty of the conversation between investors, analysts, companies and the public, in terms of how companies create sustainable value.

The immediate goal of this research is to build on the current literature around the contested nature of ESG reporting [Corporate Social Responsibility (CSR)] as a value driver for different business stakeholders and determine what aspects of ESG reporting might best serve the interests of all stakeholders (Albuquerque, Koskinen, & Zhang, 2018; Amel-Zadeh, & Serafeim, 2017; Blackrock & Ceres, 2015; Billitteri, 2008; Cochran & Wood, 1984).

Placing research in context

The literature review revealed a number of shortcomings in the conversation as it is currently structured:

- Investors seek short-term returns on capital and this is at odds with the building of long-term term capital
- Standards and guidelines offer confusing messages for reporting companies, e.g. the concept of shared value
- In response, companies either tick boxes or dress up their performance in non-financial areas

While the new IIRC standard aims to clear up the confusion by offering a standardised guide for companies to tell their value creation story over the short, medium and long term, in the process reporting on issues material to providers of financial capital, the key research question still remains: *How can a better understanding of the differences in perspectives of material issues between the buy-side (asset managers), the sell-side (analysts) and companies themselves be used to improve company reporting and analyst research on Environment, Societal and Governance (ESG) issues in South African listed companies?*

In seeking to answer this question, we will be exploring the *paradox tensions companies face in pursuit of sustainable value creation*, including, and in addition to, those listed above.

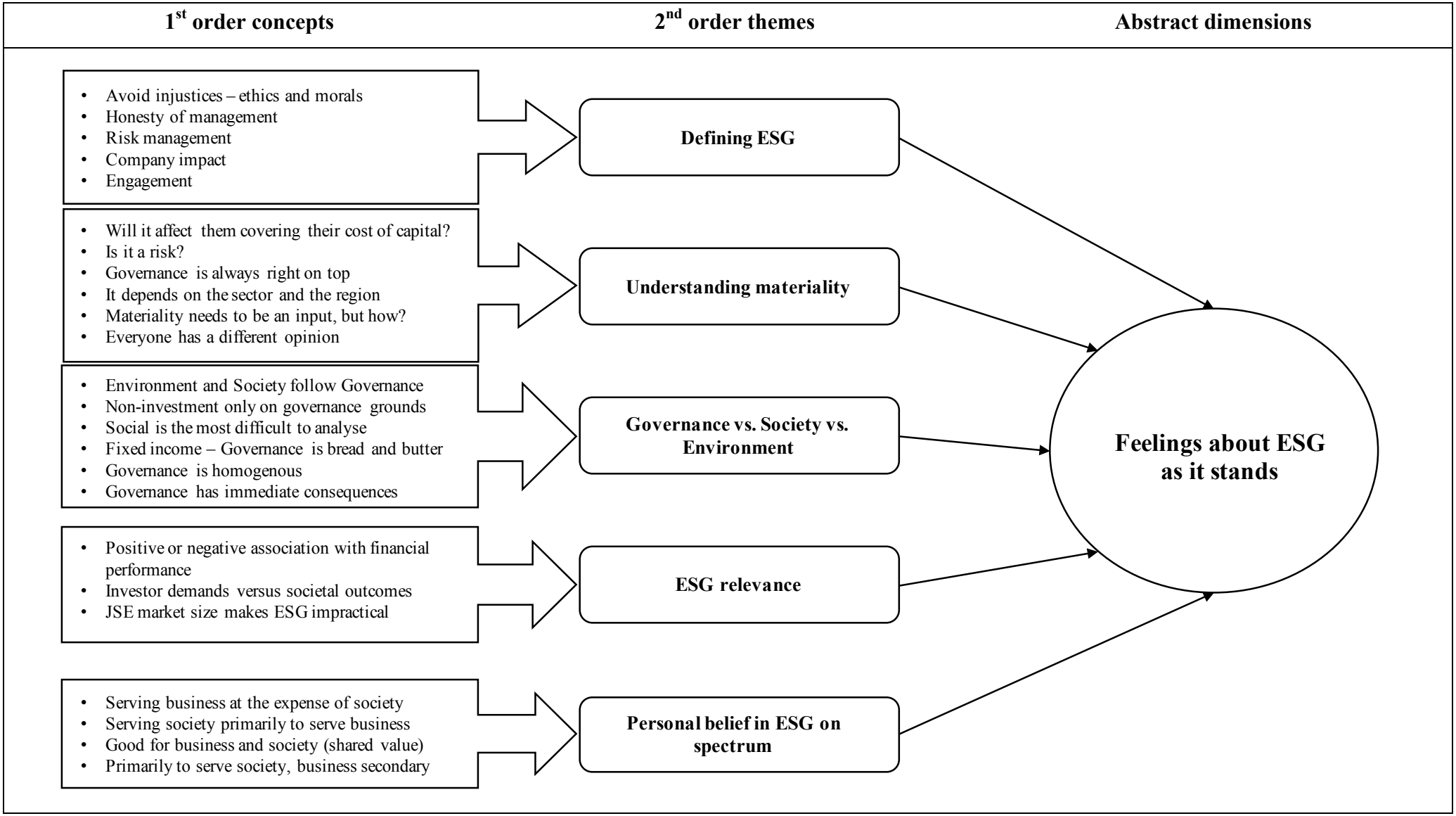


Figure 9. Data structure for the first aggregate dimension: Feelings about ESG as it stands

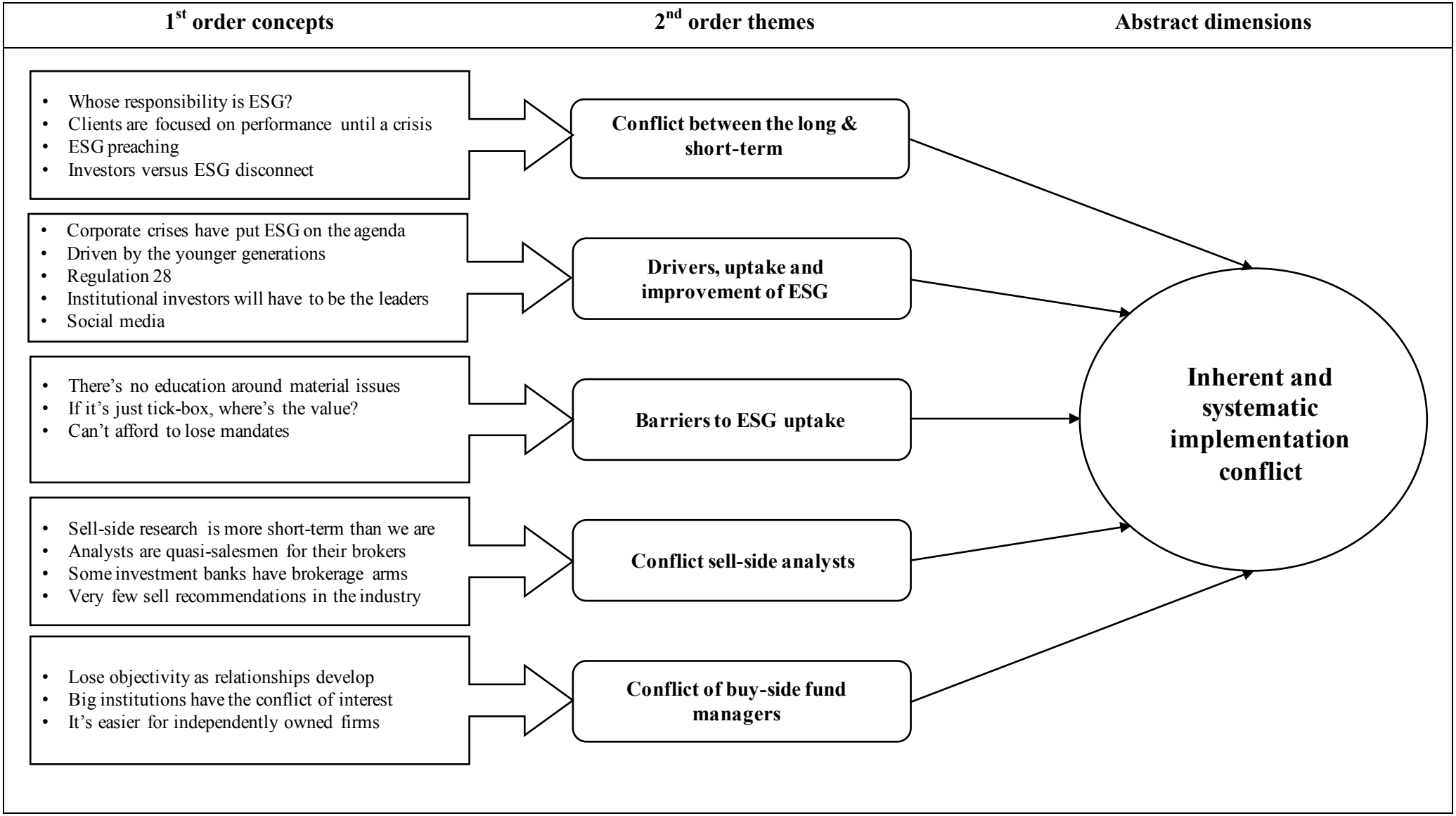


Figure 10. Data structure for the second aggregate dimension: Inherent and systematic implementation conflict

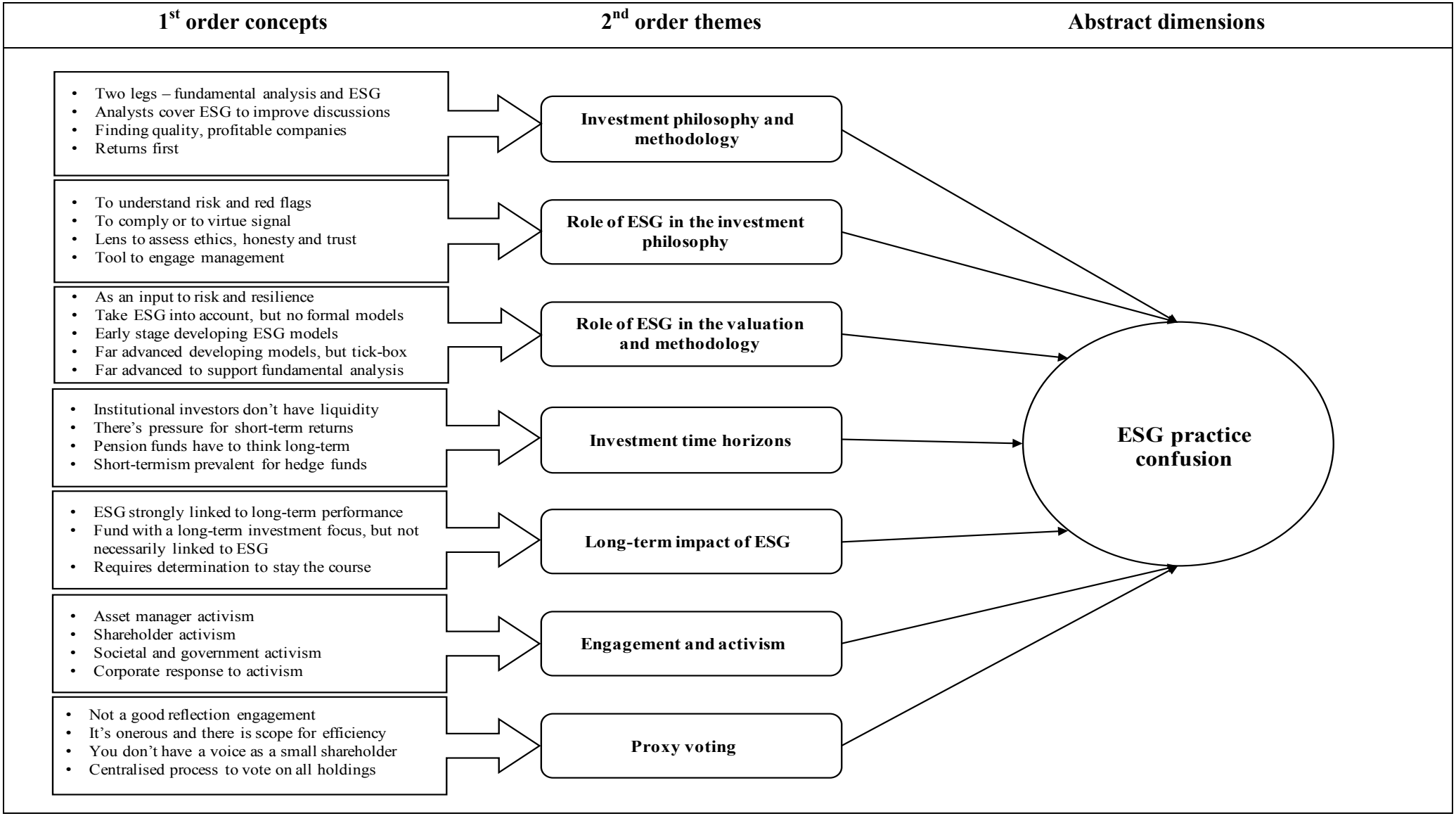


Figure 11. Data structure for the third aggregate dimension: ESG practice confusion

Answers to this question will help in the ultimate goal to develop a praxis model aimed at improving the honesty of the conversation between investors, analysts, companies and the public, in terms of how companies create sustainable value.

Figures 9, 10 and 11 all display the three aggregate dimensions of the data structured as constructed under the guidelines prescribed by Gioia et al. (2012). By creating pyramids of information starting with raw, transcribed interviews then first order concepts, second order themes and finally building into the abstract concepts (the peak of the pyramid), the synthesised data can provide insights into the dynamics of ESG practice, rather than merely looking at the themes or codes alone.

As Gioia et al. (2012) described, the data structure is merely a static picture of the data collected. What is important when analysing the data and putting into grounded theory is the *arrows* that connect the relevant boxes to make the theory *dynamic*. Figure 12 sets out the grounded theory and describes how asset managers perceive ESG at the time of the study (Feelings about ESG as it stands), the pressures currently in the market that are determining its usefulness (Inherent and systematic implementation conflict) and how this translates into ESG practice (ESG practice confusion).

Having participated in 22 separate interviews I gained a perspective of how asset managers thought about their own understanding of ESG. Using grounded theory to construct a dynamic data structure I hope to articulate my perspective as eloquently and succinctly as possible.

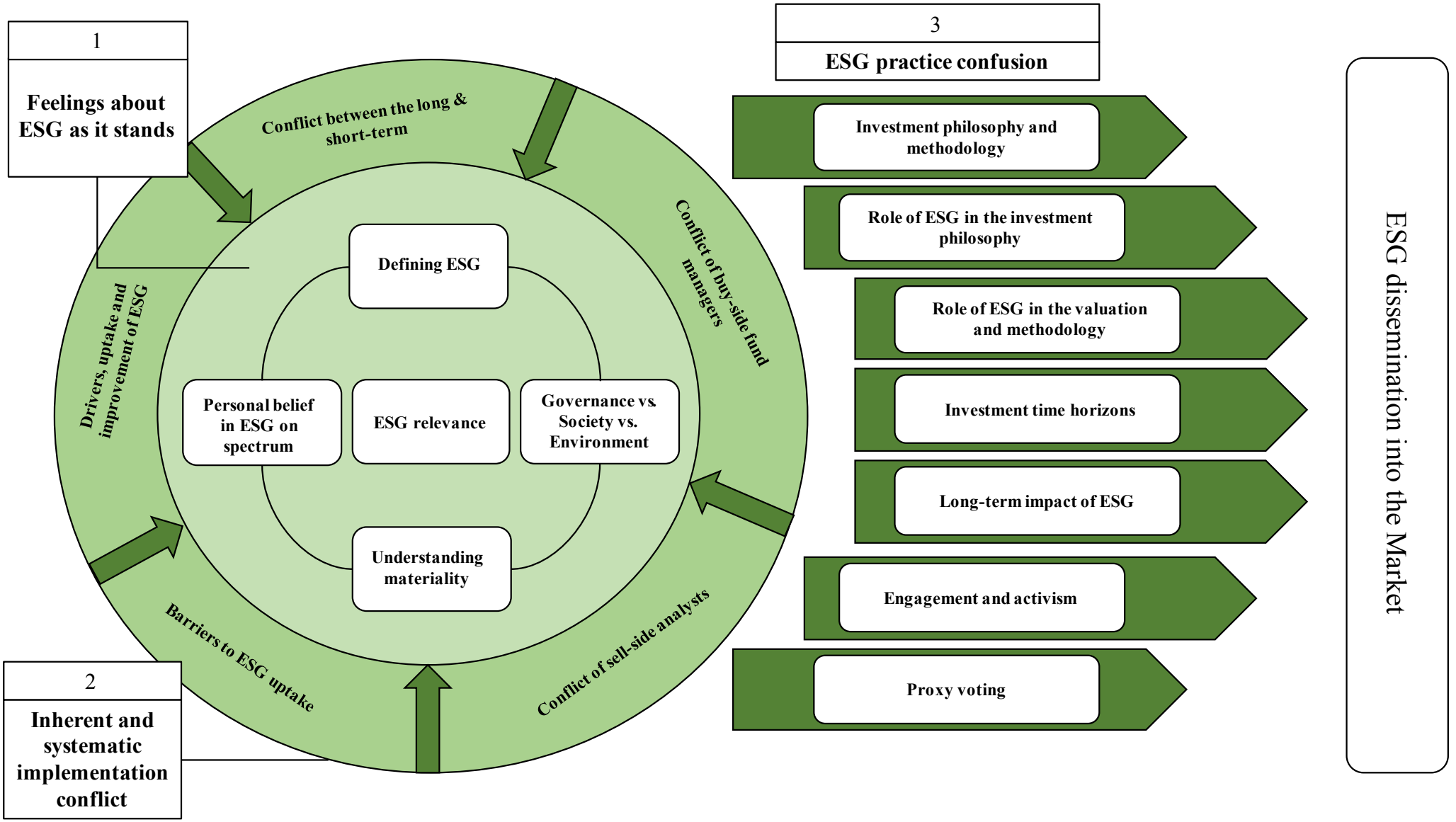


Figure 12. Grounded theory diagram of ESG pressures and research dissemination in the South African asset management industry

When I had originally come across Gioia et al.'s (2012) work I had pre-supposed what the aggregate dimensions would have been and naively presumed the result before really interrogating the data. My pre-supposition was that the interviews would allow me to categorise the asset managers into groups based on their authenticity for practicing ESG and implementing it in their investment models.

As it turns out the data interrogation process revealed an all-together different story. There were three aggregate dimensions that stood out to me. The groups of 2nd order themes in each dimension spoke to ESG as a growing phenomenon in the industry with its growth supported and constrained by constructs in the industry. The general confusion and areas of disagreement have resulted in a variety of ESG outcomes and stratifications of it's dissemination into the market.

The three aggregate dimensions are:

1. Feelings about ESG as it stands (Figure 9)
2. Inherent and systematic implementation conflict (Figure 10)
3. ESG practice confusion (Figure 11)

I will speak broadly to the interaction of these aggregate dimensions before looking at the individual dimensions and the composition of 2nd order themes and 1st order concepts within each. Figure 12 displays the interaction between the three dimensions. The first, Feelings about ESG as it stands, refers to how asset managers described ESG, it's definition to them, the relative importance of it's different components and its overall relevance to the industry.

This was an important first dimension in my eyes as the similarities and differences speak to ESG as a concept that hasn't found a homogenous definition or process throughout the industry. Asset managers were open about it's relevance and in particular the areas of Environment and Governance that they felt were easiest and most productive to research.

This understanding, defining and value association with ESG exists in the context of multiple pressures on ESG. The second aggregate dimension is the inherent and systematic implementation conflict that exists in the industry. In Figure 12 this is represented by the band 'constricting' the first aggregate dimension.

Here asset managers spoke to the conflicts they face with regard to the relationships between different parties in the market, in particular company management relationships with asset managers, shareholders and analysts, as well as asset manager relationships with clients (their mandates). These conflicts, as I have referred to them, dictate information flow, as well as the types of information disseminated into the market.

Respondents also referenced the growing trends towards more sustainable markets in a generational context amongst other barriers and drivers. This inherent and systematic conflict determines asset manager practice of ESG.

The final aggregate dimension is ESG practice confusion. The themes within this dimension speak to the many ways in which ESG is practiced or attempted with varying degrees of success. Some asset managers have inputs into their valuation process, some a scorecard and others use it just to engage and remain abreast of issues.

I will expand on each of these aggregate dimensions providing examples of quotes as well as some areas of agreement and disagreement within 2nd order themes.

4.1.1 Feelings about ESG as it stands

In this aggregate dimension, the discussions explored five 2nd themes:

4.1.1.1 Defining ESG

4.1.1.2 Understanding materiality

4.1.1.3 Governance vs. Society vs. Environment

4.1.1.4 ESG relevance

4.1.1.5 Personal belief in ESG on a spectrum

4.1.1.1 Defining ESG

The wide range of opinions on the topic of ESG generally supports the literature that ESG and its related concepts, such as CSR and CSI are contested topics. Examples of responses included: “The problem with ESG is there hasn't been a definition. ESG was the substitute for CSI when people realised CSI was not enough” by respondent 14 and “You can’t say ‘ESG issues’, because nobody knows what ‘ESG issues’ are. You have to mention – ‘these are the rules that govern it’” by respondent 16.

Not many of the interviewees attempted a definition of ESG, though all referred to ESG with some understanding of its role, dynamics and implications during the course of the interviews, as will be explored below. From the comments made, there would appear to be a wide range of interpretations of ESG on the continuum between concern for society and concern for business' interests. Examples of the former included: "At least the next generation doesn't have to suffer from the injustices of how we exploit workers and communities. And that's what we mean when we talk about sustainability" by respondent 1 and "ESG is more about the impact the company is having on society, while equity research is primarily about the company's health" by respondent 14. An example of the latter includes: "If ESG issues are big (material) enough that we think a company is never going to cover its cost of capital and deliver a decent ROE, then we might not invest in it" by respondent 18.

4.1.1.2 Understanding materiality

When defining materiality, and whether it was a factor taken into account in the investment process, the majority of respondents who attempted to provide a definition for materiality only saw materiality at the level of governance, society and environment. A quote from respondent 7 sums up this approach: "So governance would always be right on top but then obviously depending on the industry that the company's operating, [materiality] could be huge in terms of environmental issues, then we'd focus on those, or similarly, for material risk around social issues." While this may be a simplistic description of materiality by the respondent who was using the terms for ease of conversation i.e. using the titles 'environmental issues' and 'social issues' to refer to a wide range of underlying issues the fact that the titles were referred to as being all-or-nothing, is telling.

A contrary opinion by respondent 12 indicates a burgeoning understanding at a deeper level, especially with regard to differences between companies rather than merely industries: "And within industrials you'll have guys that deal with with food. Other guys deal with hard goods. You can't compare the two with a simple scorecard." These definitions indicate an intrinsic understanding of materiality, but none of the respondents had processes or tools that helped them determine materiality beyond this intrinsic understanding.

4.1.1.3 Governance vs. Society vs. Environment

Following on from definitions of materiality by respondents is the precedence respondents set in using governance, societal and environmental metrics in investment

decisions. The overwhelming majority of respondents considered governance to be of the most importance when referring ESG. Respondent 11 even went so far as to say "the G I find so important because it can literally destroy a company. If you don't do the E and the S it may speak to long term inefficiencies but it doesn't necessarily destroy value like poor governance can."

Many respondents were of the opinion that governance leads societal and environmental issues with respondent 1 saying "I think that actually recent corporate scandals, especially on the governance side which flips down to everything else, has actually highlighted the importance of ESG" and respondent 4 saying "but you will find that if governance is taken care of, usually the environment and society follow themselves."

Other reasons respondents favoured governance to either of societal or environmental factors are that governance is fairly uniform across industries and that there are specific metrics to understanding it. On the former point respondent 9 is recorded as saying "Governance is fairly homogenous, environment and society comprise a diverse set of issues." And on the latter point respondent 14 and 3 said "Governance is a big one, it's easier to have a metric for and to understand where it is important" and "in governance there is a lot of factors: structure of the board, remuneration, diversity, etc." respectively.

Respondents also mentioned that while they favour Governance out of the three pillars of ESG, environmental issues followed in the wake of governance as being the easiest to track and record with societal issues being the the toughest to make an accurate account of. Respondent 10 said "the S of the ESG, is the most difficult to analyse, as there is usually not a lot of information." Respondent 14 summed it up well "Society is the tougher one. Companies make donations, like buying food parcels for a community, but to what degree are they being responsible? … It is easy to over spend on projects that don't succeed, raising doubt about when the input is sustainable and when enough. That causes corporates to pull back from investing in the social 'up-liftment' of the community."

4.1.1.4 ESG relevance

One of the main subthemes I explored with my respondents was the relevance of ESG to business value creation. My analysis of the transcripts found that 15 of the 22 respondents viewed ESG as being definitely positively associated with financial performance. Examples

of their responses included: “When you grow larger, you have a bigger and bigger impact on society and that society – they are your customers, they are your stakeholders, so you have to take all those people into account. They vote with their money.” by respondent 4 and “A section 54 stoppage [a regulation in the mining industry that orders a mine shut down operations after a fatality on its premises] might seem like an operational issue, but actually its a social issue” by respondent 5. A reoccurring theme was that the relevance of ESG lay in its role to identify and mitigate risks, or increase resiliency of their portfolios or underlying assets (see under the role of ESG for the asset manager below).

Three respondents viewed ESG as being in a trade-off relationship with financial performance (i.e. negatively associated), or more of an issue for society than for business. An example of the former included: “if there is a corporate governance issue or there is a social issue that’s going to affect the economy you should take that into account, but at this stage our markets are so small that its slightly impossible to not invest in something that’s so big like an Eskom” by respondent 17 and of the latter: “you can imagine if the manager feels BTI [British American Tobacco] is not a great socially uplifting company, but they look like they are going to outperform, what do you do? That’s the reality of the game, which is unfortunate” by respondent 15.

Four respondents had either conflicting views, or made comments with only tangential reference to the question. Respondent 13, with more than 30 years’ experience in the industry, observed: “But I don’t think ESG, from an industry perspective, with the exception of a handful of smaller fund managers, has been regarded as vitally important. For me it’s an issue, so I will talk to Sasol about chemical spills, whereas nobody else does. I think most fund managers, it’s all about return, and that’s it.”

4.1.1.5 Personal belief in ESG on a spectrum

Amongst the conflicting pressures on the individual participating in the process of allocating owners’ capital to companies in the economy are their own views of the interplay between business and society. My analysis of the 22 discussions found that two regard ESG’s role to serve business interests, even at the expense of society’s interests, and three regard ESG’s role as primarily to serve society, with business’ interest as a secondary benefit. An example of the former included: “An ESG issue, such as Listeriosis, can cause an over-reaction, making a stock (like Tiger Brands) fundamentally under-valued, and thus present a

buying opportunity" by respondent 18 and of the latter: "It should be for the betterment of society and not for financial gain. The entire world financial system has been run for financial gain and look what has been happening" by respondent 15.

Eight respondents held views characterised by Porter's 'shared value' philosophy, whereby ESG should be both good for business and for society. Examples of this view included: "the advent of responsible investing leads companies to not only take, but give back to the communities in which they operate" by respondent 16 and "At least the next generation doesn't have to suffer from the injustices of how we exploit workers and communities. And that's what we mean when we talk about sustainability, so as a result of the company operating in that region, we at least have to see social improvements in general to the people there" by respondent 2.

Half the respondents regarded ESG's role similarly to the IIRC's definition of ESG, i.e. that ESG should serve society's interests for the purpose of advancing the interests of business. Examples of this view included: "Our approach has not changed. As long-term investors, we have always been concerned with the long-term valuation of the company relative to the price you have to pay" by respondent 3 and "if you ignore the ESG, you are being one-dimensional in your evaluation of the company. So you are not acknowledging the soft, yet critical elements that can undermine your investment thesis. You have to look at both holistically" by respondent 10. And five of these respondents, as well as one from the 'shared value' group, recognised the potential for conflicting interests between business and society, a theme I explore below.

4.1.2 Inherent and systematic implementation conflict

In this aggregate dimension, the discussions explored five 2nd themes:

4.1.2.1 Conflict between the long & the short-term

4.1.2.2 Drivers, uptake and improvement of ESG

4.1.2.3 Barriers to ESG uptake

4.1.2.4 Conflict of sell-side analysts

4.1.2.5 Conflict of buy-side fund managers

4.1.2.1 Conflict between the long & the short-term

In expressing their personal views of the role of ESG in an ideal world, six of the 22 respondents were sensitive to the conflicting demands of the investor seeking returns on capital invested for providers of funds on the one hand, and to satisfy the needs and wants of society on the other. Examples of this view included: "Investment management want to buy companies that are growing. So it is unfortunate that we come a little bit more entrenched and it is putting us on collision course with the principles of ESG" by respondent 9 and "generally, clients are more focused on performance than anything else, until the crisis happens, and then they ask you difficult questions" by respondent 10. This recognition by the respondents of the conflict between business and society demonstrates the difficulty asset managers have had integrating ESG into their investment processes.

One practical aspect of the South African market of publicly listed companies is its small size and pareto distribution of market capitalisation held by only a handful of stocks (Naspers is larger than all other companies in this study combined). Three of the respondents noted that aside from value judgements regarding the trade-off between societal and investor demands, avoiding companies with questionable ESG behaviour would reduce the investable universe to an impractically small subset. An example of this view was given by respondent 5: "We've got many different issues coming through that affect different people, and if we were to start making those calls on behalf of our client base, we would get to a very, very small investment universe, and then we actually can't create our portfolios optimally in a way that diversifies risk and generates enough return for our clients".

Respondent 1 also made the point that "the aim is not to name and shame companies and then not invest in them, the aim is to try and impact and then influence their practices, adoption of

best practice. Because remember the bigger goal – it's to change how things are done in the entire world."

4.1.2.2 Drivers, uptake and improvement of ESG

Some respondents pointed out various reasons for ESG being driven in the investment industry. Many respondents pointed to recent company crises as being a genuine push towards making ESG more relevant. As respondent 7 pointed out "I think the shift that has created or the interests around these things has been the corporate scandals and the corporate problems we've had around governance that is literally over the last 18 months shone such a big spotlight on ESG that people/analysts at investment companies have previously ignored".

Some pointed to a younger generation being more in touch with these issues and therefore driving ESG. The narrative of younger generations driving ESG was also linked to the idea that social media is having a significant impact on ESG relevance in the market. Respondent 19 referred to the impact millenials were having on investing in general saying "there's also more of an awareness, especially younger people, I would say people under the age of forty who care more and more about how this company makes its money versus whether it just does." Respondent 14 made direct reference to this link, saying "Millennials will drive ESG. It is already embedded in the millennial narrative, not something that's foreign…Social media platforms play a role as a tool that millennials use."

Interestingly only one respondent pointed to Regulation 28 as a driver of ESG practice in the market. Respondent 9 said "I think for me the big push has come funnily enough from regulation, Regulation 28, which said that as part of your investment process you need to show how you've incorporated ESG into your thinking and then your evaluation. So, a lot of our clients are pension funds, and therefore Regulation 28 applies to them." The respondent also pointed out that the way the regulation is being dealt with in the market is essentially to sign-off on a cut-and-paste paragraph of Regulation 28 on their new mandates. The respondent emphasised that they would have to think long and hard about how they deal with ESG if they are called upon to explain themselves in the face of a crisis.

One respondent raised an interesting alternate driver to ESG in the institutional leaders in the market. The point the respondent made was just that the sheer influence wielded by an institutional investor like Old Mutual, PIC or Allan Gray, makes them incredibly influential

in leading engagement with companies (because of their larger shareholdings) and setting an example to smaller players in the market. Respondent 12 emphasised this point saying "just by virtue of being around for 30 years before and just having that marketing presence, you know? It just raises the profile of that business. So they will just be natural leaders. if the leaders start to raise the issue more it will drive it further down the food chain." The respondent also mentioned that you didn't necessarily have to be a big shareholder, just a consistent shareholder. If the management of a company sees you on the share register consistently (year-in and year-out) they know you aren't just there for a short-term price discrepancy and rather long-term cumulative returns.

4.1.2.3 Barriers to ESG uptake

Some of the interviewees expressed unprompted views about how authentic they felt the ESG process was at their employer firm or that of a peer firm in the market. Respondent 9 spoke to his perception of ESG in the industry: "We tend to put this up as a differentiator just to win assets without really giving it proper thought and making sure that there is a lot of substance behind what we are doing. And you see that especially when suddenly something has gone wrong in an industry. The latest being Steinhoff, and the question becomes, "but if you've been saying that you've been doing ESG, how come you've messed up on this one?" So a lot of guys get caught out and they get shown up."

Respondent 19 referred to policy put out by one of their peers, a larger asset manager, and said "it was the most self-serving thing I've ever seen. I thought you were going to talk about ESG and tell me how you view it, but it was just a party line of kind of ninety nineties business school – 'maximize shareholder value'. No, it's not about that."

Respondent 5 admitted to the difficulties faced in dealing with ESG and mentioned the fact that they knew their solution wasn't perfect, but that they were facing up to the obstacles in the area saying: "So, it's not that we are opposed, its just tricky. I feel like on our side it is sincere it's just that we are grappling with different issues."

4.1.2.4 Conflict of sell-side analysts

Respondent 5 mentioned their push to reward independent research from analysts, rather than commoditized research from analysts who can adjust their valuations to suit what their client might want to hear. Respondent 3 corroborated this view saying "We use very

little sell-side research, we use the research not the recommendations, because they are playing more short-term than our valuation objective."

Respondent 22 also made reference to the conflict of sell-side analysts with particular reference to Steinhoff, saying "So there is significant career risk if you highlight too many issues and lose your access to management. Because if Steinhoff is one of your companies and you can't engage with management you lose all your advantage. So it's a bit of an issue on the sell-side."

4.1.2.5 Conflict of buy-side fund managers

A few respondents spoke to the conflict of interest that exists between asset manager analysts when they develop longstanding relationships with company management. Respondent 14 said "Over time, the risks lies in the close relationships that develop between the analysts and the management teams. Ultimately, you want to do your job without offending management." Respondent 17 mentioned the bias towards believing company management saying "If you've had a relationship with them for twenty years, you already in that trap where you're believing everything that they say."

Another conflict inherent for both the buy and sell-side is the loss of independence for certain investment houses because they have a brokerage or corporate finance arm within the same company. Respondent 22 provided an example of this, saying "if a [investment house] analyst would take on [a retailer] for example, [the retailer] management might go to [bank that owns the investment house] and say now listen, we're getting a bit of resistance from one of your guys, we're going to change our accounts to another bank. And then the pressure will be on the analyst to let it go" (I have removed the name of the bank and retailer in question for the purposes of anonymity).

4.1.3 ESG implementation confusion

In this section, the discussions explored seven themes:

4.1.3.1 Investment philosophy and methodology

4.1.3.2 Role of ESG in the investment philosophy

4.1.3.3 Role of ESG in the valuation and methodology

4.1.3.4 Investment time horizons

4.1.3.5 Long-term impact of ESG

4.1.3.6 Engagement and activism

4.1.3.7 Proxy voting

4.1.3.1 Investment philosophy and methodology

I had asked each of the asset managers to comment on how they approached their investment philosophy. Largely asset managers fell into two categories, either a holistic approach to incorporating companies in their portfolios, or a 'two-legged' approach separating the fundamental and ESG components. An example of the former being Respondent 7 who said "No specific ESG framework. It's a discussion its really just a broad discussion and it takes into account a lot of people's the collective history in the team and just the knowledge of what we have predetermined as industrys we like." Similarly, asset manager 21 said "in the initial assessment there isn't an ESG specific focus around there, it's how the analyst seems ESG play out in terms of the valuation of the company"

In contrast, and in answer to the latter point, respondent 1 said "every investment opportunity has two legs to it: there's the fundamental side of things and the ESG side of things. Where the fundamentals are atypical valuations, making the business case from the financial and productivity point of view and the second part, the investment case being based on the ESG."

The concept of 'finding quality companies' was spoken to by some of the respondents when justifying how they think about their investment philosophy. Respondent 8 said "but we choose to invest in quality companies with a history of good cash flows, that are not too highly leveraged. We've got a quality scorecard. So we've developed a quality scorecard based on a variety of research."

4.1.3.2 Role of ESG in the investment philosophy

ESG as an input to risk and resilience analysis

As noted under 'The relevance of ESG for value creation' above, respondents viewed the main role of ESG in investment philosophy as a means to identify and mitigate risks, or increase resiliency of their portfolios or underlying assets. Seventeen of the respondents commented on this utility. Example responses included: "its really quite simplistic, its really about looking for red flags" by respondent 19 and "It's more of an objective measure when you've got a score attached to it so you can be a bit more circumspect. And have more of a safeguard" by respondent 12.

ESG to comply with, or signal virtue in response to client demand

Five of the respondents referenced ESG as a compliance or virtue signalling practice. Compliance and virtue signalling in this context mean either ticking the required boxes to indicate everything is above board, or signalling their virtue by reporting on immaterial practices or those practices that make them look good. Respondent 17 mentioned the compliance response to analysing ESG issues saying "Where is the corporate governance there, where is the analyst saying all of this? You just tick okay he's a director tick he's a director tick". An example of virtue signalling reporting was highlighted by respondent 13 who said "A lot of ESG reporting is, I would say, probably advertorial, so a lot of these companies will go and say we spent so much on development on community skills, we built a school, a university, a hall, we built houses, all these things."

ESG as a lens through which to assess quality of company leadership

Eleven of the respondents spoke to ESG as a lens through which the ethics, honesty and trust of management could be observed. Especially when it comes to governance respondents referred to the use of the King Code as well as engagement as the standard by which they could have a lens into the quality of company management. For example, respondent 4 said "So, actually I think that in unregulated markets you need more (ESG oversight) because it takes a holistic view of investments, it's risk mitigation, it's all those things… that it's checking on honesty. Governance, pure and simple, is just checking on the honesty of the management, as simple as that." Similarly, respondent 8 said "a lot of big moves in the market either positive or negative will be related to a governance issue like a loss of faith in management".

ESG as a tool for engagement with company leadership

Fifteen of the 20 respondents spoke to ESG as a tool for company engagement. While this will be dealt with in the next section as well, it is worth mentioning how the respondents viewed ESG in this regard. The majority of respondents spoke about engagement as the means to dealing with ESG issues rather than ESG as the means to engagement. Respondent 2 summed up this approach well, saying "Instead of us trying to think like create models to incorporate into evaluation it should be focused on as an engagement issue and we should be looking at engaging boards and executives on these issues."

4.1.3.3 Role of ESG in the valuation and methodology

Considering almost all respondents view ESG as playing an important role for the asset manager, foremost as an input to risk analysis, but also for other reasons noted above, it follows that ESG must play a role in the valuation of companies. Respondents had many views about the extent to which ESG could be incorporated into valuation modelling.

As noted above, the majority of respondents' view ESG as a risk or resilience indicator, pointing out the red flags that asset managers and analysts need to be aware of if they are to consider investing in a company.

However, a number pointed out that ESG is too qualitative in nature to be integrated in valuation formulae, as expressed by respondent 5: "We don't have a standardised risk rating framework. We think it's because its very difficult to put a number to a company's environmental risks, to say that Sasol is a 3.8 out of 5. We rather just discuss them."

Given the growing recognition of ESG's role in evaluation, I probed respondents for an indication of how far advanced they were in developing ESG models to serve as input to company valuation. Eleven respondents admitted they had no formal model, but took into account ESG factors in their valuations. Examples of this view included: "I would say that the ESG things are a natural output in the research process. So, to the extent that there is any environmental risk in the product delivery, it's natural outcome would be mentioned in the research document" by respondent 13 and "It has been at the analyst's discretion to go in depth if there is reason to believe ESG issues or risks are near the horizon, or imminent" by respondent 14.

Four respondents admitted that they are in the early stages of developing ESG models. All the models are attempting to score ESG in some quantifiable form as either as an ancillary to their financial models according to respondent's 2, 8 and 12 or using ESG metrics to directly affect the discount rate used to value companies such as respondent 11. It must be noted that respondent 11 invests in property only and therefore the ESG metrics used to adjust the discount rate are environmental metrics that are well disclosed in that industry.

Only one respondent (respondent 1) has fully integrated ESG into their investment process using ESG analysts and fundamental analysts to access companies and quantify ESG risks and opportunities using a matrix. The respondent admitted that this has not been used to impact financial valuations yet, and will only attempt that once they have built up a large enough pool of ESG data. It can be noted that Respondent 1 is one of the larger asset managers in the South African market making it more feasible to approach ESG integration than smaller asset managers given capacity and availability of resources.

Three respondents had advanced qualitative ESG models. These respondents admitted that ESG was qualitative and therefore not worth pursuing on a quantitative level (for now at least). An example of the qualitative process was put forward by respondent 9 who said: "We have almost like a template for each company, but with a lot of questions that help guide the analyst thinking about how to approach ESG. A list of questions, but by no means exhaustive. The idea is to get the analyst to think long and hard about some of the softer side of things before diving into the hard numbers and making a decision."

4.1.3.4 Investment time horizons

The confusion around the implementation of ESG shows itself in conflicting views of investment time horizons as well as the pressures on those horizons as previously mentioned. Of the big institutional investors in this study, one made the point that "We have to take into account the investment time horizon. When you are an institutional investor, it is different to being a day trader. You are not trading in and out of that share all the time. We don't have the liquidity in the market."

Respondent 21 admitted that even as a self-declared long-term investing house the short-term still had relevance, saying "So we've never said to clients or anybody out there in the market

that we are speculating or looking for short-term returns. However, having said that, there are times where you have to look at the short term returns…you have to move money out and move money in from your fund to another fund that is performing better. That's just human nature."

Respondent 15 made the point that the short-termism was definitely present in the market, but that is ultimately where some funds (like hedge funds) operate, saying "I can guarantee short-termism is present. If you underperform in two months, then people are going to phone you. It is a lot more prevalent in the hedge fund space versus the long space because in the hedge fund side there are absolute returns and they don't really care what the market is doing."

Where the long-term is of particular relevance and thus where ESG comes in to play most readily is for pension funds who, dealing with the pensions of their clients, have to think about the long-term. As respondent 7 put it "I think pension fund clients are realizing that…you can't just be looking at the three six month and one-year performance in terms of your fund. Because within those periods there's a lot of volatility. So I think they're starting to recognize it."

This conflict between short-term and long-term is further illustrated in the next section as investors grapple with the how to manage the need for client returns and the sustainability of this returns.

4.1.3.5 Long-term impact of ESG

The tension between long-term demands of society versus the shorter-term demands of business, from the point of view of returns on investment, was commented on by every respondent. Nine respondents identified ESG as being strongly linked to long-term performance, while an additional four described their funds as having a long-term focus, but not necessarily linked to ESG factors. In addition, respondent 7 also noted that clients increasingly recognise the importance of having a long-term view in the market, despite short-term volatility, while respondent 20 made a similar observation, though not linked to ESG factors.

Despite recognising the link between long-term performance and ESG factors, eight respondents noted increasing short-termism in the market. A variety of reasons were cited for

this increase in short-termism, as represented by the following views: “We have seen investment horizons get shorter because of pressure clients, pressure from asset consultants, especially so where our mandate is to have a 3 to 5-year view. But on a monthly basis we are assessed in terms of where we fall in terms of the ASISA rankings” by respondent 8, “You can also see it in how executives are remunerated. It’s all very short term. It’s all winner takes all” by respondent 9. Respondent 19 also mentioned that the increases in technology allowing clients and asset managers access to company performance on a daily basis has shortened time horizons for both parties, expecting returns on a much shorter basis now that returns can be tracked on a shorter basis.

The contradiction inherent in the demand for both long-term and short-term performance was expressed by five of the respondents, noting that their clients demand short-term performance despite agreeing to a longer-term view of their investments. Examples of these views included: “On the one hand they want you to have these sustainable long-term views, but they get very itchy, very worried when managers start underperforming” by respondent 4 and in talking about pressure for returns from clients, respondent 8 said “well that doesn’t mean we going to underperform from a 3 to 5-year view but definitely there’s a lot more pressure for short term performance.”

In commenting on this tension, three of the respondents noted that strong determination is required to stay the course, largely through ongoing engagement. An example of this view was expressed by respondent 1: “Most of the ESG issues that you identify in companies are long term driven so they are not like really issues that you can sort out in the short term. Hence one had to come up with that engagement strategy.”

4.1.3.6 Engagement and activism

Engagement between asset owners and asset managers

In looking at ESG engagement there are multiple levels of engagement that can be explored. The first is the engagement between asset owners (clients) and asset managers whose job it is to invest their clients’ money.

Eight of the 20 respondents mentioned an increase in engagement from clients around ESG issues, especially after the crises that happened during 2017 (most notable they implosion of

Steinhoff). Interestingly four respondents mentioned the disinterest or apathy of their clients with regard to ESG issues. An example of the former include: “First thing about that is the asset owners have become more involved. On the institutional side, those asset owners have taken a more active approach in asking questions” by respondent 3 and the latter: “I certainly don’t get any questions from my clients about it. They are only concerned about performance” by respondent 20. In general, there are more respondents who see greater client engagement, but it is worth noting the enclaves of clients and asset managers who are not feeling pushed toward more ESG practices.

Looking at the nuance of what clients are demanding from asset managers in terms of their engagement there were four main themes that came through. Three respondents brought up that they were asked how they have applied their minds, particularly following the corporate failures of 2017, three respondents said their engagement with clients centred around how they, as asset managers, engage with the firms, four respondents were asked to provide feedback on how they conduct their ESG and what their results had showed and finally, two respondents said that they have had client pressure to sell or reduce their exposure to certain companies.

The motivation for this engagement from clients has come from a fear of the downside potential to companies if ESG risks aren’t managed well (mentioned by two respondents), the building of sustainable value (mentioned by only one respondent) and a merely compliance perspective (mentioned by two respondents).

Looking at specific concerns related to governance, society and the environment six respondents mentioned client pressure to report on concerns related to these specifically with four asset managers concerned about governance and four concerned about societal and environmental issues (two respondents were concerned about all three areas of ESG).

Company engagement

The majority of respondents indicated that engagement was used as a means to stay invested in a company, rather than disinvesting immediately. As respondent 1 put it “So if we’re going to walk away from a company because of it’s poor environmental impact or negative environmental impact we feel like we haven’t really achieved the bigger goal which is actually to influence companies.” This was also mentioned by respondent 5 who spoke to the

need to remain invested given the size of the market and the fact that company engagement was the only way to ensure that they didn't reduce the size of their investable universe in the South African market.

Company leadership response to engagement

The opposite side of the coin from asset manager engagement with companies is the response asset managers received from this engagement. Many respondents mentioned that there has been sincere engagement from companies to improve on issues brought up such as improved reporting (respondent 3), more comprehensive ESG issues being engaged with and voted on (respondent 4) and generally sincerer engagement with individual asset managers by company management (respondent 5). As respondent 12 pointed out though, if you're a big shareholder they will listen to what you have to say, but that isn't necessarily true if you're a minority shareholder.

Respondent 6 mentioned that the responses they had had from management existed on a spectrum from poor disclosure and practice to those who were fully on board to integrate suggestions. The respondent's aim was to lift those at the bottom end of the spectrum to be better rather than making those who responded well to engagement great. It must be noted here that the size of the asset manager, or respondent, has a big impact in how willing companies are to engage, not the least because of the likelihood that a large asset manager will have a significant shareholding.

Society and government engagement

Many asset managers questioned the extent to which they should be held accountable for how crises, especially from an ESG perspective, play out at a company level. As respondent 3 put it referring to the listeriosis crisis at Tiger Brands: "You can't expect a manager or any shareholder to go and ask about your safety standards, it's a question you ask about their prospectus, ISO 9002, regulatory standards, compliance, etc. But daily testing on listeriosis, no. The department of health should do that and that should be enough. The expectations of what you can do is sometimes misplaced. Otherwise we would be running such a company ourselves."

The respondent brings up a point voiced by others in the study; to what extent is it society or by extension the government's job to regulate companies for these types of issues. In

response to the question about whether mines should be shut down and workers re-skilled for another industry, respondent 1 said "You shouldn't be talking to shareholders. You should be talking to the government to say can we develop these people's skills? And the government might say "if I'm not getting taxes from these people I wont have budget for that"". This is by no means a comprehensive example, but it does illustrate the play between what asset managers can do to influence companies and what the government has the power to do.

4.1.3.7 Proxy voting

The next level of engagement is that of the engagement between asset management and companies. Here I will talk to the motivations behind engagement with companies as well as the channels through which this engagement happens.

The motivation and purpose of engagement with companies was elegantly put by respondent 18 who said "Reason for engagement is if you think there is inherently more value in the company than just simply selling shares". This was largely the case for all the respondents and corroborated by respondent 3 who said "unpacking [company engagement], what do you want management to do? You want management to change their behaviour."

In order to change company behaviour outside of the personal engagement with company management, respondents also referred to proxy voting as being a primary source of company engagement. As respondent 1 put it "And we actually engaged management on a lot of issues via proxies where we voted against issues. And obviously it goes back to majority/minority you know? What shares are you holding can make an impact or an influence." While the majority of respondents were in the affirmative of voting their proxies and using them as a positive source of engagement, respondent 3 did criticise proxy voting saying "The proxy voting is not a good reflection of engagement because of this [engaging with companies before voting takes place]. Whether you voted for or against is not noticed. It is the engagement before hand that is not disclosed that can translate into positive change to the policy change that you will now vote for."

4.2 Part two – Findings of the materiality scoring exercise

The materiality scoring exercise is a simple exercise designed to collect data from companies, asset managers and analysts about what they perceive to be material issues in a particular industry and how material those issues are relative to one another. This will answer the research question at a basic level as to whether there are differences in perspectives with regard to what issues are material. Figure 13 displays the three data sources and five industries I have looked at and provides some visual clarity for the quantitative data capturing element of this study. A variety of data was collected to produce these findings with two of the sources, companies and asset managers, coded by myself and the last source, asset managers, provided by themselves through a survey. I have provided a complete explanation of the data collection and analysis in the Research Methodology.

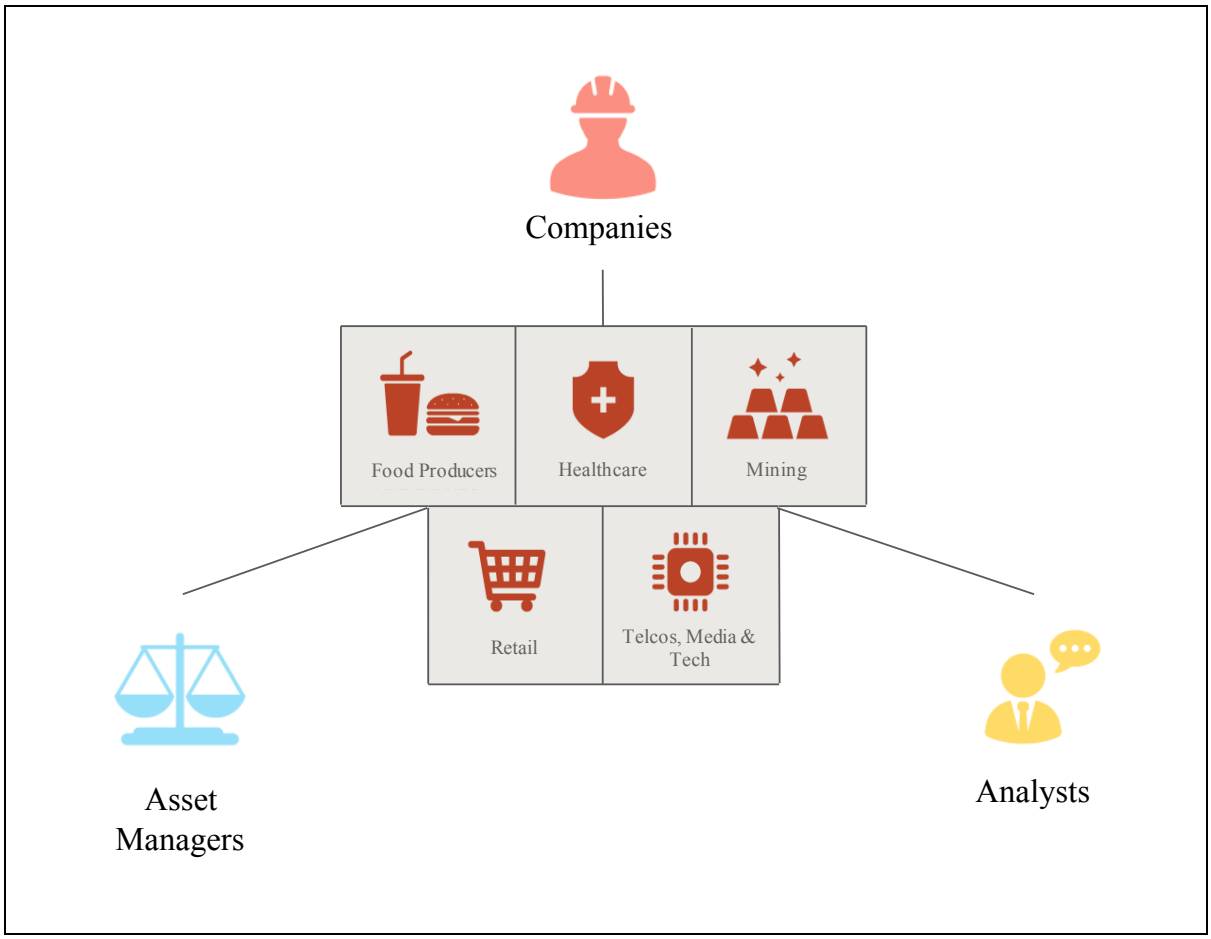


Figure 13. Data collection sources. A visual display of my three sources for data (companies, asset managers and analysts) and the five industries underlying each data source.

Summary of findings for Part Two – the materiality scoring exercise

The materiality scoring exercise for the three stakeholders: corporate management (company reports), asset managers and analysts, revealed that companies themselves weighted ESG issues as more material than Operational or Financial issues, asset managers gave on average an equal weighting, while analysts weighted Operational and Financial issues as being overwhelmingly more material than ESG issues. Both asset managers and companies differentiated between E, S and G issues across industries, with Societal and Environmental issues being higher for the Mining industry, Customer issues (a component of S) higher for Healthcare, TMT and Retail, and Governance and Ethics issues being weighted consistently high across all industrys by asset managers, in contrast to companies themselves, who weighted Societal and Environmental issues on average significantly higher than Governance and Ethics.

4.2.1 Company Annual Reports

I coded both risks and material for companies in order to understand whether there might be differences between these two different types of disclosures. It is worth illustrating here the issues companies disclosed as 'Risks' versus those they disclosed as 'Material'. I have selected one company from each industry in Table 9 below and provided some examples of issues deemed to be Risks and Material issues as well as the category into which they were coded (the colours relate to the issue category consistent throughout this report).

Table 9. Examples of issues companies disclosed as Risks and Material issues

Food Producers – Tiger Brands (TBS)		
Coding category	Risks	Material issues
Product suitability (Customer issue)	Product quality	Response to consumer preferences Pending sugar tax Compliance with labelling, salt and sugar
Healthcare providers – Mediclinic (MEI)		
Coding category	Risks	Material issues
Treatment of customers (Customer issue)	Clinical risks • provision of care • disease outbreak	Patient safety

	Quality of operational services, e.g. poor response to complaints	Infection prevention and control
Mining – Sibanye Gold (SGL)		
Coding category	Risks	Material issues
Industry equity (Societal issue)	Regulatory compliance with the Mining Charter and related social and labour plans Maintaining and obtaining legal and social licences to operate	Procurement and enterprise development Illegal mining
Retail – Shoprite (SHP)		
Coding category	Risks	Material issues
Fair labour (Labour issue)	Compliance with Labour Relations Act	Career development and growth Education and training Study assistance Job creation
Telcos., Media and Tech (TMT) – Vodacom (VOD)		
Coding category	Risks	Material issues
Customer ID protection and data privacy (Customer issues)	Customer data misuse or leakage Communication costs Adverse political measures and regulatory pressures regarding the price of roaming Government White Paper to facilitate entry of new players into the market	Protecting consumer interests regarding privacy of information Managing the challenge of data-usage transparency

Summary of findings from analysis of risks and material issues disclosed in annual reports

The results in Table 12 reflect the aggregated self-declared risk areas by companies within each industry. Table 13, below, examines self-declared material issues. At a high level, we

can see that there is fairly even disclosure between financial and ESG risk disclosures. While companies across all the industries disclosed Operational risks at over 20% (to a maximum of 41%), Financial risks were less disclosed with the Healthcare and Mining industries only disclosing these as 10% and 13% of their disclosures respectively.

Companies showed more variance in disclosure of ESG risks across industries. It is likely that this has to do with the greater number of categories for coding within the ESG segment and also the different issues faced by these industries. Each industry highlighted different areas for greater risk disclosure for example, Customer issues account for 17% of risk disclosures for the Food Producers and 16% for the Healthcare providers. Whereas Societal and Labour issues account for 25% and 19% of Miners risk disclosures respectively.

Table 10. Scaled industry totals for risk disclosures

Industries	Food		Health		Mining		Retail		TMT		**Total**	
Issue Categories	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Operational	14,9	23	29,4	41	23,7	28	22,3	28	24,4	32	114,7	31
Financial	11,6	18	7,2	10	11,3	13	21,3	27	13,3	17	64,7	17
Financial Total	**26,5**	**41**	**36,6**	**51**	**34,9**	**42**	**43,6**	**55**	**37,7**	**49**	**179,4**	**48**
Governance	6,3	10	9,9	14	4,6	5	10,5	13	9,9	13	41,1	11
Ethics	3,9	6	4,9	7	0,0	0	2,9	4	1,5	2	13,2	4
Labour	4,3	7	2,3	3	16,0	19	1,3	2	0,0	0	23,8	6
Society	6,8	11	3,1	4	20,8	25	10,0	13	14,4	19	55,1	15
Customers	11,2	17	11,3	16	0,0	0	7,3	9	12,4	16	42,2	11
Environment	5,2	8	3,6	5	7,8	9	3,6	5	0,9	1	21,1	6
Non-Financial (ESG) Total	**37,7**	**59**	**35,1**	**49**	**49,2**	**58**	**35,4**	**45**	**39,0**	**51**	**196,4**	**52**
Total	**64,2**	**100**	**71,7**	**100**	**84,1**	**100**	**79,1**	**100**	**76,7**	**100**	**375,8**	**100**

Comparing the results of the companies' self-declared risks in Table 12 above to how the industries have declared their material issues (displayed in Table 13) we can see some areas of difference between the two types of disclosures as well as similarities.

Table 11. Scaled industry totals for material issue disclosures												
Industries	Food		Health		Mining		Retail		TMT		**Total**	
Issue Categories	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Operational	13,9	19	24,8	26	12,2	18	12,5	28	4,8	16	68,2	22
Financial	0,8	1	9,3	10	8,0	12	1,5	3	3,2	11	22,7	7
Financial Total	**14,7**	**20**	**34,1**	**36**	**20,1**	**30**	**14,0**	**31**	**8,0**	**26**	**90,9**	**29**
Governance	1,0	1	1,7	2	2,8	4	7,8	17	3,0	10	16,3	5
Ethics	1,0	1	7,2	8	2,8	4	0,8	2	4,5	15	16,3	5
Labour	17,8	24	9,9	10	13,9	20	4,9	11	2,4	8	48,8	16
Society	18,7	26	4,5	5	13,4	20	7,0	16	3,0	10	46,7	15
Customers	9,4	13	26,0	27	0,0	0	6,8	15	9,3	31	51,5	17
Environment	10,2	14	11,9	13	14,9	22	3,7	8	0,0	0	40,7	13
Non-Financial (ESG) Total	**58,1**	**80**	**61,2**	**64**	**47,8**	**70**	**31,0**	**69**	**22,3**	**74**	**220,3**	**71**
Total	**72,8**	**100**	**95,3**	**100**	**67,9**	**100**	**44,9**	**100**	**30,3**	**100**	**311,2**	**100**

Findings of how companies view materiality

The first and most obvious difference between the risk and material issue disclosures is that the material issues are weighted much more heavily towards ESG issues than Operational or Financial issues. The largest difference is in the Food Producing industry where 80% of the material issue disclosures are for ESG issues and the smallest difference is in the Healthcare industry where 64% of disclosures are for ESG issues. By contrast the largest difference for risk disclosures was an 18% difference between ESG and financial disclosures, also in the Food Producing industry.

As with the risk disclosures by industry, each industry has highlighted areas of material importance through greater disclosures in those areas. Interestingly areas of relative low risk disclosure have come through in high materiality disclosure for some of the industries and vice versa. Customer issues make up 17% of the Food industry risk disclosures and Labour and Societal risks a mere 18% combined, but in terms of material issue disclosures in the same industry Customer issues represent only 13% of disclosures and Labour and Society disclosures account for 50% of total Food Producing material issues.

Similarly, in the TMT industry where Operational issues accounted for 32% of the total risk disclosures, but only 16% of material issue disclosures. This is almost the mirror image for

Customer issues in the same industry, which accounted for 16% of risk disclosures, but 31% of material issue disclosures.

4.2.2 *Asset Managers*

The asset manager responses to the survey are presented in Table 14. Looking at Table 14 you can see that no asset managers weighted any issue categories at 0, 1 or 2 and only 2 materiality weightings of 3 were provided for Ethics and Environmental issues.

Table 12. Asset manager response counts in the Food Producing industry

Issue categories	**Weightings scale**											**Total**	**Average**
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**		
Operational					1	2	2		7	6	3	166	7,90
Financial					1	1	3	5	8	1	2	155	7,38
Financial count					**2**	**3**	**5**	**5**	**15**	**7**	**5**	**160,5**	**7,64**
Governance					1		1	1	10	3	5	174	8,29
Ethics				1		1	1	4	4	3	7	171	8,14
Labour							4	6	6	3	2	161	7,67
Society					2	2	5	5	6	1		140	6,67
Customers							1	2	4	3	11	189	9,00
Environment				1		1	5	5	2	2	5	157	7,48
ESG count				**2**	**3**	**4**	**17**	**23**	**32**	**15**	**30**	**165,3**	**7,87**
Total				**2**	**5**	**7**	**22**	**28**	**47**	**22**	**35**	**162,9**	**7,8**

The next step was to multiply the count by the materiality weighting and aggregate the result to get a total of that issue category. For example, the total for Operational issues (166) in Table 14 is made up of 1x4+2x5+…3x10 (count x materiality). This aggregate total is then divided by the number of counts in order to get an average materiality weighting out of 10 for each issue category. The average column in Table 14 might not display differences as stark as those found in the company annual reports, but the calculation of Z-scores will expand on these.

I must also disclose a few caveats here that may have influenced the materiality weightings presented by asset managers. Firstly, asset managers are inclined to present to me what they think I want to hear about ESG and thus may have increased or decreased their weightings across the financial or ESG categories to present a different result to the true result.

Another issue is that my selection criteria for companies included Steinhoff (based on market capitalisation) before they crashed in December of 2017 and thus asset managers may be more inclined to weight up Governance as a category when seeing the Steinhoff name included in the study (the crash was largely related to the power of Markus Jooste on the board, a governance issue). This isn't just with regard to the retail industry (where Steinhoff is included), the crash of Steinhoff was so large that it was referenced in almost every interview and had many knock-on effects for other companies in the market. It is likely that asset managers up-weighted Governance as a category across all industries.

A final caveat is that during my interview process, which took place over two weeks, news broke that implicated Tiger Brands and RCL Foods in the Listeriosis crisis. This may have affected the results for one half of my respondents who became aware of the issue and the companies implicated, as well as the type of issue being dealt with (the hygiene of products given to customers).

These issues represent things that happen in the market all the time that might influence asset managers to weight issues differently, but the scale of the Steinhoff crash and Listeriosis crisis make them worth mentioning before looking at the results.

Analysis of asset manager surveys

Table 15 documents the differences in asset manager materiality weightings by industry. As previously mentioned these differences are less stark than those in the company annual report disclosures, but there are some points of note worth mentioning.

Table 13. Average asset manager materiality weightings across industries					
	Food	**Health**	**Mining**	**Retail**	**TMT**
Operational	7,90	7,95	8,33	8,00	9,14
Financial	7,38	7,33	8,81	7,62	7,43
Average financial	**7,64**	**7,64**	**8,57**	**7,81**	**8,29**
Governance	8,29	8,48	8,48	8,38	8,43
Ethics	8,14	9,10	7,62	8,19	8,71
Labour	7,67	7,52	9,48	7,62	6,71
Society	6,67	7,19	9,00	7,00	7,43
Customers	9,00	9,38	4,62	9,14	9,10
Environment	7,48	6,95	9,43	5,76	5,24
Average non-financial	**7,87**	**8,10**	**8,10**	**7,68**	**7,60**
All issues average	**7,82**	**7,99**	**8,22**	**7,71**	**7,77**

Findings of how asset managers view materiality

The first point of note is that across all issues asset managers weighted miners as having the highest materiality and retailers the lowest (relatively). Looking at financial versus non-financial (ESG) differences, there seems to be only slight variance between the weightings for asset managers. The Food and Health industrys both had a higher materiality weighting for ESG categories, while Mining, Retail and the TMT industry had a higher materiality weighting for financial issues on average.

These averages obscure the fact that there are more substantial differences at individual category level that affect the average. For example, asset managers on average weighted the financial categories (8,57) in the Mining industry as more material than ESG categories (8,10) in the same industry. But Labour (9,48), Societal (9,00) and Environmental issues (9,43) (ESG categories) were all weighted as being more material than either of the Operational or Financial categories on average. Because Customer issues were weighted at only 4,62 this brought down the weighting for ESG issues in the Mining industry as a whole.

The Labour category in the mining industry was the highest weighted issue category across all industries with an average weighting of 9,48. The Customer category in the Healthcare industry was the second highest with an average weighting of 9,38. On the other end of the scale the Customer category in the mining industry was given the lowest average weighting by asset managers at 4,62 followed by Environment for the TMT industry with 5,24.

4.2.3 Analysts

Summary of findings

Table 16 provides the results from the analyst earnings calls and we can see immediately that the overwhelming majority of questions asked were in the Operational and Financial categories. Healthcare was the industry with the 'lowest' representation, although they still had 85% of their questions coded as Operational or Financial. Healthcare was also the industry with the highest single ESG issue representation with 13% of questions coded in the Customer category. Only Tongaat Hulett (Food Producing industry) had no earnings calls to be downloaded.

Table 14. Coded analyst questions across industries

Industries	Food		Health		Mining		Retail		TMT		**Total**	
Issue Categories	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Operational	21	47	23	42	40	65	38	55	49	58	171	54
Financial	22	49	24	44	14	23	28	41	28	33	116	37
Financial Total	43	96	47	85	54	87	66	96	77	91	287	91
Governance	0	0	0	0	0	0	0	0	0	0	0	0
Ethics	0	0	1	2	0	0	0	0	0	0	1	0
Labour	0	0	0	0	4	6	0	0	0	0	4	1
Society	0	0	0	0	4	6	0	0	5	6	9	3
Customers	2	4	7	13	0	0	3	4	3	4	15	5
Environment	0	0	0	0	0	0	0	0	0	0	0	0
Non-Financial (ESG) Total	2	4	8	15	8	13	3	4	8	9	29	9
Total	45	100	55	100	62	100	69	100	85	100	316	100

The categories that recorded no questions whatsoever were Governance and Environment. The Mining industry recorded 12% of the questions as Labour and Societal issues and the TMT industry recorded 10% of questions as Societal and Customer issues. In terms of total questions asked the TMT industry had 85 total questions, 16 more than the next industry (Retail).

In Table 16 below I have extracted some questions asked by analysts at various company earnings presentations to illustrate how they were coded and provide some context to what type of questions were asked by analysts (I have chosen to keep the analysts who asked the questions and the companies they work for anonymous for the purposes of this study).

Table 15. Examples of questions asked by analysts

Food Producers – RCL Foods (RCL)	
Coding category	Analyst question(s)
Productivity (Operational)	"…the statement that you'll be back to pre-drought volume. I think if I'm not mistaken, your capacity is sort of just above 600,000 or 600,000. Could we expect you to be closer to that number is what you're saying by 2019? And will it be more back loaded or more front loaded do you think?
Access to products (Customers)	"… are you making in-roads into the independent and informal markets in Gauteng?"
Healthcare providers – Adcock Ingram (AIP)	
Coding category	Analyst question(s)
IP & Manufactured capital (Operational)	"The changes to the MCC and therefore hopefully a faster approval of products, do you have any idea sort of value of products that you have with the MCC, that have sort of sat there that might be released by a faster regulatory process?"
Anti-competitive behaviour (Ethics)	"So you think, the improvement in the regulatory process is not going to take your share from generic competition rather than from ethical guys that are still waiting to see some good competition?"
Mining – Gold Fields (GFI)	
Coding category	Analyst question(s)
Fair labour (Labour)	"…just on the Tarkwa. Can you talk a little bit about what's happening? We read about the -- that you're moving to a contractor, and obviously, your union not being too pleased on that, you're off to court, a little bit on that."
Productivity (Operational)	"So maybe you can share with us, when you come up with your targets on this new rebase plan, moving production from this 322,000 ounces to 480,000 ounces by 2022, can you share with us what implied productivity you have, like, in 2018? And where are we getting to in 2022 to get to that 480,000 ounces?"
Retail – Steinhoff (SNH)	
Coding category	Analyst question(s)
Capital risks (Financial)	"And can you just talk us through the issue of provisions? Obviously, there was a Manager Magazin call last week which referred to litigation around the Austrian businesses and Conforama. Your statement that you put out seem to imply that you recognize that you would have to pay some money in

	recognition of those shareholdings. And I think you said at the time of the German IPO that there would be I think it was at 3% or 3.5% of total assets. Can you talk us through exactly how much you have provisions? Do those provisions keep on going up over time and do they relate to current trading of the business or just a historic valuation of the businesses? And if that is provided for, then where is the cash [indiscernible]?"
Business partnerships (Operational)	"[With] regards your excellent liquidity profile and where I ask myself I'm entering the credit, why was there the necessity in the past to enter joint venture agreements with Europe's third largest furniture retailer [indiscernible] Poco movement and Conforama acquisitions where I have the feeling given the liquidity you had and confirmed bank lines that you could have done it all by yourself? Thank you.
Telcos., Media and Tech (TMT) – MTN (MTN)	
Coding category	Analyst question(s)
Industry equity (Society)	"…just looking back over the last few months, wondering if you've seen any disruptions recently from any of the civil unrest or any issues? There were some reports of the Internet gateway being shut down."
Business action (Operational)	"A couple of questions on Nigeria. What is the growth in Nigerian voice revenues if you exclude the incoming international dollar-denominated revenues?"
Capital risks (Financial)	"And secondly, for the FX losses which are included in the income statement, how much of that is because of the – using the CBN rate of NGN 306 for official translation, but actually making the translations at NGN 360 rate?"

These quotes represent only a small sample of all analyst questions, but in providing examples of both financial and non-financial questions I hope to 'colour the numbers' as much as possible.

The only industry which doesn't have non-financial issues represented in quotes (in Table 17) is the Retail industry. Even though there were Customer specific questions to choose, I thought it might be interesting to pull some quotes from analysts and their interactions with Markus Jooste of Steinhoff from the earnings call before the company collapsed. Steinhoff was a major South African retailer throughout the late 1990's until December 2017 when it lost 90% of its market capitalisation (one of the largest publicly listed companies on the JSE at the time) in the space of a few days. The collapse followed Steinhoff's auditor refusing to sign off on their year-end financials, which quickly uncovered the 'accounting irregularities'

that had been on-going at Steinhoff over the last 2 decades. It is evident from these quotes that the analysts were aware of the suspicions of the German authorities and even refer to the 'Manager Magazin' article that initially exposed Steinhoff. However, there were no questions raised by analysts that dealt specifically with governance at Steinhoff and the issues of key man risk in former CEO Markus Jooste and the power of the former chairman Christo Weise.

4.2.4 Overall results

Summary of findings

The materiality scoring exercise for the three stakeholders: corporate management (company reports), asset managers and analysts, reveals that companies themselves weight ESG issues as more material than Operational or Financial issues, asset managers give on average an equal weighting, while analysts weight Operational and Financial issues as being overwhelmingly more material than ESG issues. Both asset managers and companies differentiate between E, S and G issues across industries, with Societal and Environmental issues being higher for the Mining industry, Customer issues (a component of S) higher for Healthcare, TMT and Retail, and Governance and Ethics issues being weighted consistently high across all industrys by asset managers, in contrast to companies themselves, who weight Societal and Environmental issues on average significantly higher than Governance and Ethics.

The final step of the Part one is to compare the results collected from the company reports, asset manager surveys and analyst questions in earning call transcripts. These comparisons at an industry level will then expose any differences or similarities in what the three parties considered material issues.

In order to look at the results of the companies, asset managers and analysts as a like-for-like comparison, I have calculated the Z-score for each industry, data source and issue category. By looking at the data in this way I am able to compare the data collected as a number of questions or risks and material issues with data collected as a rating from asset managers, which is otherwise an apples-to-oranges comparison.

I will look at each industry in the order of Food, Healthcare, Mining, Retail and TMT to discover what the different parties considered material issues in each.

Overall results – Food Producing industry

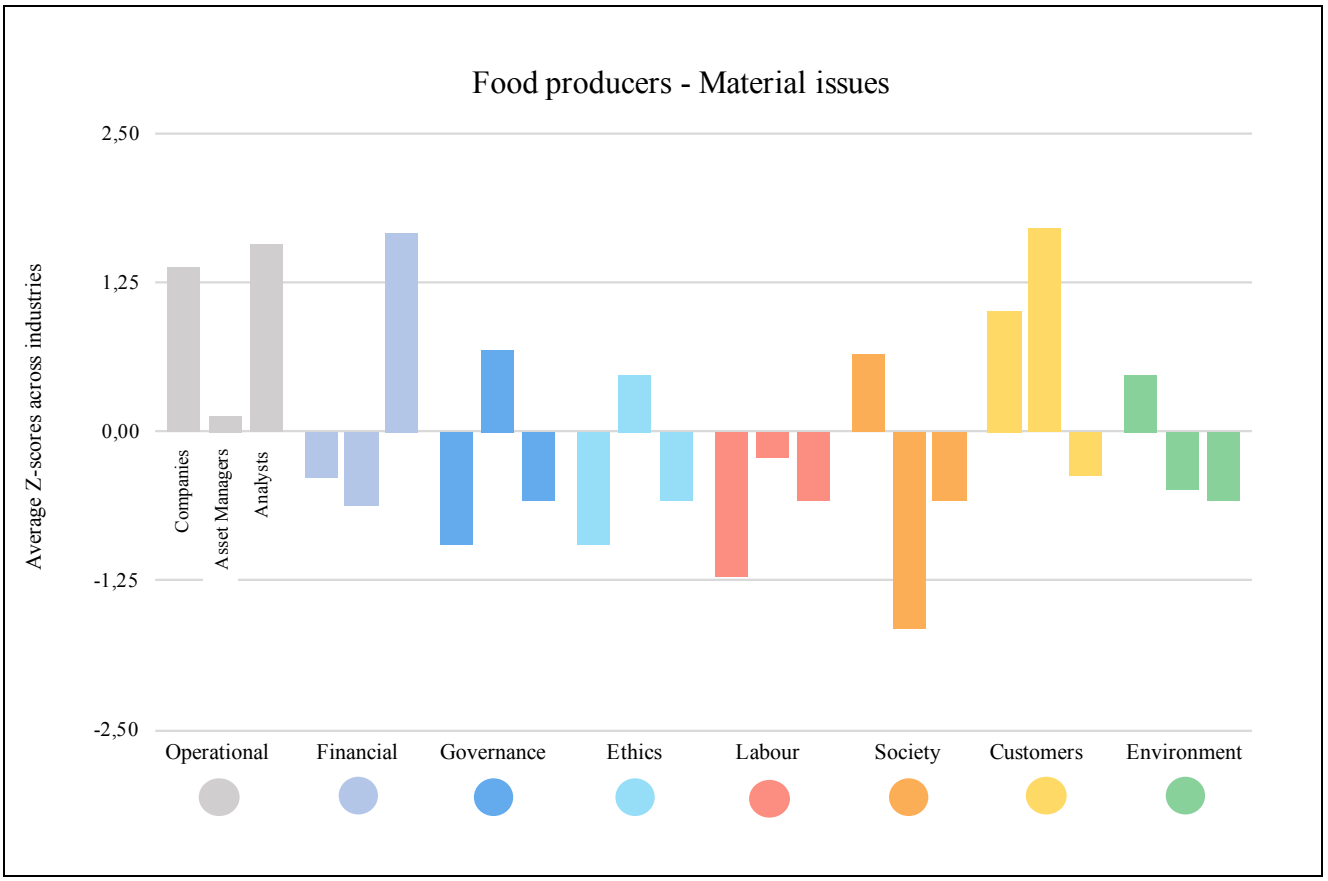


Figure 14. Materiality of issues in the food producers industry as determined by companies, asset managers and analysts.

In dealing with the overall results between the three data sources I will first set out the similarities and then the differences in materiality. In Figure 14, the positive spikes (upwards) represent material issues while the negative spikes represent less material issues.

Looking at the similarities between the data sources I am specifically looking at the positive Z-scores across the different issues. The only issue across which all three parties were in agreement was Operational issues, which was over one standard deviation above the mean for Companies and Analysts and just above the mean for Asset managers.

Labour was an issue considered less material by all parties to relative degrees with Companies communicating it as the least material issue of all issues. Asset managers and companies both considered Customer issues to be material and Financial issues less material, but otherwise the similarities stop there.

Asset managers raised Governance and Ethical categories as material, which were largely ignored as material issues by both Companies and Analysts. The Societal, Customer and Environmental materiality raised by companies was largely not reciprocated by the other data sources except in the case of Asset managers raising Customer concerns as being material.

Looking at Table 18 in which I have highlighted the positive Z-scores, there are very few obvious areas of similarity. Besides the Operational issues which are considered material to various degrees by the different parties, only Customer issues overlap as being material and even then only by two of the data sources (Companies and Asset managers).

Table 16. Z-scores in the Food Producing industry

	Companies	Asset managers	Analysts
Operational	1,38	0,13	1,56
Financial	-0,40	-0,62	1,67
Governance	-0,95	0,68	-0,57
Ethics	-0,95	0,47	-0,57
Labour	-1,21	-0,21	-0,57
Society	0,64	-1,65	-0,57
Customers	1,01	1,70	-0,37
Environment	0,48	-0,49	-0,57

Overall results – Healthcare industry

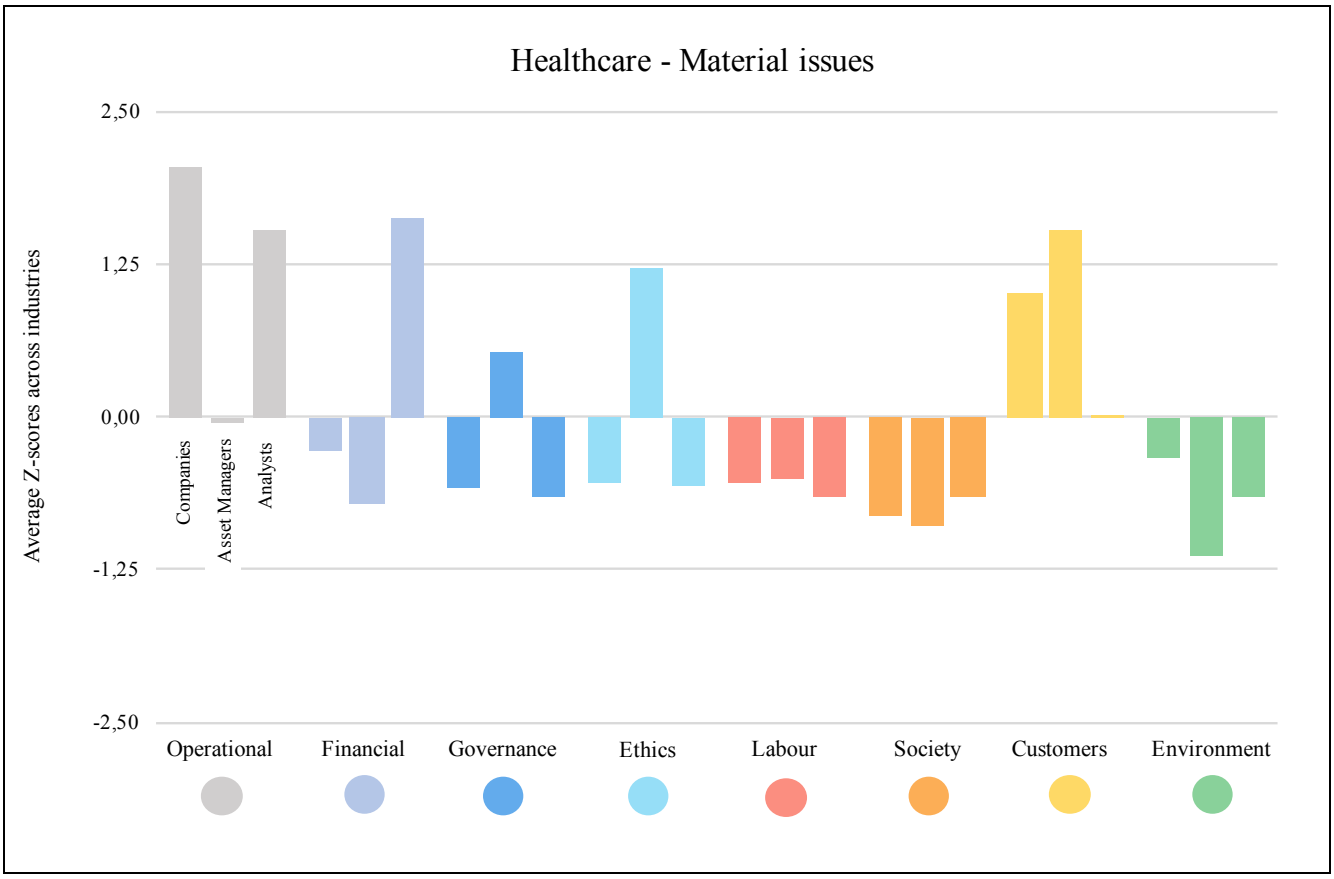


Figure 15. Materiality of issues in the healthcare industry as determined by companies, asset managers and analysts.

As with the food producing industry, analysts have overwhelmingly considered Operational and Financial issues to be material in the Healthcare industry. Customer issues got a notable mention by Analysts and thus had a positive Z-score (if only marginally positive), even though this was overshadowed by the number of questions asked of an Operational and Financial nature. This was interesting given that it was considered a material issue by both Companies and Asset managers as well. More importantly Customer issues were considered the most material issue by asset managers and the second most material by Companies.

Again, Governance and Ethical issues were considered material to Asset managers (Ethical issues in particular), but this materiality was not reciprocated by Companies or Analysts. While Asset managers were the only data source not to consider Operational issues as material, Companies considered this the most material issue with disclosures two standard deviations above the mean for that data source.

Labour, Societal and Environmental issues were all considered immaterial (the least material) by all three data sources. Environmental issues were considered the least material issue for asset managers while Societal issues were the least material for Companies. The categories considered immaterial by analysts were Governance, Labour, Society and Environment all without any questions being asked (Table 16).

Table 17 - Z-scores in the Healthcare industry			
	Companies	Asset managers	Analysts
Operational	2,05	-0,04	1,53
Financial	-0,27	-0,72	1,63
Governance	-0,57	0,54	-0,65
Ethics	-0,54	1,22	-0,56
Labour	-0,54	-0,51	-0,65
Society	-0,82	-0,88	-0,65
Customers	1,01	1,54	0,01
Environment	-0,33	-1,14	-0,65

Overall results – Mining industry

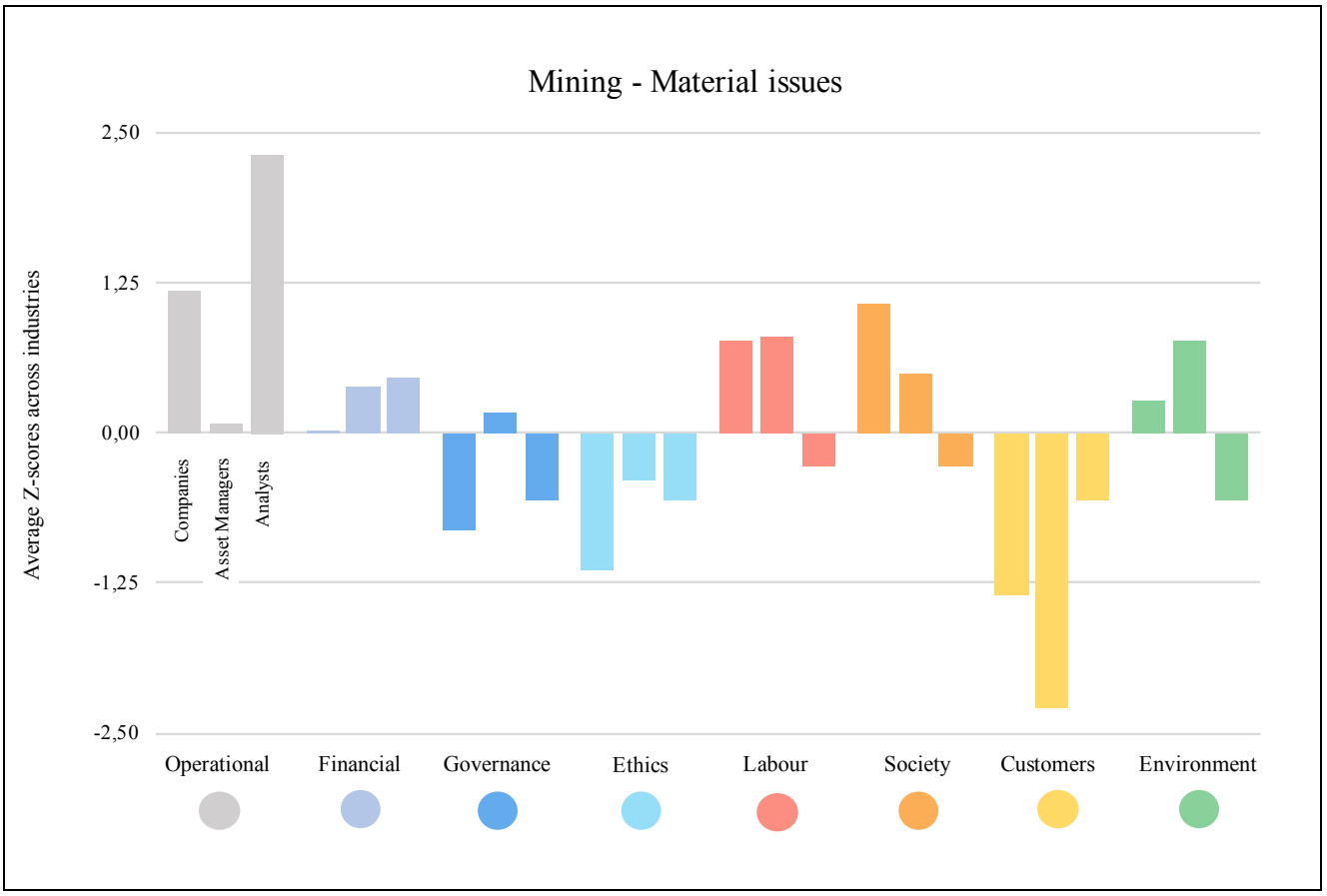


Figure 16. Materiality of issues in the mining industry as determined by companies, asset managers and analysts.

The Mining industry had a much larger number of issue categories with disclosures and ratings above the mean (positive Z-scores) when considering Companies and Asset managers respectively. The categories of Operational and Financial issues were the only similar categories across the three data sources with only Asset managers considering Financial issues more material than Operational issues likely due to the significant impact of commodity and currency prices on the wellbeing of miners.

Companies and Asset managers both considered Labour, Societal and Environmental issues to be material with Companies placing more emphasis on Societal issues and Asset managers on Labour and Environmental issues. Customer issues were considered the least material by both Companies and Asset managers (particularly so for Asset managers with a Z-score of -2,28, the furthest score from the mean by more than a full standard deviation). Ethical issues

were also not considered material by the three data sources with Companies only considering Customer issues less important.

Asset managers, as per the previous industries, considered Governance a material issue with a score slightly above the mean. This was one of the slightly less material issues however scoring only slightly above Operational issues. Asset managers were the only data source to consider Governance issues material at all.

Again Analysts largely only considered Operational and Financial issues material with only four questions being asked of Labour and Societal issues respectively for a total of eight questions across ESG categories (Table 16).

Table 18 - Z-scores in the Mining industry

	Companies	Asset managers	Analysts
Operational	1,19	0,07	2,32
Financial	0,02	0,37	0,45
Governance	-0,82	0,16	-0,56
Ethics	-1,14	-0,38	-0,56
Labour	0,76	0,80	-0,27
Society	1,08	0,49	-0,27
Customers	-1,34	-2,28	-0,56
Environment	0,26	0,77	-0,56

Overall results – Retail industry

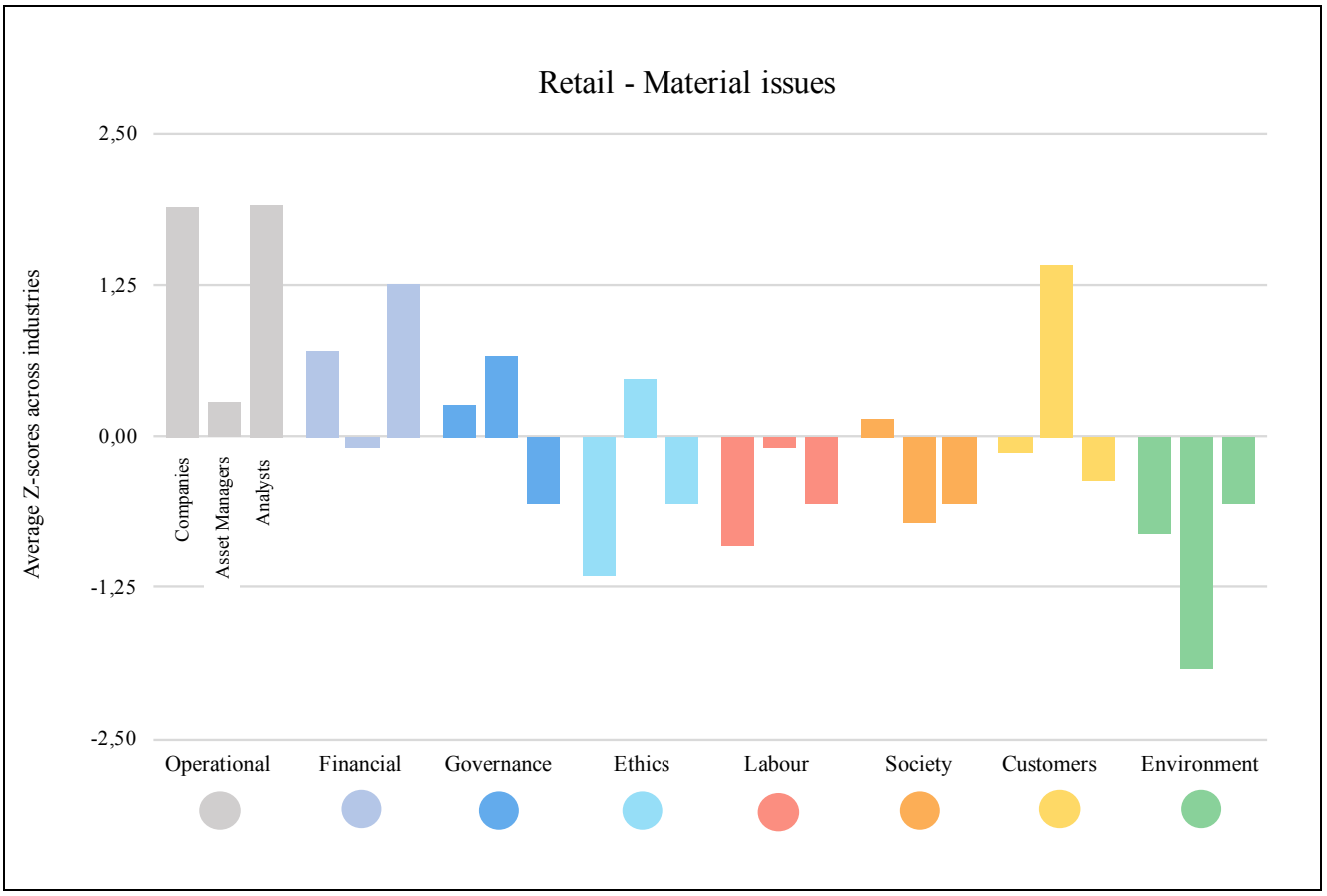


Figure 17. Materiality of issues in the retail industry as determined by companies, asset managers and analysts.

The only common issue category across the three data sources in the retail industry was the category of Operational issues. Financial issues were considered material by Companies and Analysts, but not Asset managers (although the Z-score for Asset managers on this issue indicates that it was very close to the mean score).

The only other area of near parity was Governance, which was considered material by Companies and Asset managers. It is no surprise that Governance issues were considered material by Asset managers (as with all the industries in this study) who also considered Ethics issues material, but this was the only industry in which Governance issues were considered material by Companies. This is a particularly interesting finding given the dismissal of governance materiality across the other industries. The area of specific materiality highlighted by companies was 'System integrity' and where issues such as

business continuity, IT governance and cyber risk were raised. The Z-score for Governance issues disclosed by Companies is only 0,27 (slightly above the mean), but this was their highest weighted ESG issue above Societal issues.

Customer issues were considered most material by Asset mangers with a Z-score of 1,42 and even though Companies and Analysts recorded negative Z-scores with regard to this issue, these scores were the closet to the mean of any of their negative Z-scores. Labour and Environmental issues were considered the least material by all the data sources, Environmental issues of particular low materiality recording scores of over -0,5 standard deviations below the mean and in the case of Asset Managers almost two standard deviations below.

Table 19 - Z-scores in the Retail industry

	Companies	Asset managers	Analysts
Operational	1,89	0,28	1,92
Financial	0,71	-0,09	1,27
Governance	0,27	0,66	-0,56
Ethics	-1,16	0,47	-0,56
Labour	-0,91	-0,09	-0,56
Society	0,15	-0,71	-0,56
Customers	-0,14	1,42	-0,37
Environment	-0,80	-1,93	-0,56

Overall results – TMT industry

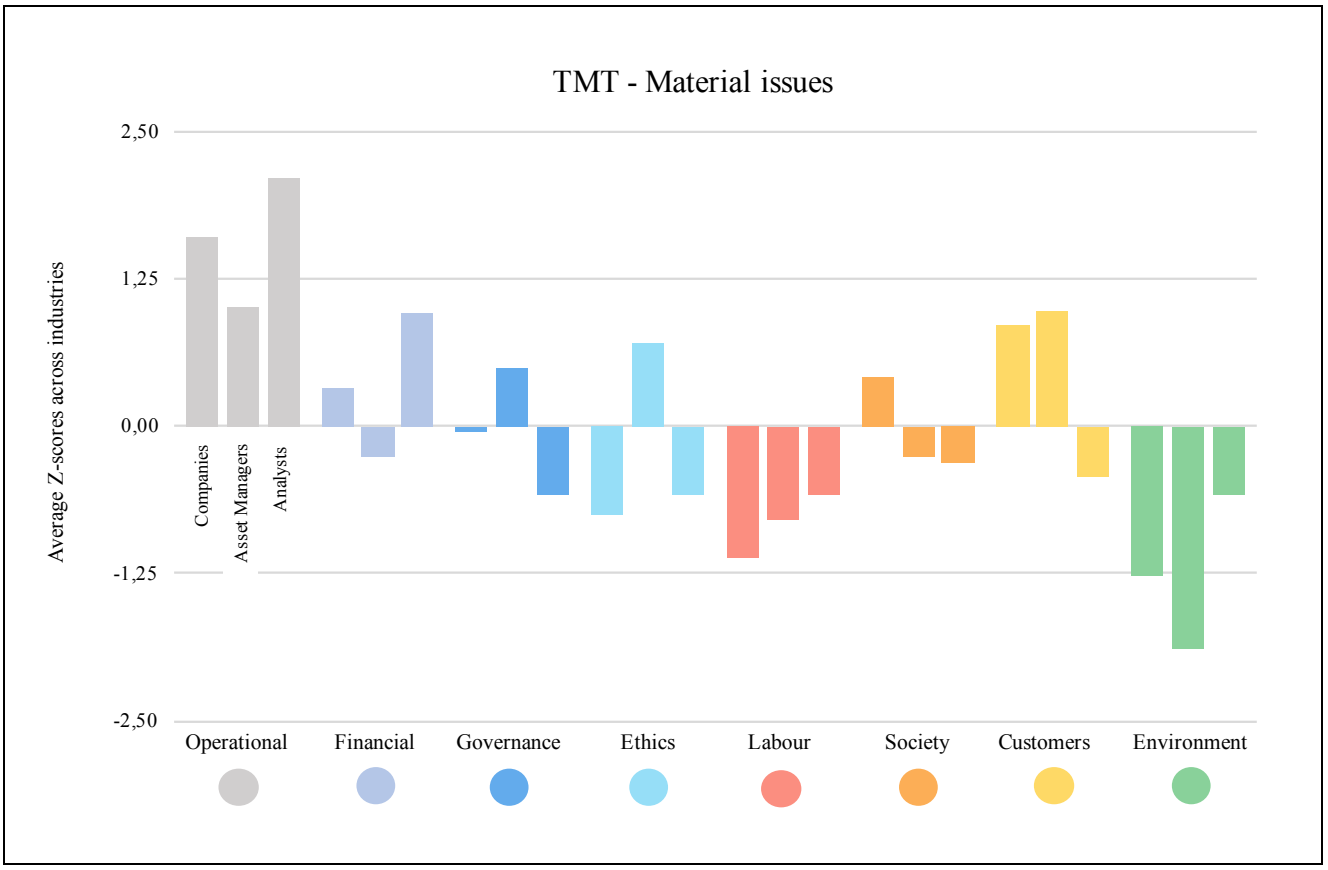


Figure 18. Materiality of issues in the TMT industry as determined by companies, asset managers and analysts.

Looking at the final industry, TMT, again we see the familiar trend of Operational issues being considered material by all the data sources. Not only was this considered material, but it was the most material issue for each of the data sources ranging from one standard deviation above the mean to over two. Financial issues were also considered material by Companies and Analysts, but not by Asset managers.

The only other area any of the data sources have some common ground is the Customer category where Companies and Asset managers both considered it material at almost a full standard deviation above the mean of disclosures and weightings respectively. Analysts didn't have questions in this category to the same extent as those coded for Operational and Financial issues, but there were three questions (Table 16) asked, which is significant in the context of so few ESG questions being asked in general by Analysts.

Environmental issues considered the least material category by all the data sources with Labour issues coming in a close second for all the data sources. Societal issues were only considered material by Companies, but Analysts registered five questions (Table 16) in that category which is significant for the same reasons provided for Customer issues in this industry.

As has been a common theme throughout these industries Governance and Ethics issue categories were only considered material by Asset managers with Analysts recording no questions in either category. The Z-score for Companies' Governance disclosures is close to the mean (-0,05) however, which shows some disclosures in this area for TMT companies.

Table 20 - Z-scores in the TMT industry

	Companies	Asset managers	Analysts
Operational	1,61	1,02	2,11
Financial	0,32	-0,26	0,96
Governance	-0,05	0,49	-0,58
Ethics	-0,75	0,70	-0,58
Labour	-1,12	-0,79	-0,58
Society	0,41	-0,26	-0,31
Customers	0,85	0,98	-0,42
Environment	-1,27	-1,88	-0,58

Overall results: Analysts' concerns aligning with Company risk disclosures

One final point of note when looking at the overall results is how frequently the positive Z-scores for Analyst's aligned with the positive Z-scores for Companies' disclosures. By this I mean that for every single industry the Analysts' questions focused on Financial and Operational issues and returned overwhelmingly positive Z-scores in those areas. Similarly, companies had positive Z-scores for Financial and Operational issues (besides Health and Food industries where Financial issues where not considered material).

Referring back to Tables 12 (risk disclosures) and 13 (material issues) that displayed the differences in the types of company disclosures, I made the point that non-financial *material issue* disclosures far out-weighted the financial disclosures. Across all industries 71% of material issues disclosures referred to non-financial issues. Conversely only 52% of risks referred to financial issues. In pure quantum of disclosures made, there were 168 financial issue risk disclosures and 94 material issue disclosures.

Putting this all together, it is evident that Analysts' fixation with financial and operational issues (represented by the positive Z-score) aligns with companies' focus on these issues as well (represented by their positive Z-scores for financial and operational issues) and this was made up by companies' risk disclosures rather than their material issue disclosures.

It is reasonable to point out that since there is a direct link between company management and analysts at earnings calls (i.e. the executives field questions from analysts in the room) that companies have responded to this by disclosing the analyst's areas of interest in their integrated reports and predominantly as risk disclosures.

Companies are obviously focusing on other areas of materiality as well, where analysts have tended to only focus on the operational and financial issues, but it begs the question of the legitimacy of the efforts of these companies to manage 'material issues' if their focus is to respond to the risks analysts raise as being of concern to them.

5 Discussion

This study investigated the extent to which practioners were in agreement on relevant industry-specific ESG and operational and financial issues and bottlenecks. Further, I explored the way ESG is currently practiced, as viewed by asset managers, that is proving to be an obstacle to its growth as an investment philosophy.

5.1 Summary of results in relation to the research question:

This study sought to improve analyst research and company reporting of Environment, Societal and Governance issues (of South Africa listed companies) by understanding where the practioners of ESG see similarities and differences in individual issues. The choice of an inductive study is valuable here, allowing for an open-ended exploration of the data, particularly when it comes to suggesting improvements to research and reporting on ESG.

By understanding the reasons for the similarities and differences in materiality, improvements to ESG research and reporting can be suggested with particular reference to the development of a praxis model (Appendix 7) that presents a framework for interrogating company leadership through its reporting. Section 5.1.2 *Towards a more honest and useful ESG conversation* provides suggestions to improve research and reporting.

To provide the most compelling answer to the research question, I will present the results of the materiality scoring exercise first with comparisons to the literature review and selected excerpts from the asset manager interviews. This will establish where perspectives on materiality exist and why asset managers, analysts or companies might favour certain issues (such as financial, operational or governance issues).

The second step of the discussion will be to suggest improvements to company reporting and analyst research on ESG issues to improve the conversation being had on the topic between the aforementioned parties. ‘Improving the conversation’ on ESG requires understanding where barriers exist, both identified in my research, as well as from the literature, and where

improvements and enhancements can be made in the interests of companies, investors and society.

The discussion is framed in two parts to sufficiently deal with the findings and comparisons with the literature. The first part relates to challenges around understanding ESG and its current practice in the investment industry, while the second relates to improvements to ESG research and reporting.

5.1.1 Four sides to materiality: Companies, Asset Managers, Analysts and the truth

ESG has followed two paths to date – that which aims to protect investors and that which aims to protect society. Accordingly, materiality has been defined to suit both paths. The SEC defines material issues as "those matters about which an average prudent investor ought reasonably to be informed" (Lydenberg 2012) similar to the <IR> Framework that recognises the primacy of providers of financial capital in the determination of materiality and the creation of value. On the other hand, the Global Reporting Initiative (GRI) definition, amongst others, specifies materiality aimed more at societal value protection, by placing it in the context of value for the reporting organisation and its stakeholders, as well as the environment, and society at large.

These definitions are the first step towards understanding why companies, asset managers and analysts have differing views when it comes to favouring issues for materiality in each industry. Companies have been forced to tread the line between investor accountability and societal protection through years of corporate crises and societal awakening, while asset managers have showed a growing awareness of ESG issues in their responses, especially following recent corporate failures, most notably involving Steinhoff, which lost 90% of its listed value in one week (December 2017).

Five areas for discussion emerged from the findings:

1. Poor integration of ESG from corporates and a lack of interest from investors
2. Companies cover Environment and Society, but not Governance
3. Decoupling – through too much information, through reputation enhancement and through superficial compliance
4. Asset managers' view that ESG should be focused on insuring against risks
5. Analysts and their limited freedom from independence

5.1.1.1 Poor integration of ESG from corporates and a lack of interest from investors

In Eccles and Serafiem's (2011) study of 2000 companies in 23 countries, they factored companies across four quadrants for both high and low reporting integration as well as investor interest in ESG information.

Interestingly, South Africa joined the likes of Brazil, France and Sweden in the quadrant where the perception was that there was a high degree of integrated reporting by companies, but very little interest by investors in non-financial performance metrics. This finding is supported by the findings in my study across both these dimensions. Firstly, all the annual reports studied included materiality analysis and tables of non-financial issues, at the very least listed alongside financial issues (although the degree of true integration was not interrogated in this study and is therefore uncertain). The interviews with asset managers showed some interest in ESG issues, but from the discussion, it appeared that the Steinhoff collapse, as well as the Listeriosis crisis, had only recently awakened analysts to the importance of ESG issues as drivers, or destroyers of company value.

5.1.1.2 Companies cover Environment and Society, but not Governance

My study found companies rarely disclosed Governance and Ethics as material issues or even as risks. This finding agrees with the 2016 PwC survey that found that 60% of companies believed their sustainability disclosures facilitate investors' comparison of companies, but 92% of investors did not agree. When asked about the quality of sustainability reporting, all the corporate organisations report they are confident with the quality, whereas 71% of investors report they are not confident (Strott & Carey, 2016).

PwC concludes that if companies believe they have a compelling ESG story that could improve long-term prospects and mitigate risk, they should make more effort to tell that story to investors. When comparing this to the interviews with asset managers, I found that the overwhelming majority of respondents considered governance to be of the most importance when referring to ESG. Respondent 11 even went so far as to say "the G I find so important because it can literally destroy a company. If you don't do the E and the S it may speak to long term inefficiencies but it doesn't necessarily destroy value like poor governance can."

Many respondents were of the opinion that governance leads societal and environmental issues with respondent 1 saying "I think that actually recent corporate scandals, especially on

the governance side which flips down to everything else, has actually highlighted the importance of ESG" and respondent 4 saying "but you will find that if governance is taken care of, usually the environment and society follow themselves." It is evident that the reporting by companies is not meeting the demands of investors in this study and this is supported by the literature.

5.1.1.3 Decoupling – through too much information, through reputation enhancement and through superficial compliance

Another issue for company reporting to contend with is that of decoupling. The literature review found three areas of decoupling: through torrents of information, as a reputation enhancing tool, and superficial compliance.

Torrential information flow

According to Schramade (2016), quite often the sustainability analyst "doesn't understand investment needs and he (or she) will bombard his investment counterpart with all available sustainability data on a firm. Most of that data will prove of little use to the investment analyst, who may unjustly become cynical about all sustainability data." This indicates a potential divide between ESG as risk mitigating tool and its current implementation.

Rea (2011) found that by 2010, 32% of all 392 listed companies on the JSE were producing reports at Level C Compliance with the G3 standard. Perusal of Rea's (2011) annual research into GRI compliance by companies listed on the JSE, found scant evidence that this increase in reporting on materiality (by the GRI's definition), showed any correlation with more responsible behaviour in terms of managing relationships and resources. While the average G3 compliance score achieved by the companies surveyed in 2011 was 25%, several companies that achieved significantly above-average scores were on the cusp of destroying significant value for both shareholders and society.

The examples listed in the literature review included Lonmin and African Bank, but during my study Steinhoff proved how compliance with the King Code for Governance and a lack of disclosure around governance as a material issue does little to manage it.

The issue with a torrent of information is that it obscures what is material by providing too much information across less material issues. Asset managers who were concerned with governance as being one of the core issues for companies to manage and disclose, also pointed to the fact that Societal and Environmental issues were the hardest to track and provide metrics for. Respondent 10 said "the S of the ESG, is the most difficult to analyse, as there is usually not a lot of information." Respondent 14 summed it up well: "Society is the tougher one. Companies make donations, like buying food parcels for a community, but to what degree are they being responsible? … It is easy to overspend on projects that don't succeed, raising doubt about when the input is sustainable and when enough. That causes corporates to pull back from investing in the social 'upliftment' of the community."

Labour, Societal and Customer issues were presented as material in a number of industries from a company perspective, but given asset managers struggle to make these disclosures useful and their need for governance disclosure suggests a disconnect between a company's willingness to disclose on issues and the usefulness of those disclosures.

Decoupling through reputation enhancement

Using the annual report to market the company to investors and stakeholders at large is not a foreign concept and well documented by the likes of Markowitz (2008), Mungoni (2014) and Montgomery (2015). This practice of greenwashing, according to Oreskes & Conway (2010), is being met with increasing scepticism by consumers, while employees seeking genuine career fulfilment are negatively affected by the practice.

My study of materiality was less conclusive on this point. Companies and asset managers declared the same ESG issues to be material and immaterial across all the industries besides Food producers and TMT where Society was up-weighted by companies in both and Environment in Food producers. Asset managers and analysts down-weighted these issues.

The limitation of the materiality weighting exercise prevented analysis of the quality of corporate response to the issues. As described in the methodology, the assessment process was a binary one, with issues either counted in or counted out as they appeared in risk and materiality tables. Ideally, the quality of reporting should be assessed, in particular the degree to which companies promote a value proposition relating to an ESG issue, with, or without

backing statements with sincere and strategic response, as well as balanced performance reporting.

As investors become warier of how companies interact with their shareholders, there is less room to enhance reporting with superficial content. It is likely that decoupling in this way may have decreased over time as companies look to focus on areas of real importance, issues with significant influence on how companies can operate sustainably. There has been increasing votes against remuneration in South Africa, for example, by shareholders who are less likely to accept a remuneration report as is than they were historically (Mchunu, 2019).

Decoupling through superficial compliance

Christensen (2017) argues that sustainability is by its very nature open-ended, since problems, challenges, and issues change across time and context. Sustainability is necessarily a "moving target" (Guthey & Morsing, 2014) "in a state of continuing emergence" (Lockett, Moon, & Visser, 2006). Precisely because of its ambiguous nature, it allows for sense-making and participation from many different stakeholders with diverse interests and expectations (McWilliams, Siegel, & Wright, 2006). Despite this open-ended nature, Christensen notes a trend towards closed standards. Rasche (2010), criticizes such standards as being characterized by detailed and accurate specification of practices and behaviours, thus lacking sensitivity to local conditions. In such cases, compliance may be reduced to annual exercises of "ticking the boxes," thereby excluding necessary reflection on the standard's limitations and discussions about potentially better practices.

This issue works both ways with closed standards promoting compliance, such as the case of governance, and open standards promoting disclosure, but with little usefulness, as has been the critique of asset managers towards the usefulness of societal and environmental data. This may also explain the tendency for all parties in my study to up-weight operational issues given their direct impact on the company's performance and the rigour with which companies disclose information on these issues. The quality of reporting on operational issues may be considered the best litmus test of company health until ESG standards improve their usefulness for all stakeholders, including companies, analysts and asset managers.

5.1.1.4 Asset Managers' view that ESG should be focused on insuring against risks

ESG lacks a consistent definition

Asset managers were the only stakeholders in the study that I had the opportunity to interview and their responses allowed me to develop a grounded theory model (Figure 12) to understand the forces at play in the investment arena. The interviews helped to colour their materiality weightings and provide some context to their chosen weights.

The narrative of the literature when it comes to the role of the asset manager (or investor) was nuanced, casting some investors as short-term focused shareholders using ESG as merely a compliance or virtue signalling tool, and others as long-term focused investors who see the benefit in ESG. What was apparent from the investor interviews was that there is little understanding of a common definition for ESG, as we found earlier in the literature review. Very few interviewees attempted a definition, although they all had an understanding of its role, dynamics and implications, a finding supported by a recent PwC survey (Strott & Carey, 2016).

ESG is favoured as a risk mitigating tool

Weighting those issues, they believed more important relative to others in the materiality scoring exercise was an intuitive exercise for asset managers, considering the lack of a common definition for ESG. Their perspectives on materiality were largely in line with companies (aside form the aforementioned Governance and Ethics scores). I consider the possibility that investors understand where risks lie for companies, while struggling to make the link between these underlying risks and ESG as an investing theme.

In a survey of publicly traded firms across more than 40 countries, Dyck et al. (2018) offers new evidence that institutional investors push for stronger firm-level E&S performance around the world. That is, firms are stepping up their E&S performance because investors are asking for it. E&S investment could be value enhancing by providing a form of insurance against event risk or product market differentiation, or both (Servaes and Tamayo, 2013; Hong and Liskovich, 2016; Albuquerque et al., 2017; Lins et al., 2017). Many investors use such motivations to explain their E&S activism, and these investors often note that E&S spending is aimed at a long-term, instead of short-term, payoff.

My respondents echoed these assertions, with respondent 18 saying: “If ESG issues are big (material) enough that we think a company is never going to cover its cost of capital and deliver a decent ROE, then we might not invest in it.”. This coincided with their thoughts on the relevance of ESG to business value creation. My analysis of the transcripts found that 15 of the 22 respondents viewed ESG as being definitely positively associated with financial performance. Examples of their responses included: “When you grow larger, you have a bigger and bigger impact on society and that society – they are your customers, they are your stakeholders, so you have to take all those people into account. They vote with their money.” by respondent 4 and “A section 54 stoppage [a regulation in the mining industry that orders a mine shut down operations after a fatality on its premises] might seem like an operational issue, but actually its a social issue” by respondent 5. A reoccurring theme was that the relevance of ESG lay in its role to identify and mitigate risks, or increase resiliency of their portfolios or underlying assets (see under the role of ESG for the asset manager below).

Many respondents viewed the main role of ESG in investment philosophy as a means to identify and mitigate risks, or increase resiliency of their portfolios or underlying assets. 17 of the respondents commented on this utility. Example responses included: “it’s really quite simplistic, its really about looking for red flags” by respondent 19 and “It’s more of an objective measure when you’ve got a score attached to it so you can be a bit more circumspect and have more of a safeguard” by respondent 12.

The fact that these findings contradict those of Eccles and Serafiem (2011) may be explained by the seven years that have passed since then, and the significant corporate and societal failures that have raised the importance of ESG thinking in the minds of the asset management community. From the beginning of the decade, corruption of corporate relationships with government became almost standard business procedure, finally terminating with the concept of state capture towards the end of President Zuma’s tenure in office. Following immediately in its wake, Steinhoff was exposed for tax fraud in Europe, followed by a litany of corporate actions designed to defraud minority investors. The leaders of the Resilient Group, a property developer, were also found to have conflicted interests, given their cross-holdings and lack of board independence.

Indeed, eight of the 20 asset manager interview respondents mentioned an increase in engagement from clients around ESG issues, especially after the crises that happened during 2017 (most notable they implosion of Steinhoff).

Current metrics aren't providing useful data

Grewal, Serafeim and Yoon (2016) found that ESG activism has not traditionally been founded on an assessment of materiality. Indeed, in their study analysing 2,665 shareholder proposals that address ESG issues, more than half of proposals (58 percent) focused on immaterial ESG factors, suggesting notable inefficiencies in the engagement efforts conducted by many investors. Further, they found that activist investors choose a topical issue, such as climate change or diversity, and then engage with a wide range of companies across industries based on criteria such as financial holdings, performance on the focal issue by the target companies, and/or the size of the target companies (Blackrock and Ceres, 2015). Grewal et al. (2016) found proposals on immaterial issues were associated with subsequent declines in firm valuation. Their research showed that companies increase performance on immaterial issues because of agency problems, low awareness of the materiality of ESG issues, and attempts to divert attention from poor performance on material issues.

In the same vein, respondents in my study pointed out the difficulty in analysing the different components of ESG with the current metrics available. Respondent 10 said "the S of the ESG, is the most difficult to analyse, as there is usually not a lot of information" and respondent 14 summed it up well, saying: "Society is the tougher one. Companies make donations, like buying food parcels for a community, but to what degree are they being responsible? … It is easy to over spend on projects that don't succeed, raising doubt about when the input is sustainable and when enough. That causes corporates to pull back from investing in the social 'upliftment' of the community."

ESG might mitigate risks, but investments need growth

The pressures companies are under to provide short-term returns has affected how asset managers choose their investments, naturally wanting to pursue growing companies and avoiding a corporate collapse. A recent *McKinsey Quarterly* survey gauged the perceptions of over a thousand C-suite executives and board members with regard to short-termism and performance time horizons (Barton, Bailley, Zoffer, 2016). The authors found that not only

did 79% of correspondents feel pressure to prove strong financial performance in under two years in 2013, but that number rose to 87% in 2016. It was also found that 55% of executives and directors, at firms that lacked a strong long-term culture, said they would delay undertaking a new project in order to hit quarterly targets, regardless of sacrificed value.

Asset managers in my survey reported this pressure as coming in particular from clients, with respondent 9 saying: "Investment management want to buy companies that are growing. So it is unfortunate that we come a little bit more entrenched and it is putting us on collision course with the principles of ESG" and, from respondent 10: "generally, clients are more focused on performance than anything else, until the crisis happens, and then they ask you difficult questions."

Asset managers held similar views on material issues to companies, with analysts holding a different view. However, this shades over the nuance of inconsistent definitions, impractical metrics and short-term pressures that makes the implementation of ESG at asset management firms across South Africa imperfect and for some, even undesirable. In other words, while they might agree on what are significant issues for companies to deal with, there seem to be varied approaches, perceptions and definitions to ESG beneath that commonality.

In the next section I will speak to the materiality perspective of analysts before talking to the potential improvements of ESG reporting and research.

5.1.1.5 Analysts and their limited freedom from independence

Analysts as a group had the least opportunity make an account for themselves in this study and the only interaction was via their questions from earnings calls coded as their perspective on ESG. Notwithstanding this limitation, there are insights that can be gleaned from this data collection.

Analysts were by far the most one-sided of the three data sources, up-weighting Operational and Financial issues almost exclusively in all industries, while down-weighting, even ignoring ESG issues. Operational issues is an area that all three stakeholders surveyed upweighted consistently across all industries. Intuitively this makes sense as a company's operations are the core of its health, at least in the short term. All parties are aware of this and therefore the reporting on and demand for operational information is high.

As PwC's ESG pulse survey pointed out, some investors believe that ESG reporting should be relevant to operational and financial performance and how companies manage it to achieve long-term financial sustainability and offset long-term risks. But until we get to a common framework and set of standards, inconsistent disclosure will undoubtedly affect the usefulness of ESG data (Strott & Carey, 2016). Investors and the analysts that provide them with research are already looking for information that provides a clearer view of the operational and financial health of the business. Considering the shortage of ESG data it is little wonder that analysts stick to their knitting and report on the operational and financial issues.

Of note is the lack of 'empowered' independence that analysts enjoy. Respondents in the interviews pointed out that access to company management as an analyst is your access to information and without it there is little value you can add over your peers who enjoy that access. Respondent 22 made particular reference to Steinhoff, saying: "So there is significant career risk if you highlight too many issues and lose your access to management. Because if Steinhoff is one of your companies and you can't engage with management, you lose all your advantage. So it's a bit of an issue on the sell-side."

While this may not excuse a complete lack of questions around any ESG topics by analysts, it does highlight the difficulty analysts might face when asking pressing issues relating to Governance or Ethics when it directly relates to executives at the earnings call they are attending. It takes the work of investigative journalists to uncover many of these issues, as analysts seem focused on the accuracy of their company valuation models over non-financial issues outside these models.

The conversation break-down on ESG issues largely lies on the side of analysts, but this speaks to the conversation in the industry as a whole. While companies report on ESG issues and asset managers declare a need for it, there is an obvious disconnect between the reporting of the information and the ability to make it useful (a service usually provided by analysts). This disconnect needs to be bridged by making the available information more useful to all parties.

The next section will deal with the improvements to ESG research and reporting.

5.1.2 Towards a more honest and useful ESG conversation

This section addresses the second part of the research question, which is to suggest improvements to ESG research and reporting. The discussion will make reference to the literature review, as well as the final two elements of the grounded theory framework, '*Inherent and systematic implementation conflict*' and '*ESG practice confusion*', in making the case for a more effective conversation between companies, analysts and asset managers. As described in the research methodology, this section bridges the gap between theory and practice to provide applicable outcomes to for the investment community (Van de Ven and Johnson, 2006).

Improving ESG is no mean feat and I don't presume to have to solved the issue in it's entirety. There are direct barriers to overcome as laid out in the *Inherent and systematic implementation conflict* section of grounded theory, which can be used to improve the *ESG practice confusion*. Using the literature on materiality as the groundwork I will put forward two direct, and interlinked, strategies for improving both reporting and research on ESG issues. These two strategies are to *standardise ESG using a consistent approach to understanding materiality* and *following through by analysing company responses to material issues.*

5.1.2.1 Standardising ESG using a consistent approach to understanding materiality

As set out in the literature review, companies that highlight and respond to their material sustainability issues outperform those companies that don't (Khan, Serafeim and Yoon, 2015; Turban and Greening, 1997; Waddock and Graves, 1997; Cochran and Wood, 1984). This simple observation has found little foothold in the mainstream investment community beyond companies complying with the integrating reporting guidelines to report on these issues.

In analysing the interviews with asset managers, I found that few, if any, attempted a definition of ESG and this was further reflected in their varying approaches to ESG as part of the investment philosophy. ESG philosophies mentioned were to mitigate risk, comply with or signal virtue in response to client demand, use as an engagement tool with the company and a lens through which they could assess the quality of company leadership. These approaches were very high-level however, and few asset managers articulated development

of their ESG approach beyond a qualitative assessment to be used for further engagement, or to raise questions at their in-house investor discussions. As respondent 9 so eloquently put it: "We have almost like a template for each company, but with a lot of questions that help guide the analyst thinking about how to approach ESG. A list of questions, but by no means exhaustive. The idea is to get the analyst to think long and hard about some of the softer side of things before diving into the hard numbers and making a decision" and respondent 5 who said: "We don't have a standardised risk rating framework. We think it's because its very difficult to put a number to a company's environmental risks, to say that Sasol is a 3.8 out of 5. We rather just discuss them."

In order to standardise the approach to ESG I suggest focusing on materiality as the first step to better engagement on ESG topics. The materiality weighting exercise conducted in the findings suggests that there is already partial agreement between companies and asset managers on issues (both ESG and non-ESG) across the five industries in the survey. By standardising a universe of issues (much like the research instrument provided in this study), asset managers, analysts and even retail investors will be able to conduct their weightings of what they believe to be material issues and pursue the most material issues through metrics, valuation or even engagement. Differences in emphasis between these stakeholders can then become useful subjects of engagement.

This will address the issue raised by Schramade (2016) of flooding of investment discussions with all available sustainability data and metrics. I recommend the data should rather be filtered for that which is relevant to the firm through its exposure to ESG issues. For example, in the Food producing industry in this survey, asset managers and companies were in agreement that customer issues were material, but asset managers didn't believe environmental issues to be material where companies did. Either companies should make a better case for environmental materiality, or, failing this, filter out environmental data in order to focus on what investors believe to be important (being the customers of the firm). Such an approach would make ESG much more relevant as a tool to the investor and much more likely to illicit a benefit to society through better engagement on the topic.

5.1.2.2 Following through by analysing company responses to material issues.

Identifying material issues is only the first step and begs the obvious question, so what? The literature might support the outperformance of companies based on their

declaration and performance on material sustainability issues, but how do you know how a company's performance fares relative to peers, or on an absolute basis?

There is thus a clear demand in the industry for a more standardised and, more importantly, useful approach to ESG that meets the needs of investors. Having arrived at a common understanding of materiality, using a common universe of potential ESG issues, as discussed above, the second part of praxis solution would be to assess how effectively companies then manage those material issues and risks. Responsible stewardship of these issues, not forgetting the primacy of the investor might be an effective indicator of the ethics, honesty and integrity of management (a facet of ESG expressed by half of the respondents in the asset management group).

Societal issues like community relations and fair labour were the cornerstone of the disaster at Lonmin, but neither the company nor investors were prepared when it came to understanding what metrics or disclosures to use to track Lonmin's performance on those issues. As respondent 10 said: "the S of the ESG, is the most difficult to analyse, as there is usually not a lot of information." The follow-through I suggest to understanding the quality of corporate leadership is to interrogate the quality of corporate reporting on material issues.

In the financial realm, standards such as GAAP and IFRS have been honed to provide a framework against which financial outcomes can be interrogated. Only recently has the ESG industry been offered a methodology it can adopt for reporting on non-financial issues. For many years, the Global Reporting Initiative (GRI) was the standard, but hampered in its effectiveness by the lack of a materiality process, thus allowing companies to game the exercise with a box-ticking approach.

From 2014, however, the International Integrated Reporting Council's <IR> Framework offers a more rigorous process for reporting on ESG issues, more likely to result in information of use to the investor.

If corporate leadership is able to make the case for why an issue is material to its value creation story and hold itself accountable for progress against the issue, articulated through a strategy that is clearly linked to the issue, then there is material for analysts to interrogate, and a basis for a constructive discussion between corporate leadership and the asset manager.

This concept is fleshed out further in the description of the praxis model in Appendix 7.

5.2 Limitations

The most fundamental limitation of this study was the fact that 'Society at large' was not given an opportunity to present its views on what issues were material in each industry. The reason for this was the scope of the research necessary to understand who 'society at large' included and how to access that information. Doing a media scan was discussed as a way to take the temperature of society, but I considered this a biased approach particularly in South Africa. The number and variety of cultural groups across South Africa make it very difficult to assume a media scan would capture the average materiality of South Africans and as such I focussed my attentions on those parties I had better access to.

I have also disclosed previously my profession in the industry, which introduces bias particularly in the interviews with asset managers (people I present research to as my profession). The costs of this approach were a familiarity bias, but the benefits were a much larger pool of asset managers (a convenience sample) and access to individuals within firms that held higher titles than I may have been allowed access to. I believed these benefits to out weigh the costs.

5.3 Concluding the discussion

The discussion focussed on addressing the research question, linking the literature with the findings. Having described the reasons for each data source's reasons for weighting materiality across industrys the way they had I then suggested a materiality centric approach to standardising ESG information and subsequent engagement, a preferred tool of asset managers, as the means to make this ESG information relevant to investors and impact society at large.

6 Conclusions and Recommendations

I set out to discover whether differences existed between what asset managers, companies and analysts perceived to be material across five industries in South Africa. The purpose of this study was to provide suggestions for how to improve current ESG analysis and reporting, and in doing so benefit both investors and society through more sustainable business practices.

I found the perspective of analysts to be significantly different from the views of asset managers and companies, with analysts favouring operational and financial questions, while asking very few, if any, ESG related questions.

Asset managers and companies had more similar perspectives on materiality, but differed significantly on Governance and Ethical issues. The way this was expressed was that companies favoured compliance in these areas rather than substantive disclosure on material issues and risks, while asset managers were convinced that quality leadership, largely expressed through sound governance and ethics at companies, was pivotal to its long-term sustainability.

These observations were paired with interviews with asset managers, developed into a grounded theory model to provide context to the materiality weightings and better insight into recommendations for reporting and research improvements. The grounded theory model diagrammatically represented how asset managers were coming to terms with and practicing ESG in a South African context across three themes (Figure 12):

- *Feelings about ESG as it stands*
- *Inherent and systematic implementation confusion*
- *ESG practice confusion*

These aggregate dimensions were compared with the literature to understand the state of ESG in South Africa and how asset managers were practically using ESG. The focus of the literature review was to set out the development of ESG and in particular how materiality has grown as a concept both in terms of company performance (Khan, Serafiem and Yoon, 2015)

and the development of reporting standards from both the Global Reporting Initiative and IIRC (International Integrated Reporting Council).

This was used to inform the recommendation for improved ESG analysis, based on better quality reporting, namely through the standardisation of the materiality analysis tool to provide a consistent tool for investors when analysing ESG issues across companies and industries and secondly for companies to use a reporting process, such as offered by the IIRC, that can serve as a more useful foundation for the conversation between the three stakeholders, companies, analysts and asset managers. The results and outcomes of the report serve as the basis for the development of a praxis model (Appendix 7), comprising of both a materiality analysis framework and a framework for assessing leadership quality through the reporting of the company's response to its material issues.

The recommendations set out below are a summarised version of the praxis model, using insights gained from this report to analyse company leadership and for their maturity of response to material ESG issues.

6.1 Recommendations using the principal findings to develop a praxis model

The recommendations presented here will leverage off the literature presented that companies focused on dealing with their most material sustainability issues out perform those companies that don't address these issues (Khan, Serafeim and Yoon, 2015; Turban and Greening, 1997; Waddock and Graves, 1997; Cochran and Wood, 1984). Using the research instrument presented in Appendix 2, this section will recommend developments to the concept of materiality that will lead into the areas for future research (6.2 Areas for future research).

This recommendation addresses issues raised by asset managers about quantifying ESG risk and the overall qualitative nature of ESG that makes it difficult to implement in valuations.

Step 1: Materiality analysis

Using the research instrument in Appendix 2 an investor can determine the materiality of particular issues to a company based on it's exposures (geographical locations, markets in which it operates, LSM markets it transacts with, structure of the board, carbon foot print,

etc.) based on an arbitrary scale of between 0 and 30. Zero being immaterial and 30 being highly material.

This need not be a ranking process but rather each issue being weighted for the probability and magnitude of its impact on the firm's various capitals (its relationships and resources) through a three to five-year window (a time horizon that brings more relevance to ESG issues, while also fitting with the demands of the long-term investor.

Step 2: Analysing the firm's response to these material issues

This materiality weighting can then be multiplied by the firm's response to the issue (value destructive or value accretive) to provide a weighted score representing the quality of leadership. This represents a departure from the existing practice of adjudicating whether a company has a 'good' versus 'bad' carbon footprint for instance, which may offer a measure of impact, but says little of a company's prospects. For example, if a 'good' company with low impact scores were to acquire a company with high impact scores with a view to turning it around, traditional ESG analysis might deem that company to have deteriorated on the basis of deteriorating impact, when in fact it may present an excellent investment prospect as its management embarks on improving the newly acquired entity.

The framework for assessing quality of leadership response is derived from the guidance given by the IIRC's <IR> Framework for reporting. This framework requires the company to undertake a materiality assessment (through stakeholder engagement) and to demonstrate how it applies its business model to create long-term, sustainable value for its shareholders, showing trade-offs across the six capitals: financial, intellectual, human, manufactured, relational and natural, through its reporting.

From the point of view of scoring the quality of leadership response, the company's reporting (indeed, all its communications) can be scored, either positively, or negatively, for:

- *Context and recognition*
  Does the firm disclose that it is aware of the issue and has engaged with the relevant stakeholders to understand the impact this issue has on the firm?
- *Accountability*

Does the firm hold itself accountable for the issue with a mandate to address it? In critical cases this may mean that managers have their variable remuneration adjusted to incentivise performance against this issue, for example.

- *Performance reporting*
  Does the firm use relevant, comparable and understandable metrics to track progress against the issue and targets for periods to come?
- *Strategy*
  Does the firm articulate a strategy to deal with the issue? Importantly, such a strategy should provide a cogent link between the context, accountability and performance reporting.

Each of these aspects can be scored between negative 10 (a very poor score, such as Steinhoff's disclosure on Governance issues in it's 2017 annual report) and positive 10 (a very high score).

By multiplying this score by the issue's materiality weighting, a view can be obtained of the quality of the leadership, as it would be expected that competent leaders will achieve higher scores against their most material issues, and poorer scores against their least material issues. Thus the average score for a particular leadership can be compared with industry-wide performance of other companies to get a view of the quality of the leadership This will allow investors to track how a company is performing overall (i.e. averaging all weighted average scores) or at a more granular level, where they might be underperforming on a specific material aspect.

This also gives companies the flexibility to deal with issues in whichever way they deem is best for their value creation strategy, within their operating context, as long it addresses the companies most material issues. This circumvents the issue of closed standards not addressing issues adequately through compliance alone.

This model is designed to create a foundation for an improved quality of discussion (engagement) between asset managers, analysts and companies. Ultimately, the aim is for it to become a relevant input to company valuation, thus endorsing the relevance of ESG factors for the investment community, while addressing the concerns of society.

6.2 Areas for further research

Building off the praxis model recommendation I would suggest further research be focused on tracking company performance across material issues. The current research supporting outperformance based on materiality disclosures (Khan, Serafeim and Yoon, 2015; Turban and Greening, 1997; Waddock and Graves, 1997; Cochran and Wood, 1984) has yet to study the inverse, where corporate failures were the result of particularly material issues not being dealt with and subsequently sinking a company.

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Appendix 1 - Interview guideline

1. What is your job title and job description here at [asset manager's name]?

2. How are stocks split between analyst and what is your coverage?

3. How many stocks do you have under coverage?

4. How are stock selection decisions made as a team?

5. How do you approach ESG as a firm?

6. How do you build ESG into your valuation process or models? Is it included in valuations or a separate process completely?

7. How do you view company valuation from a time horizon perspective?

8. To what extent does ESG have an effect on the investment time horizon given ESG tends to incorporate long-term issues?

9. Can you be successful by being completely short-term?

10. What do you believe the practice of ESG should look like from a company and investing perspective in an ideal world?

11. What do you understand by the term 'materiality' as it relates to ESG?

12. How do you take materiality into account if at all?

13. How have you seen a shift in investing/ESG thinking over time? Is there perhaps a generational shift?

14. Do you think ESG should be incorporated from a moral perspective? I.e. use ESG to ensure moral outcomes for society that you want to see?

15. Do you see ESG as a predictor of financial performance?

16. Do you see ESG as protecting against disaster or for value creation?

17. How do you view ESG research as being important in unregulated markets?

18. Do you think ESG can be used to prevent crises for businesses and society?

Appendix 2 – Research instrument

OPERATIONAL		Issue descriptions
1	Business action	Mergers & acquisitions • Integration of new businesses • Unlocking synergies • Digestion issues • New listings Market expansion • Vertical integration • Horizontal integration • New products • New geographies New business strategies • Turnaround strategies/programmes • New strategies
2	Business Partnerships	Business partnerships • Joint ventures • Partnerships • Vendor/major suppliers • Major franchisees Minority investments
3	IP & Manufactured capital	Talent • Acquisition • Development • Retention (remuneration and incentives) IP acquisition, R&D, patents Business continuity risk Threats to business model and IP Threats of disruptive technologies
4	Inputs and resources	Resources • Stock and availability of resources (biological and non-biological) including stranded assets Key material inputs • Stock and availability of key material inputs
5	Productivity	Doing more with less, increases in efficiency, utilisation of company resources, e.g.: energy, water, natural resources, human capital, manufactured capital, intellectual property, technology and systems and logistics
FINANCIAL		Issue descriptions
6	Capital risks	Capital adequacy/liquidity risk Leverage and funding risk Counterparty/credit risk Retained income/dividends
7	Market risks	Rates and price volatility • Interest rates • Foreign exchange rates • Price volatility • Government currency control Market health • Economic health in operating markets Changes in demand for products & services
GOVERNANCE		Issue descriptions

8	Board balance & effectiveness	
9	Audit independence	
10	Leadership selection and preparation	
11	Remuneration & incentives	
12	System integrity	IT Governance Business continuity risk Direct security threats to company infrastructure
ETHICS		Issue descriptions
13	Moral DNA of the organisation	Moral DNA (or moral spine, integrity, or moral authenticity)
14	Theft, fraud and corruption	(including also money laundering and financing of terrorism, illicit capital flows)
15	Anti-competitive behaviour	Marketplace behaviour • Actions taken to dominate a market (for example the formation of cartels) • Abuse of dominant market position, for example through price gouging IP rights of third parties • Actions to infringe on the IP rights of others, such copyright infringement, or patent violations
LABOUR		Issue descriptions
16	Fair labour	Employee engagement & relations • Includes engagement with unions and collective bargaining councils Fair labour practices • Working conditions, including human rights, child labour, forced labour, freedom of association & expression, discipline, employee benefits, housing/living conditions • Skills development (life skills, career development) Labour disruption • Management of retrenchments, replacement of labour by robots and artificial intelligence Fair remuneration • Including post employment obligations (retirement funds)
17	Occupational health & safety	Safety, health and wellness

SOCIETY		Issue descriptions
18	Community	Impact on community Community engagement and relations Community development
19	Internal equity	Equitable (local*) ownership Equitable (local) employment equity * 'Local' means representative of the diversity of the local population (gender, race and other potentially disadvantaged groups)
20	Industry equity	Supplier development • Includes preferential procurement, small business development in the supply chain Equitable use of industry resources • Allocation of quotas and illegal use of industry resources Development of local downstream industry & management of illegal industries not under regulation Taxes, dues and contributions to government and authorities Development and maintenance of industry infrastructure (including institutional risks relating to failure of government infrastructure and utilities, e.g. municipalities, roads, etc.) Effect of social instability on industry infrastructure (involuntary migration, dread disease, violence, rioting) Effect of political instability, such as a failure of national governance, interstate conflict, terrorism, state collapse, resulting in business friction, eg, airport security checks, SIM card registration, etc.
CUSTOMERS		Issue descriptions
21	Product suitability	Quality of product/service Health impact of product/service Abuse of content • Management of content to prevent undue influence of public or limit freedom of speech, including fake news, or rigging of elections. Overreach of recommendations in media industry Credit affordability
22	Treatment of customers	Customer experience • Customer satisfaction, response to complaints Ethical promotion, including ethical advertising and Product labelling Responsible credit & lending practices • Promotion of credit at POS, management of debt post-sale, interest rates and other charges Ethical sales practices • Terms and conditions, warrantees, non-interest charges, admin fees, etc.
23	Access to products & services	Local access to products and services • How companies provide for, or prevent, access to their products and services through innovative product design, education, etc. Both obligation and opportunity
24	Customer ID protection and data privacy	Abuse of user data/violation of privacy • Protection of user data gathered at POS or on platform/system for commercial interests Protection of user data • Protection of user data from cyber-attacks and ransom-ware Government intrusion • Management of government interference, such as censorship and monitoring
ENVIRONMENT		Issue descriptions

25	Energy	Utilisation of non-renewable energy • Sustainable utilisation of non-renewable energy Generation of renewable energy
26	Water	Sustainable utilisation of water stocks
27	Bio-impact	Direct impacts on environment • Pollution or spoilage of the natural environment from effluent, waste and emissions, including carbon, dust, SO2, NO2, etc. as a result of the company's direct operations • Bio-resources (forests, fish, land) Life-cycle impacts on environment • As above, but referring to impacts on the environment from products and services during their productive life and beyond Supply chain impacts on environment • As above, but referring to impacts of suppliers on the environment

Appendix 2A – Scaling analysis of annual reports to account for differences in styles

In order to account for variances in individual company reporting styles, i.e. some companies reporting very succinct lists of issues and others more verbose and repetitive lists I have adjusted the data for the companies so that each company represents only 20% of the industry total (given five companies per industry). This will ensure that a company like VOD who reported 41 issues in total and made up 38% of the industry disclosures in this study doesn't unfairly weight issues towards what one company deems material. The quantum of disclosures doesn't indicate the materiality of the particular issue, rather the relative number of disclosures to other issues disclosed in the report is, I believe, a better indicator of materiality.

Each company only accounting for 20% of the industry disclosures this will contain any bias that might arise from a company that discloses multiple times for different aspects of a single issue compared to a company that discloses once and deals with the different aspects as sub-issues – a coding task outside the scope of this study.

I have illustrated the affect that this has on the scores in Tables 10 and 11. Using the Telcos, Media and Tech industry (TMT) you can see the bias that VOD (Vodacom) brings to the industry scoring as they make up 38,3% of the total industry disclosures in Table 10. Just because they disclosed 15 times for Customer issues for example (five risks and ten material issues), doesn't mean those should count three times more towards the industry total than NPN's (Naspers) five disclosures. Rather they should count towards the industry total to the extent that they are disclosed relative to other issues in VOD's report.

Table 10. Risk and material issue disclosures in the TMT industry

TMT companies	BLU		MTN		NPN		TKG		VOD		Total		
Issue categories *	R	M	R	M	R	M	R	M	R	M	R	M	Tot
Operational	4	0	4	1	3	2	4	0	6	3	21	6	27
Business action	1		1				1		1		4		4
Business partnerships						1			2	1	2	2	4
IP & Manufactured capital	2		1	1	2	1	3		2	1	10	3	13
Inputs & resources			1						1		2		2
Productivity	1		1		1					1	3	1	4
Financial	3	0	3	2	3	0	1	0	1	1	11	3	14
Capital risks			1		1					1	2	1	3
Market risks	3		2	2	2		1		1		9	2	11
Governance	2	0	1	0	1	1	2	0	2	4	8	5	13
Board balance & effectiveness						1				1		2	2
Audit independence													
Leadership selection & preparation										1		1	1
Remuneration & incentives										2		2	2
System integrity	2		1		1		2		2		8		8
Ethics	0	2	0	0	1	2	0	0	1	0	2	4	6
Moral DNA of the organisation						2						2	2
Theft, fraud & corruption		1			1				1		2	1	3
Anti-competitive behaviour		1										1	1
Labour	0	0	0	0	0	2	0	0	0	1	0	3	3
Fair labour						2						2	2
Occupational health & safety										1		1	1
Society	3	0	3	0	1	1	2	0	3	4	12	5	17
Community										2		2	2
Internal equity	1						1				2		2
Industry equity	2		3		1	1	1		3	2	10	3	13
Customers	2	0	1	1	2	3	2	0	5	10	12	14	26
Product suitability						1				3		4	4
Treatment of customers	1			1	1	2	1		1	2	4	5	9
Access to products & services										3		3	3
Customer ID protection & data privacy	1		1		1		1		4	2	8	2	10
Environment	0	0	0	0	1	0	0	0	0	0	1	0	1
Energy													
Water					1						1		1
Bio-impact													
Totals for Risks & Material issues	**14**	**2**	**12**	**4**	**12**	**11**	**11**	**0**	**18**	**23**	**67**	**40**	**107**
Overall Total	**16**		**16**		**23**		**11**		**41**		**107**		
Percentage of industry total	**15,0%**		**15,0%**		**21,5%**		**10,3%**		**38,3%**		**100%**		

** The 'R' column denotes risk disclosures; the 'M' column denotes disclosures in the company's table of material issues.*

By scaling each company's disclosures upwards and downwards by the relevant scaling factor (Table 11) we can ensure that they represent only 20% of the total industry disclosures. Table 11 shows how this changes the 'materiality landscape' for the industry when compared to Table 10.

Table 11. Risk and material issue disclosures in the TMT industry (scaled)

TMT companies	BLU		MTN		NPN		TKG		VOD		Total		
Issue categories	R	M	R	M	R	M	R	M	R	M	R	M	Tot
Operational	5,4	0,0	5,4	1,3	2,8	1,9	7,8	0,0	3,1	1,6	24,4	4,8	29,2
Business action	1,3		1,3				1,9		0,5		5,1		5,1
Business partnerships						0,9			1,0	0,5	1,0	1,5	2,5
IP & Manufactured capital	2,7		1,3	1,3	1,9	0,9	5,8		1,0	0,5	12,8	2,8	15,5
Inputs & resources			1,3						0,5		1,9		1,9
Productivity	1,3		1,3		0,9					0,5	3,6	0,5	4,1
Financial	4,0	0,0	4,0	2,7	2,8	0,0	1,9	0,0	0,5	0,5	13,3	3,2	16,5
Capital risks			1,3		0,9					0,5	2,3	0,5	2,8
Market risks	4,0		2,7	2,7	1,9		1,9		0,5		11,0	2,7	13,7
Governance	2,7	0,0	1,3	0,0	0,9	0,9	3,9	0,0	1,0	2,1	9,9	3,0	12,9
Board balance & effectiveness						0,9				0,5		1,5	1,5
Audit independence													
Leadership selection										0,5		0,5	0,5
Remuneration & incentives										1,0		1,0	1,0
System integrity	2,7		1,3		0,9		3,9		1,0		9,9		9,9
Ethics	0,0	2,7	0,0	0,0	0,9	1,9	0,0	0,0	0,5	0,0	1,5	4,5	6,0
Moral DNA of the organisation						1,9						1,9	1,9
Theft, fraud & corruption		1,3			0,9				0,5		1,5	1,3	2,8
Anti-competitive behaviour		1,3										1,3	1,3
Labour	0,0	0,0	0,0	0,0	0,0	1,9	0,0	0,0	0,0	0,5	0,0	2,4	2,4
Fair labour						1,9						1,9	1,9
Occupational health & safety										0,5		0,5	0,5
Society	4,0	0,0	4,0	0,0	0,9	0,9	3,9	0,0	1,6	2,1	14,4	3,0	17,4
Community										1,0		1,0	1,0
Internal equity	1,3						1,9				3,3		3,3
Industry equity	2,7		4,0		0,9	0,9	1,9		1,6	1,0	11,1	2,0	13,1
Customers	2,7	0,0	1,3	1,3	1,9	2,8	3,9	0,0	2,6	5,2	12,4	9,3	21,7
Product suitability						0,9				1,6		2,5	2,5
Treatment of customers	1,3			1,3	0,9	1,9	1,9		0,5	1,0	4,7	4,2	9,0
Access to products & services										1,6		1,6	1,6
Customer ID prot. & data privacy	1,3		1,3		0,9		1,9		2,1	1,0	7,6	1,0	8,7
Environment	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,9
Energy													
Water					0,9						0,9		0,9
Bio-impact													

Totals for Risks & Material	18,7 2,7	16,1 5,4	11,2 10,2	21,4 0,0	9,4 12,0	76,7 30,3 107,0
Overall Total	**21,4**	**21,4**	**21,4**	**21,4**	**21,4**	**107**
Old % of industry total	**15,0%**	**15,0%**	**21,5%**	**10,3%**	**38,3%**	**100%**
Scaling factor	**1,33**	**1,33**	**0,93**	**1,94**	**0,52**	**-**
New % of industry total	**20%**	**20%**	**20%**	**20%**	**20%**	**100%**

It is evident from scaling factors in Table 11 that VOD and TKG (Telkom) were adjusted the most with VOD's disclosures roughly halved and TKG's almost doubled to represent 20% of the total disclosures each. There have also been movements at an issue and category level to account for a fairer representation of the materiality landscape in the TMT industry. Tables 10 and 11 are merely for illustrative purposes, before looking at the industry totals comparatively.

Table 10 displays the industry level disclosures across the five industries of Food, Healthcare, Mining, Retail and TMT. Each industry is displayed with the total scaled disclosures from the five companies within that industry and the percentage contribution to the industry total for each category and issue.

Appendix 3 – Survey

Below I have summarised a version of the survey used to assess what each asset manager determined was the materiality of the specific financial and non-financial issues across the five industries. Each survey asked the asset manager to provide their name, job title and date upon which they were completing the exercise.

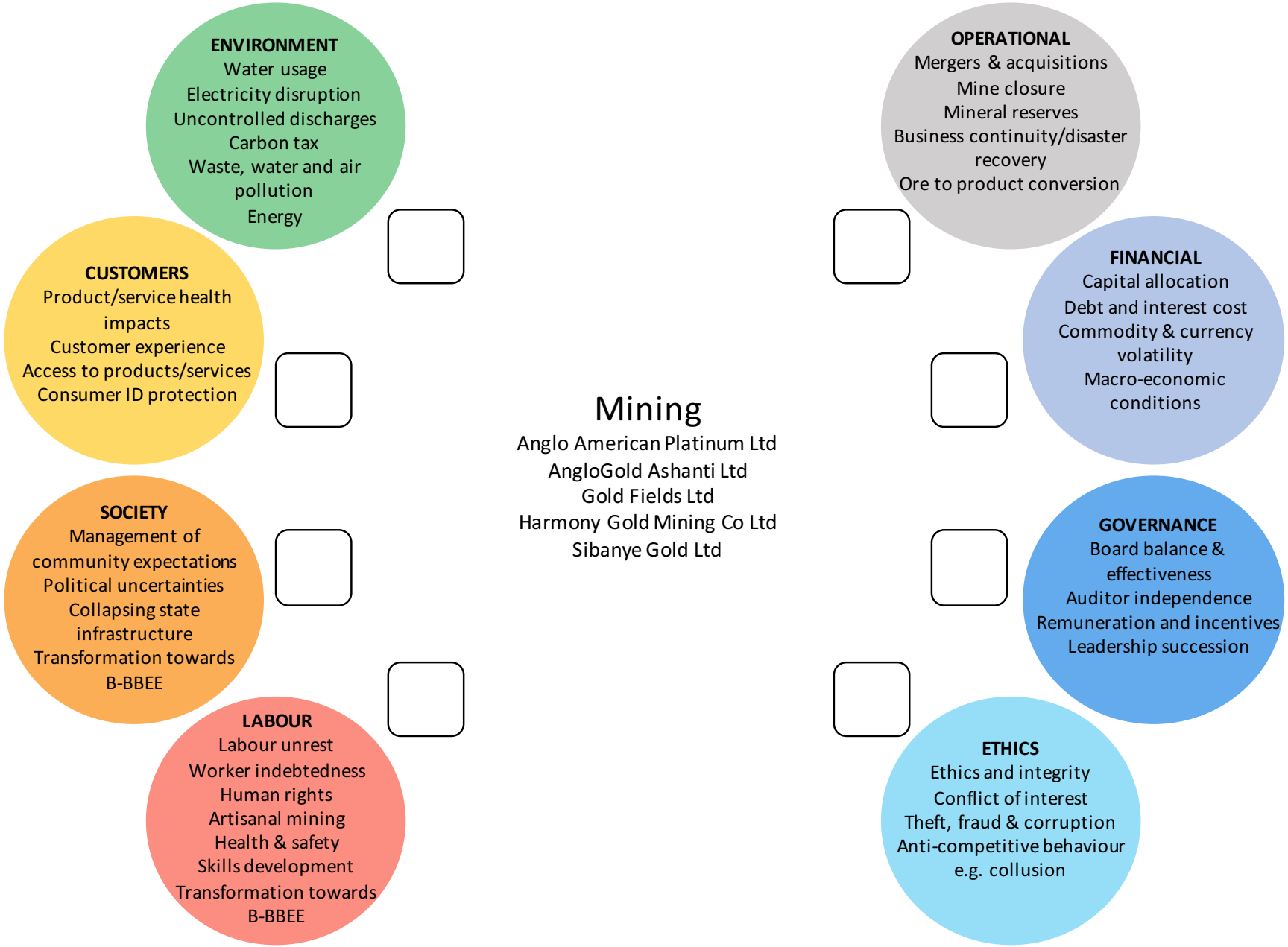
The next section was an explanation of the exercise to be completed:

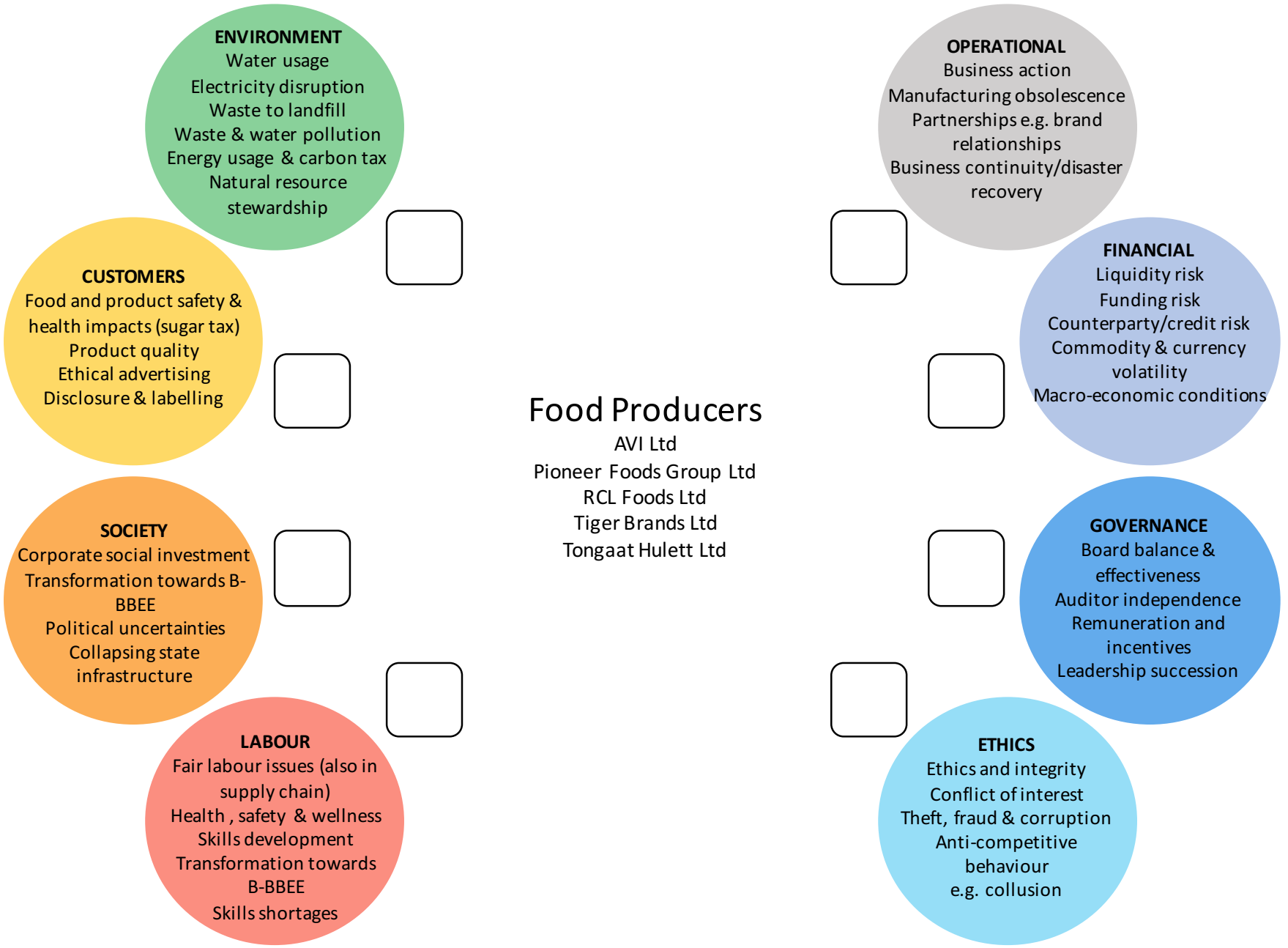
"The objective of this exercise is to determine what you believe to be important issues across five different industries. Each industry will be presented on a separate page along with the companies within the industry that I will be studying (to provide you with some context).

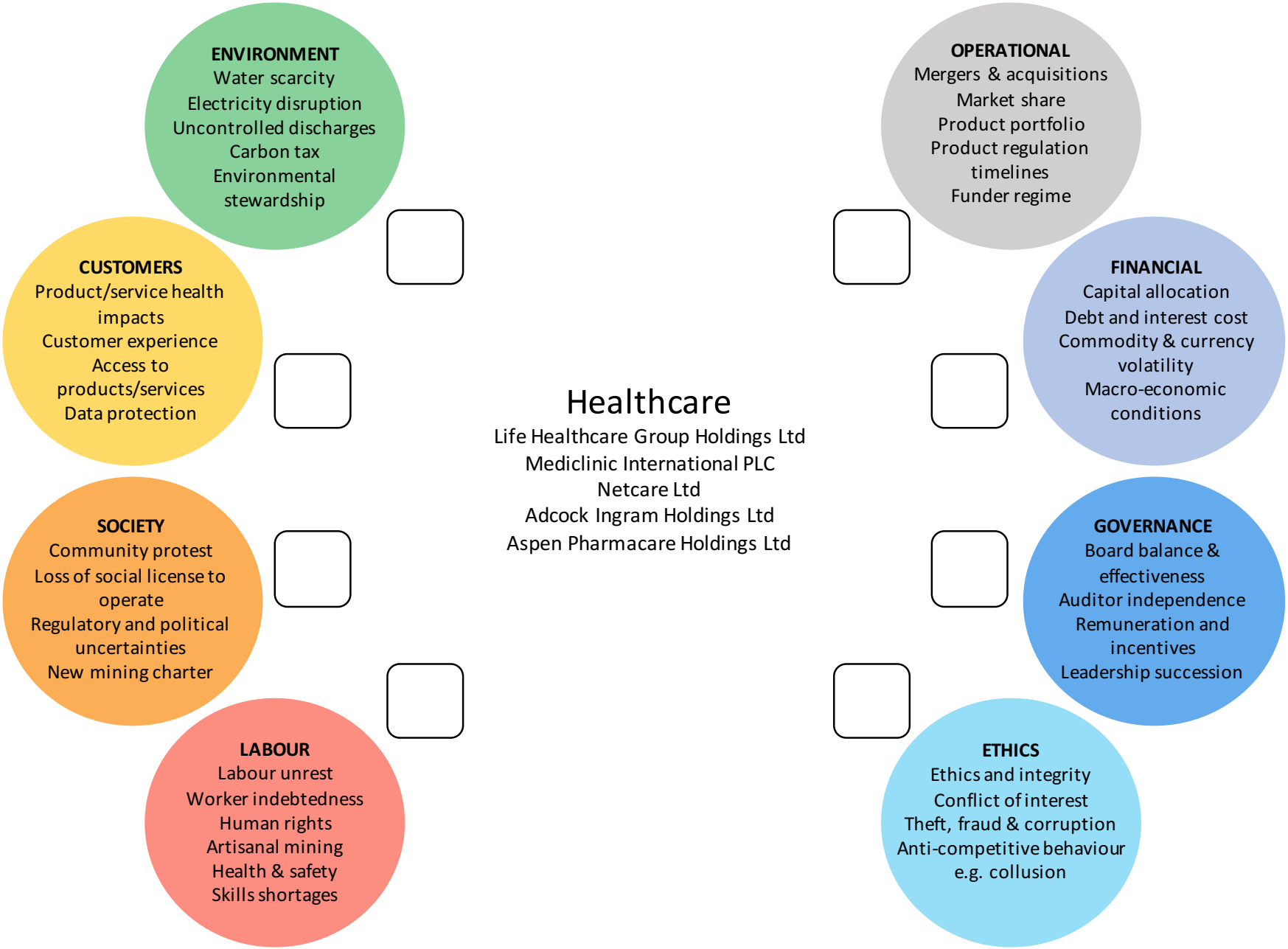
"In order to determine what you deem to be important, please **rate on a scale of 0 to 10** each of the areas surrounding the industry and companies. The eight areas surrounding the industry are financial, operational, governance, ethics, labour, society, customers and environment. Each can be weighted independently for its importance to the industry and relative importance to the other areas."

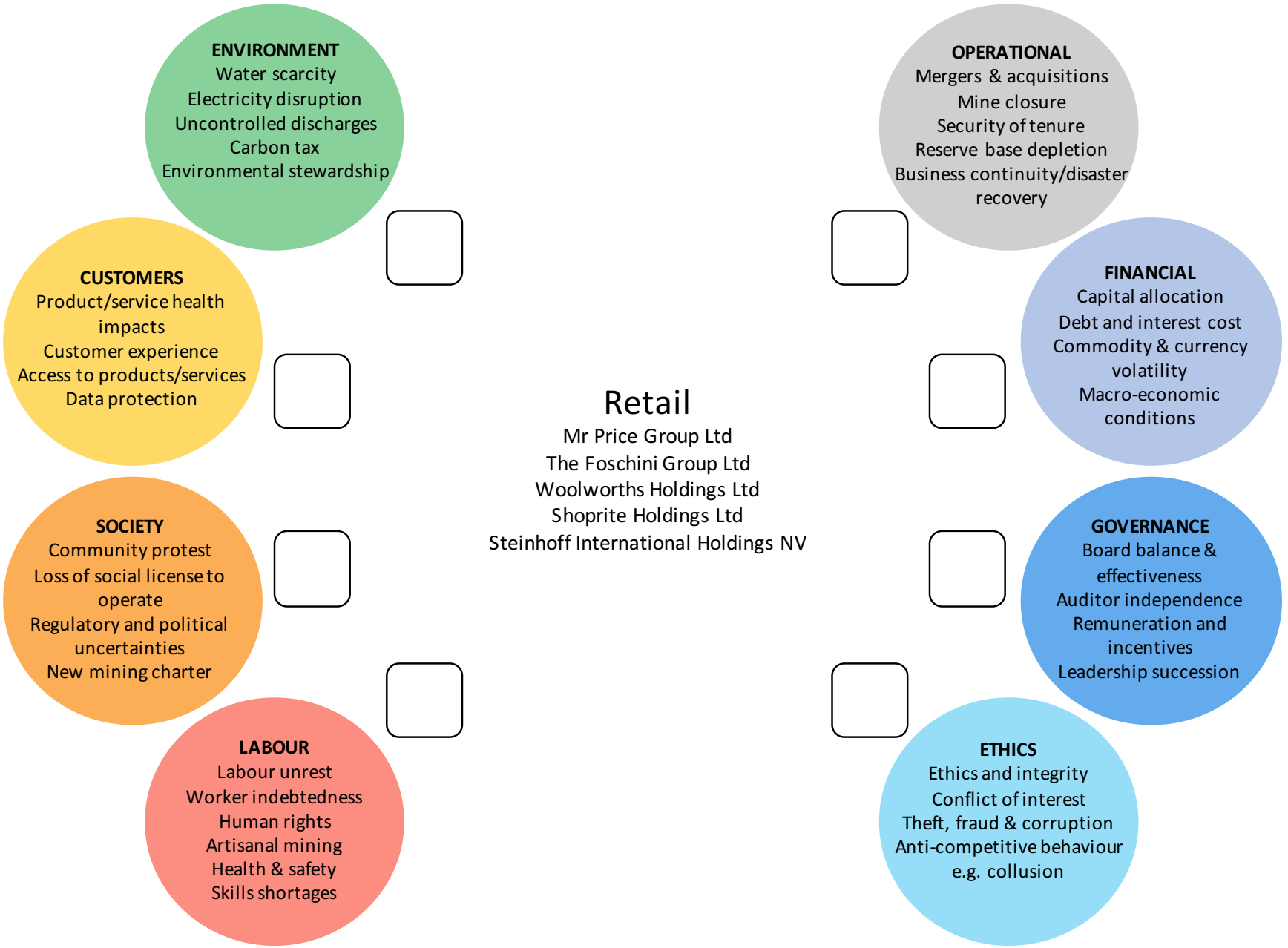
After the explanation followed five pages, each with an industry represented and displayed in the following format:

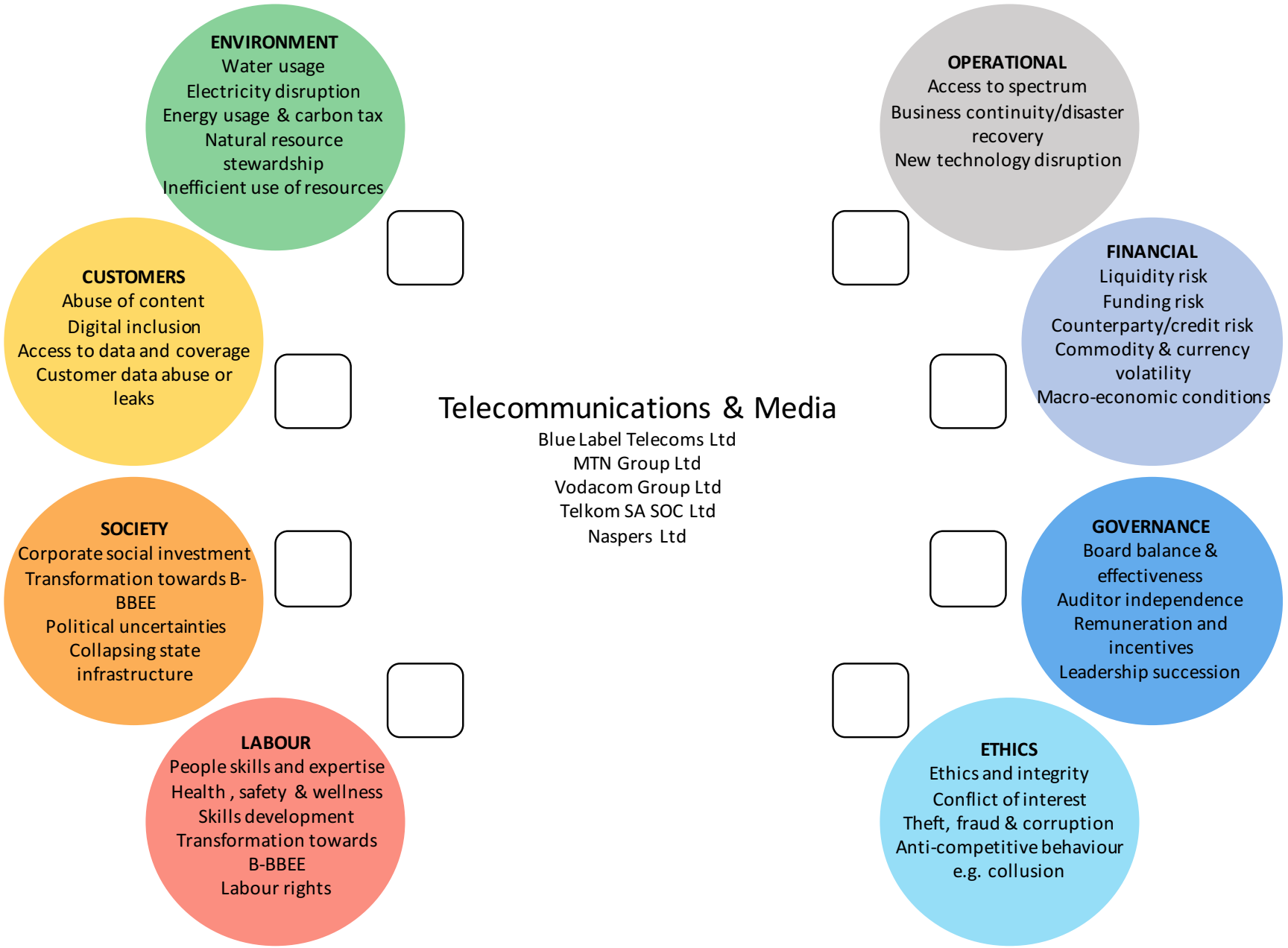
The individual would then place their weighting (between 0 and 10) in the boxes next to the relevant category. Below are the five industries, including the referenced companies for context, and the eight categories. It is important to note that I provided contextual clues for each of the categories in each of the industries in order to not leave any asset managers completely blind going into the survey.


ENVIRONMENT
Water usage
Electricity disruption
Uncontrolled discharges
Carbon tax
Waste, water and air pollution
Energy
CUSTOMERS
Product/service health impacts
Customer experience
Access to products/services
Consumer ID protection
SOCIETY
Management of community expectations
Political uncertainties
Collapsing state infrastructure
Transformation towards B-BBEE
LABOUR
Labour unrest
Worker indebtedness
Human rights
Artisanal mining
Health & safety
Skills development
Transformation towards B-BBEE
Mining
Anglo American Platinum Ltd
AngloGold Ashanti Ltd
Gold Fields Ltd
Harmony Gold Mining Co Ltd
Sibanye Gold Ltd
OPERATIONAL
Mergers & acquisitions
Mine closure
Mineral reserves
Business continuity/disaster recovery
Ore to product conversion
FINANCIAL
Capital allocation
Debt and interest cost
Commodity & currency volatility
Macro-economic conditions
GOVERNANCE
Board balance & effectiveness
Auditor independence
Remuneration and incentives
Leadership succession
ETHICS
Ethics and integrity
Conflict of interest
Theft, fraud & corruption
Anti-competitive behaviour e.g. collusion


ENVIRONMENT
Water usage
Electricity disruption
Waste to landfill
Waste & water pollution
Energy usage & carbon tax
Natural resource stewardship
CUSTOMERS
Food and product safety & health impacts (sugar tax)
Product quality
Ethical advertising
Disclosure & labelling
SOCIETY
Corporate social investment
Transformation towards B-BBEE
Political uncertainties
Collapsing state infrastructure
LABOUR
Fair labour issues (also in supply chain)
Health , safety & wellness
Skills development
Transformation towards B-BBEE
Skills shortages
Food Producers
AVI Ltd
Pioneer Foods Group Ltd
RCL Foods Ltd
Tiger Brands Ltd
Tongaat Hulett Ltd
OPERATIONAL
Business action
Manufacturing obsolescence
Partnerships e.g. brand relationships
Business continuity/disaster recovery
FINANCIAL
Liquidity risk
Funding risk
Counterparty/credit risk
Commodity & currency volatility
Macro-economic conditions
GOVERNANCE
Board balance & effectiveness
Auditor independence
Remuneration and incentives
Leadership succession
ETHICS
Ethics and integrity
Conflict of interest
Theft, fraud & corruption
Anti-competitive behaviour
e.g. collusion


ENVIRONMENT
Water scarcity
Electricity disruption
Uncontrolled discharges
Carbon tax
Environmental stewardship
CUSTOMERS
Product/service health impacts
Customer experience
Access to products/services
Data protection
SOCIETY
Community protest
Loss of social license to operate
Regulatory and political uncertainties
New mining charter
LABOUR
Labour unrest
Worker indebtedness
Human rights
Artisanal mining
Health & safety
Skills shortages
Healthcare
Life Healthcare Group Holdings Ltd
Mediclinic International PLC
Netcare Ltd
Adcock Ingram Holdings Ltd
Aspen Pharmacare Holdings Ltd
OPERATIONAL
Mergers & acquisitions
Market share
Product portfolio
Product regulation timelines
Funder regime
FINANCIAL
Capital allocation
Debt and interest cost
Commodity & currency volatility
Macro-economic conditions
GOVERNANCE
Board balance & effectiveness
Auditor independence
Remuneration and incentives
Leadership succession
ETHICS
Ethics and integrity
Conflict of interest
Theft, fraud & corruption
Anti-competitive behaviour e.g. collusion


ENVIRONMENT
Water scarcity
Electricity disruption
Uncontrolled discharges
Carbon tax
Environmental stewardship
CUSTOMERS
Product/service health impacts
Customer experience
Access to products/services
Data protection
SOCIETY
Community protest
Loss of social license to operate
Regulatory and political uncertainties
New mining charter
LABOUR
Labour unrest
Worker indebtedness
Human rights
Artisanal mining
Health & safety
Skills shortages
Retail
Mr Price Group Ltd
The Foschini Group Ltd
Woolworths Holdings Ltd
Shoprite Holdings Ltd
Steinhoff International Holdings NV
OPERATIONAL
Mergers & acquisitions
Mine closure
Security of tenure
Reserve base depletion
Business continuity/disaster recovery
FINANCIAL
Capital allocation
Debt and interest cost
Commodity & currency volatility
Macro-economic conditions
GOVERNANCE
Board balance & effectiveness
Auditor independence
Remuneration and incentives
Leadership succession
ETHICS
Ethics and integrity
Conflict of interest
Theft, fraud & corruption
Anti-competitive behaviour e.g. collusion


ENVIRONMENT
Water usage
Electricity disruption
Energy usage & carbon tax
Natural resource stewardship
Inefficient use of resources
CUSTOMERS
Abuse of content
Digital inclusion
Access to data and coverage
Customer data abuse or leaks
SOCIETY
Corporate social investment
Transformation towards B-BBEE
Political uncertainties
Collapsing state infrastructure
LABOUR
People skills and expertise
Health , safety & wellness
Skills development
Transformation towards B-BBEE
Labour rights
OPERATIONAL
Access to spectrum
Business continuity/disaster recovery
New technology disruption
FINANCIAL
Liquidity risk
Funding risk
Counterparty/credit risk
Commodity & currency volatility
Macro-economic conditions
GOVERNANCE
Board balance & effectiveness
Auditor independence
Remuneration and incentives
Leadership succession
ETHICS
Ethics and integrity
Conflict of interest
Theft, fraud & corruption
Anti-competitive behaviour e.g. collusion
Telecommunications & Media
Blue Label Telecoms Ltd
MTN Group Ltd
Vodacom Group Ltd
Telkom SA SOC Ltd
Naspers Ltd

Appendix 4 – Interview themes

Aggregate dimensions	**Second order themes**	**First order concepts**
	Interviewee descriptors	• Company role: Asset manager, Asset owner • Role and function of individual • Years of experience • Nature of investments: Stocks, bonds, local, international • Clients served by the interviewee: Internal and/or external to the company
Feelings about ESG as it stands	Defining ESG	• Avoid injustices – ethics and morals • Honesty of management • Risk management • Company impact • Engagement
	Understanding materiality	• Will it affect them covering their cost of capital? • Is it a risk? • Governance is always right on top • It depends on the industry and the region • Materiality needs to be an input, but how? • Everyone has a different opinion
	Governance vs. Society vs. Environment	• Environment and Society follow Governance • Non-investment only on governance grounds • Social is the most difficult to analyse • Fixed income – Governance is bread and butter • Governance is homogenous • Governance has immediate consequences

	ESG relevance	• Positive or negative association with financial performance • Investor demands versus societal outcomes • JSE market size makes ESG impractical
	Personal belief in ESG on a spectrum	• Serving business at the expense of society • Serving society primarily to serve business • Good for business and society (shared value) • Primarily to serve society, business secondary
Inherent and systematic implementation conflict	Conflict between the long and the short-term	• Whose responsibility is ESG? • Clients are focused on performance until a crisis • ESG preaching • Investors versus ESG disconnect
	Conflict of sell-side analysts	• Sell-side research is more short-term than we are • Analysts are quasi-salesmen for their brokers • Some investment banks have brokerage arms • Very few sell recommendations in the industry
	Conflict of buy-side fund managers	• Lose objectivity as relationships develop • Big institutions have the conflict of interest • It's easier for independently owned firms
	Drivers, uptake and improvement of ESG	• Corporate crises have put ESG on the agenda • Driven by the younger generations • Regulation 28 • Institutional investors will have to be the leaders • Social media

	Barriers to ESG uptake	• There's no education around material issues • If it's just tick-box, where's the value? • Can't afford to lose mandates
ESG implementation confusion	Investment philosophy and methodology	• Two legs – fundamental analysis and ESG • Analysts cover ESG to improve discussions • Finding quality, profitable companies • Returns first
	Role of ESG in the investment philosophy	• To understand risk and red flags • To comply or to virtue signal • Lens to assess ethics, honesty and trust • Tool to engage management
	Role of ESG in the valuation and methodology	• As an input to risk and resilience • Take ESG into account, but no formal models • Early stage developing ESG models • Far advanced developing models, but tick-box • Far advanced to support fundamental analysis
	Investment time horizons	• Institutional investors don't have liquidity • There's pressure for short-term returns • Pension funds have to think long-term • Short-termism prevalent for hedge funds
	Long-term impact of ESG	• ESG strongly linked to long-term performance • Fund with a long-term investment focus, but not necessarily linked to ESG • Requires determination to stay the course
	Engagement and activism	• Asset manager activism • Shareholder activism • Societal and government activism • Corporate response to activism

	Proxy voting	• Not a good reflection engagement • It's onerous and there is scope for efficiency • You don't have a voice as a small shareholder • Centralised process to vote on all holdings

Appendix 5 - GRI G4 Standards table of disclosures for reporting

The GRI G4 standard disclosures and indicators with comments as to how they have been treated in the Master's study ('the study') framework.

	GRI indicator	**Comment/cross reference to the study issue table**
G4-1	Strategy to address sustainability	Response to material issues (non-issue aspect)
G4-2	Description of key impacts, risks, and opportunities	Reporting content item (non-issue aspect)
G4-3 - 16	Organisational profile	Non-issue aspect
G4-17 - 23	Material aspects and boundaries	Non-issue aspect
G4-24 - 27	Stakeholder engagement	The study evaluates this aspect in terms of the company's response to each material issue
G4-28 - 32	Report profile	Non-issue aspect
G4-33	Assurance	The study evaluates this aspect in terms of the company's response to each material issue
	GOVERNANCE	
G4-34 - 31	Structure and composition	Governance: Board balance and effectiveness
G4-42	Board role in setting purpose, value, strategy	Governance: Board balance and effectiveness
G4-43 - 44	Board competencies and performance evaluation	Governance: Board balance and effectiveness
G4-45 - 47	Board role in risk management	The study evaluates this aspect in terms of the company's response to each material issue
G4-48	Board role in sustainability reporting	The study evaluates this aspect in terms of the company's response to each material issue
G4-49 – 50	Board role in evaluating ESG impact	The study evaluates company response in this regard by issue
G4-51 - 55	Remuneration and incentives	Governance: Remuneration and incentives
	ETHICS & INTEGRITY	
G4-56 - 58	Values, principles, norms; mechanisms for guidance and for reporting concerns	Ethics: Moral DNA of the organisation
	ECONOMIC	
G4-EC1	Direct economic value generated and distributed	Labour: Fair labour Society: Industry equity (taxes due) Society: Community (local economic development)
G4-EC2	Implications of organisations activities due to climate change	Environment: External environmental risks
G4-EC3	Coverage of defined benefit plan obligations	Labour: Fair labour
G4-EC4	Financial assistance received from government	Ethics: Theft, fraud and corruption
G4-EC5	Market presence – wage equity by gender	Society: Internal equity
G4-EC6	Market presence – senior management equity for local community	Society: Internal equity
G4-EC7	Indirect economic impact – impact on and support for local communities /economies by investments and services	Society: Community
G4-EC8	Indirect economic impacts relating to the industry	Society: Industry equity

G4-EC9	Procurement practices – procurement from local suppliers	Society: Industry equity
	SOCIAL • Labour practices & decent work	
G4-LA1 – LA2	Turnover, benefits	Labour: Fair labour
G4-LA3	Return to work from parental leave	Society: Internal equity
G4-LA4	Labour/management relations	Labour: Fair labour
G4-LA5-LA8	Occupational health and safety	Labour: Occupational health and safety
G4-LA9 – LA10	Training and education (by category) for occupational work & lifelong learning	Labour: Skills development
G4-LA11	Performance, career development reviews	Labour: Skills development
G4-LA12	Diversity and equal opportunity	Society: Internal equity
G4-LA13	Gender wage equity	Society: Internal equity
G4-LA14 – LA15	Labour practices in the supply chain – assessment and actions taken	Labour: Fair labour
G4-LA16	Labour practices – grievance mechanisms	Labour: Fair labour
	SOCIAL • Human rights	
G4-HR1	Human rights screening of investment agreements and contracts	Labour: Fair labour
G4-HR2	Human rights policy development and training	Labour: Fair labour
G4-HR3	Non-discrimination	Society: Internal equity
G4-HR4	Freedom of association and collective bargaining	Labour: Fair labour
G4-HR5	Child labour	Labour: Fair labour
G4-HR6	Forced or compulsory labour	Labour: Fair labour
G4-HR7	Security practices	Labour: Fair labour Society: Community Customers: Treatment of customers
G4-HR8	Indigenous rights	Society: Community
G4-HR9	Human rights assessment	The study evaluates this aspect in terms of the company's response to each affected stakeholder group
G4-HR10 - 11	Supplier human rights assessment	Labour: Fair labour
G4-HR12	Human rights grievance mechanisms	The study evaluates this aspect in terms of the company's response to each affected stakeholder group
	SOCIAL • Society	
G4-SO1	Local community engagement	Society: Community
G4-SO2	Local community impact	Society: Community
G4-SO3 – SO5	Anti-corruption	Ethics: Theft, fraud and corruption
G4-SO6	Public policy – political contributions	Ethics: Theft, fraud and corruption
G4-SO7	Anti-competitive behaviour	Ethics: Anti-competitive behaviour
G4-SO8	Societal compliance	The study evaluates this aspect in terms of the company's response to each underlying issue for which the company incurred sanction/penalty
G4-SO9	Supplier assessment for impacts on society	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Labour:

		Fair labour, Society: Community, internal equity, industry equity
G4-SO10	Grievance mechanisms for impacts on society	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Labour: Fair labour, Society: Community, internal equity, industry equity
	SOCIAL • Product responsibility	
G4-PR1 – PR2	Customer health and safety	Customers: Product suitability
G4-PR3 – PR4	Product and service labelling	Customers: Treatment of customers
G4-PR5	Measuring customer satisfaction	Customers: Treatment of customers
G4-PR6	Marketing communications – sale of banned or disputed products	Customers: Product suitability
G4-PR7	Marketing communications – non-compliance with advertising regulations	Customers: Treatment of customers
G4-PR8	Customer privacy	Customers: Customer ID protection and data privacy
G4-PR9	Product and service non-compliance	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Customers: Product suitability, Treatment of customers, Access to products and services, Customer ID protection and data privacy
	ENVIRONMENTAL	
G4-EN1-EN2	Renewable and non-renewable input materials used and/or recycled	Environment: Bio-resources
G4-EN3 – EN7	Energy: consumption, intensity, reduction	Environment: Energy
G4-EN8-10	Water: withdrawal by source, recycled and reused	Environment: Water
G4-EN11-14	Biodiversity: impacts, restoration, record of endangered species	Environment: Bio-impact
G4-EN15-21	Emissions: GHG, Nox, Sox	Environment: Bio-impact
G4-EN22-26	Effluents and waste	Environment: Bio-impact
G4-EN27-28	Products and services	Environment: Bio-impact
G4-EN29	Environmental compliance	The study evaluates this aspect in terms of the company's response to each underlying issue for which the company incurred sanction/penalty
G4-EN30	Environmental impact of Transport	Environment: Bio-impact
G4-EN31	Environmental protection measures and investments	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Environment: Energy, Water, Bio-resources, Bio-impact
G4-EN32-33	Supplier environmental assessment and actions in response	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Environment: Energy, Water, Bio-resources, Bio-impact
G4-EN34	Environmental grievance mechanisms	The study evaluates this aspect in terms of the company's response to each underlying material issue for which this may be relevant, e.g. Environment: Energy, Water, Bio-resources, Bio-impact

Appendix 6 - SASB issues table

The SASB standard disclosures and indicators with comments as to how they have been treated in the Master's study ('the study') framework.

	SASB issues	**Comment / cross reference to the study issue table**
SUPPLY CHAIN	Raw material demand	Operational: Inputs and resources Environment: Bio-resources
	Supply chain standards & selection	Labour: Fair labour Society: Community, Internal equity, Industry equity Environmental stewardship
	Supply chain engagement & transparency	Labour: Fair labour Society: Community, Internal equity, Industry equity Environmental stewardship
PRODUCTS & SERVCES	Product societal value	Customers: product suitability
	Product life cycle use impact	Environment: Bio-impact
	Packaging	Environment: Bio-impact
	Product pricing & target materials	Customers: Access to products and services
	Product quality & safety	Customers: Product suitability
BUSINESS MODEL & INNOVATION	Long-term viability of core business	Operational: Business action, Business partnerships, IP & manufactured capital, Inputs & resources, Productivity Financial: Capital outlay, market risks, capital risks
	Accounting for externalities	Operational: Business partnerships, IP & manufactured capital, Inputs & resources Financial: Market risks, capital risks
	Competitive & ethical behaviour	Ethics: Moral DNA, Theft, fraud & corruption, Anti-competitive behaviour
	Research, development & innovation	Operational: IP & manufactured capital
LEADERSHIP & GOVERNANCE	Regulatory & legal challenges	The study evaluates this aspect in terms of the company's response to each underlying issue for which the company incurred sanction/penalty or challenges
	Policies, standards & codes of conduct	The study evaluates this aspect in terms of the company's response to each underlying issue regulated by standards and codes
	Shareholder engagement	The study evaluates this aspect in terms of the company's response to each material issue
	Board structure & independence	Governance: Board balance & effectiveness
	Executive compensation	Governance: Remuneration & incentives
	Lobbying & political contributions	Ethics: Theft, fraud and corruption
ENVIRONMENT	Climate change & natural disaster risks	Environment: External environmental risks
	Environmental accidents & remediation	Environment: Bio-impact
	Water use & management	Environment: Water
	Fuel management & transportation	Environment: Energy, Bio-impact
	GHG emissions and air pollution	Environment: Bio-impact
	Waste management & effluents	Environment: Bio-impact
	Biodiversity impacts	Environment: Bio-impact
COMMUNITY	Communications & engagement	Society: Community
	Community development	Society: Community
	Impact from facilities	Society: Community
EMPLOYEES	Diversity & equal opportunity	Society: Internal equity, Industry equity
	Training & development	Labour: Skills development

	Recruitment & retention	Operational: IP & Manufactured capital
	Compensation & benefits	Operational: IP & Manufactured capital Labour: Fair labour
	Labour relations & union practices	Labour: Fair labour
	Employee health, safety & wellness	Labour: Occupational health and safety
	Child & forced labour	Labour: Fair labour
CUSTOMERS	Customer satisfaction	Customers: Treatment of customers
	Customer health & safety	Customers: Product suitability
	Disclosure & labelling	Customers: Treatment of customers
	Marketing & ethical advertisement	Customers: Treatment of customers
	Access to services	Customers: Access to products and services
	Customer privacy	Customers: Customer ID protection & data privacy
	New & emerging markets	Operational: Business action

Appendix 7 - The praxis model

The FarSight Praxis Model

I visualise a time when FarSight's model is recognised as the global standard rating of Leadership Maturity, indicated by its being adopted by the majority of the world's sovereign wealth funds. In this vision, crowd-sourced wisdom, facilitated by FarSight's model, is being used across the world to vote the most mature leaders to the most responsible positions. As a consequence, the positive power of capitalism to find solutions to societal challenges is validated, while its excesses, such as the wage gap, labour exploitation, and rent-seeking behaviour, show significant signs of being curbed.

How we began to understand leadership quality (maturity) through reporting

My MPhil research arises out of the work done by my father, Rob Worthington-Smith, during his career as a writer of annual reports. This career spanned the 2000s and early 2010s. By 2013, he came to the realisation that the sustainability movement's attempts to force companies to hold themselves accountable to society through better reporting, was having unintended consequences. In particular, companies became adept at gaming new reporting rules through a tick-box, compliance approach, or they invested heavily in reputation management and public relations, relying on the look and feel of corporate messaging to mislead stakeholders.

Despite two decades of intervention by the likes of the Global Reporting Initiative (GRI) and the work of the various iterations of the King Commission, there was little evidence that the official company reporting suite, in particular the Annual Report and its accompanying Sustainability Report, accurately reflected companies' intrinsic value. Worse, providers of finance, as represented by the asset management industry, had largely given up on attempting to gain insight from the Annual Report narrative (as distinct from the Annual Financial Statements) as an input to deriving corporate valuation.

Finally, in the early 2010s, the International Integrated Reporting Council set about rectifying the situation with a guideline for telling the company's value creation story through the newly-termed Integrated Report, a report designed to integrate relevant information usually published in separate reports (these could include the Annual Report, the Sustainability Report, the Governance Report, the Risk Report, Report to Society, etc.). The key departures

from the GRI and other existing guidelines were: (1) the concept of identifying issues material to providers of finance, as opposed to general stakeholders, (2) the concept of value being represented by building the company's resources and relationships (the IIRC refers to the six capitals in this regard) through the application of the company's business model, and (3) principles to raise the quality of reporting, such as connectivity of information, reliability and completeness, consistency and comparability, conciseness, etc.

By 2014, all companies listed on the JSE were required to report in accordance with the IIRC's <IR> Framework.

The gap that led to the development of the FarSight model

Despite the emergence of an excellent framework for reporting, there remained challenges to its efficacy. On the one hand, companies struggled to apply the framework as it was intended. Adoption of a new paradigm naturally takes time, with companies falling on a distribution curve between early pioneers and laggards. Companies with better value propositions naturally were eager to tell their value creation story, while others still sought to achieve minimum compliance, or to deceive by resorting to traditional corporate propaganda methods.

On the other hand, there was no mechanism, or significant campaign, to inform the asset management community of the change in reporting standard. From our interaction with this community, it was apparent that the non-financial, narrative section of the Integrated Annual Report remained largely impenetrable and of dubious value to buy- and sell-side researchers. Indeed, this situation persists to this day.

Considering this gap in understanding, the opportunity presented itself to develop a model whose aim would be to improve the honesty of the conversation between investors, analysts, companies and the public, in terms of how companies create sustainable value. Such a model would reconstruct the IR (and other corporate communication) in accordance with the IIRC's guideline, thereby revealing its strengths and shortcomings, and allowing for a rating of, and commentary on the report, to the benefit of both reporters and consumers of these reports.

Given that the IIRC's Integrated Reporting <IR> Framework was already being adopted as a standard by listed companies on the JSE, we elected to concentrate our efforts on the asset

management community. If this community could be provided with a set of tools to analyse the non-financial, narrative section of the Integrated Annual Report (indeed, of any corporate communication), then shareholders would better understand the drivers and protectors of value, and how responsibly these were being responded to by corporate leadership.

Development of the FarSight model: maturity of response to material issues

We decided that this set of tools would be called the FarSight model, and that it would be promoted as a rating of leadership maturity. From our own experience, our research and reading of the literature, we deduced that mature leaders are those that respond maturely to their most material issues. The ultimate score for leadership maturity would therefore be a combination of two parts: (1) weighting issues for their materiality to the business, and (2) scoring leadership for the maturity of their response to each issue in their corporate communications. In our view, this score would provide a view of the level of confidence that the asset management community could have in the leadership of the company. Following the work done by Khan, Serafeim and Yoon (2015) there is evidence to suggest that companies that invest in their most material issues, while de-emphasising their least material issues, are more competitive in the long run.

The early drafts of the model were developed between 2013 and 2015, as we tried to improve our understanding, and the robustness of, each component of the model. Key areas of development were:

- ***The universe of issues*** – in order to compare leadership maturity across industry industrys and across companies, it was important to have a consistent set of issues. We researched the existing issue universes and adapted these to a standard that we felt best straddled both the developed and emerging economies. An additional challenge was to draw the line between purely business issues (operational and financial) and those of an ESG nature. In the practical world this line is not clear. For example, the development of employee skills consists of a spectrum that stretches between pure intellectual capital on the one hand (a business issue) and life skills for disadvantaged, entry-level employees on the other (an ESG issue).
- ***Weighting issues for materiality*** – While clear guidance is provided by the IIRC for weighting materiality, in practice each group of stakeholders with legitimate interest, or concern in the affairs of the company, has its own view of which issues are more

material than others. This difference of opinion is further skewed by the general sentiment reflected in the press, on social media and through other influences. As has been found in my research, even asset managers themselves have a wide range of opinions regarding the relative importance of issues as value drivers and protectors for the business. Thus the model should be designed to be agnostic as to the morality of the issues facing companies, thereby allowing the model to interrogate companies across the full spectrum of industries, from fossil fuels to gambling and tobacco.

- ***Scoring leadership response*** – A number of challenges were presented in developing the response side of the model:
    - ***Where do we draw the line between value creation and destruction?*** Companies are scored negatively for misleading and deceptive reporting (potentially value destructive) and positively for engaged, transparent and strategic reporting (potentially value creating). Considering that materiality is a weighting, it follows that even a small positive response score can result in a relatively high leadership maturity rating (FarSight score) once the two values (weight and response score) are multiplied together. Establishing the zero point on the continuum became a key challenge we needed to resolve.
    - ***What aspects of reporting response contribute to (or detract from) leadership maturity?*** By drawing on the IIRC's principles and guidelines for reporting, we developed a four-aspect scoring model consisting of: context and recognition of the issue; leadership accountability for the issue; performance reporting; and connection between the issue and the strategic response. These became the rows in our scoring matrix (see below).
    - ***How to overcome tick-box compliance and emotive messaging?*** These two classic weaknesses in reporting resulted in the loss of confidence in reporting by the asset management industry, and it was therefore a key challenge that our model had to address. Different levels of response on the spectrum between dismissiveness and deception, through basic compliance, to deeply engaged and strategic, became the columns in our scoring matrix (see below).

Description of the FarSight model as at January, 2017

During 2015 and 2016 we piloted the FarSight model by analysing fourteen companies across four industrys (mining, retail, health and telecommunications), presenting our findings to 35 asset managers and their buy-side analysts on two road-show events in 2016. These

engagements with the industry resulted in a few minor adjustments to the model, which we then prepared for full roll-out to include analysis of the top 100 companies (by market value) across 12 industrys on the JSE over a two-year period starting in January, 2017. The key elements of the model as it stood in January, 2017 is presented here below:

Universe of issues

Appendix 2

Weighting for materiality

FarSight assigns a weighting of between 0 and 30 to each of the 24 issues. Issues weighted below 10 are barely material, while issues over 25 are crucial to the business' long-term survival.

Immaterial	Barely material	Low materiality	Medium materiality	High materiality	Crucial value driver
0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30

Weighting issues is not an exact science. In the US, the Sustainability Accounting Standards Board (SASB) starts by interrogating SEC 10k (and other) filings for frequency of key words (thus starting with companies' self-reporting bias). They then modify the resultant weighting by evaluating whether management or mismanagement of the issue will affect traditional corporate valuation parameters (e.g. profit). Finally, using discretion, they adjust upwards the weighting of issues they judge to be newly emerging. In our judgement, it would appear that representation on the workgroups that determine the final weightings is skewed against business and governance, and towards environmental and human rights issues.

We adopt a similar three-step approach to SASB, but apply an approach more similar to the International Integrated Reporting Council (IIRC) in order to derive issue weightings. For the FarSight model, the weighting of an issue is affected by:

- The probability and magnitude of its impact
- On the the firm's relationships and resources, and
- How this may affect returns to shareholders
- Through a three- to five-year window.

Sources of information we consulted to understand the industry, its drivers of value, its risks and vulnerabilities, and to reach our assessment of materiality for each of the 2,400 issues (24 issues for each of 100 companies across 12 industrys) included: national media and trade journals, transcripts of CEO interviews with business journalists, regulatory reports (eg: industry ombud reports and Competition Commission reports), company Integrated Reports and SENS announcements.

Scoring matrix for leadership response

Each issue is rated for maturity of response from -7 to +7 across four aspects (see also accompanying diagram):

- Context – how well the company understands the issue
- Taking charge – how decisive, committed and accountable
- Reporting performance – use of indicators to monitor and report progress against the issue
- Responding strategically – how strategic, innovative and far-thinking the leadership response, and how well linked to the original issue context

Fig. X: Scoring matrix for leadership response

	Smoke/ fire	**Boiler-plate**	**Basic compliance**	**Committed to journey**	**Strongly competitive**
Context & recognition	Dismissive /Insincere	None /Irrelevant /Inadequate	Partially relevant Dawning	Sincere & substantiated + Stakeholder engagement	+ Strategic & quantified
Commitment Taking charge Accountability	None or pretence	Delegated without authority	Unclear /Policy compliance	Decisive leadership with action	+ embedded in org. DNA with exec accountability
Performance reporting	Misleading	None or Isolated highlights Lacking transparency	KPIs emerging poor relevance	Relevant KPIs Good balance	Materiality Comparability Reliability
Strategic response innovation & progress	Misleading or non-compliant	Lacking in relevance	Emerging, but insignificant	Links with issues & evidence of progress	Innovative, far-thinking, competitive
SCORING	-7 -6 -5	-4 -3 -2	-1 0 +1	+2 +3 +4	+5 +6 +7

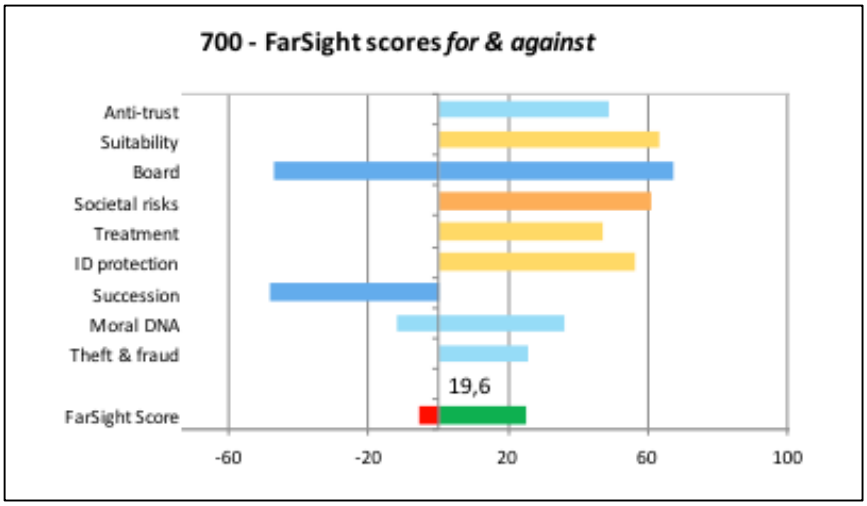
Calculating the FarSight score: Average weighted response across 24 issues

The company's FarSight rating is the average of all its issue scores. The score for each issue is the mathematical product of its materiality weighting and its score for maturity of response. Thus, low materiality issues barely affect the score, while high materiality issues make up most of the score. The table below illustrates how the score is calculated and the relative contribution of high materiality vs. low materiality issues.

Example of FarSight calculation			
Issue	Weight	Score	Total
#1	25	+5	125
#2	20	+6	120
#3	20	-1	-20
#4	18	2	36
#5	10	0	0
#...	...	...	...
#24	3	3	9
		Total	528
			/24
	FarSight score		=22

Illustrating the results of our FarSight analysis

In the diagram below, we have charted the top nine issues in a horizontal bar chart. The colour of each bar shows in which GELSCE category the underlying issue belongs. The bright red and green bar denotes the net for- and against scores for the company, with 19,6 being the final net score.



My MPhil research project

At the same time that we embarked on our analysis of the top 100 companies on the JSE, I embarked on my MPhil research. Any number of the challenges presented in developing the FarSight model could have formed the subject of my thesis. However, for the reasons described in the introduction to my dissertation, I decided to investigate how different stakeholders view materiality. My review of the literature suggested that there would be significant differences in opinion as to what ESG issues are material to companies. My MPhil aimed to discover the nature of these differences and what the reasons for these differences might be.

My research found that there were significant differences, as well as areas of alignment. Analysts differed significantly from asset managers and companies with regard to what they believed to be material issues and in particular how they weighted ESG issues. Analysts tended to weight the non-ESG issues, the operational and financial issues, much higher than asset managers. Companies tend to classify these as risks, while ESG issues are sifted through a stakeholder engagement analysis before being published as material issues.

The 22 in-depth interviews with asset managers revealed a wide range of opinions across the three dimensional areas that emerged from the analysis: (1) Feelings about ESG as it stands, (2) Inherent and systematic implementation conflict, and (3) Confusion around ESG implementation. There was some agreement that governance was of overarching importance, and that attending to ESG issues could be viewed as reducing the risk of investing in a particular company, though not at the expense of a loss in market value over the short-term. However, it was clear that the existing conversation between companies and providers of finance (analysts and the asset management community) continued to be poor with regard to the ESG issue landscape, shedding little light on how companies were either building or destroying relationships and resources over the long term.

Coincidentally, both the conclusion of my MPhil research and the conclusion of our top 100 company analysis were completed in February 2019, enabling me to take forward the outcomes of both into a praxis model for the future development of the FarSight business.

Outcomes of the FarSight analysis of the top 100 companies on the JSE

Materiality weighting table for all industries

All Industries		MATERIALITY														
		Financials		Resources	Commod.	Hotels & leisure	Industrials	TMT	Property		Retail	Healthcare		Food producers	Mining	SOEs
		Insurers	Banks						UK cos.	SA cos.		Hospitals	Pharma			
GOVERNANCE	1 Board balance & effectiveness	24	24	19	24	19	15	21	23	25	18	21	22	15	27	
	2 Audit independence	23	24	15	16	16	16	16	14	14	12	12	13	13	13	
	3 Leadership selection and preparation	26	25	15	17	18	16	18	18	21	15	15	16	12	16	
	4 Remuneration and incentives	24	25	15	19	17	15	15	14	16	15	15	15	13	19	
	5 System integrity	24	24	14	16	19	15	15	15	17	14	20	17	11	15	
ETHICS	6 Moral DNA of the organisation	26	29	17	15	17	16	19	20	20	23	26	26	15	15	
	7 Theft, fraud & corruption	18	26	14	12	17	14	17	15	20	0	24	26	11	8	
	8 Anti-competitive behaviour	20	19	16	7	18	18	17	10	18	12	16	21	17	3	
LABOUR	9 Fair labour	5	5	22	26	17	18	6	2	2	22	8	13	20	27	
	10 Occupational health and safety	8	0	21	25	9	14	0	1	1	0	13	13	15	29	
	11 Talent attraction/development/retention	15	14	8	11	8	8	14	15	15	14	17	15	14	21	
SOCIETY	12 Community relations	3	6	21	27	15	15	10	15	12	4	2	1	16	25	
	13 Internal equity	22	22	18	20	16	18	14	1	9	11	14	12	17	21	
	14 Industry equity	22	22	21	23	17	18	14	5	11	16	11	14	19	22	
	15 External societal risks	23	23	20	20	15	20	19	14	15	17	21	21	16	20	
CUSTOMERS	16 Product suitability	27	27	8	2	27	20	20	16	14	24	5	27	23	0	
	17 Treatment of customers	28	26	0	0	25	16	19	17	17	26	30	16	9	2	
	18 Access to products & services	20	23	0	0	2	3	16	3	9	19	21	25	20	2	
	19 Consumer ID protection and data privacy	23	23	0	0	7	6	19	0	0	13	20	14	1	0	
ENVIRONMENT	20 Energy	5	5	23	22	14	15	9	17	17	8	10	9	18	24	
	21 Water	2	2	20	17	16	11	0	10	14	9	12	13	22	18	
	22 Materials and resources	0	0	6	0	9	2	1	8	8	0	0	12	22	0	
	23 Biophysical impact	0	0	24	20	12	12	4	15	15	12	4	11	20	26	
	24 External environmental risks	6	0	10	14	11	10	2	3	3	3	1	1	18	15	
	Average materiality (out of max 30)	16,3	16,4	14,4	14,7	15,0	13,7	12,7	11,3	13,1	12,8	14,0	15,5	15,7	15,3	

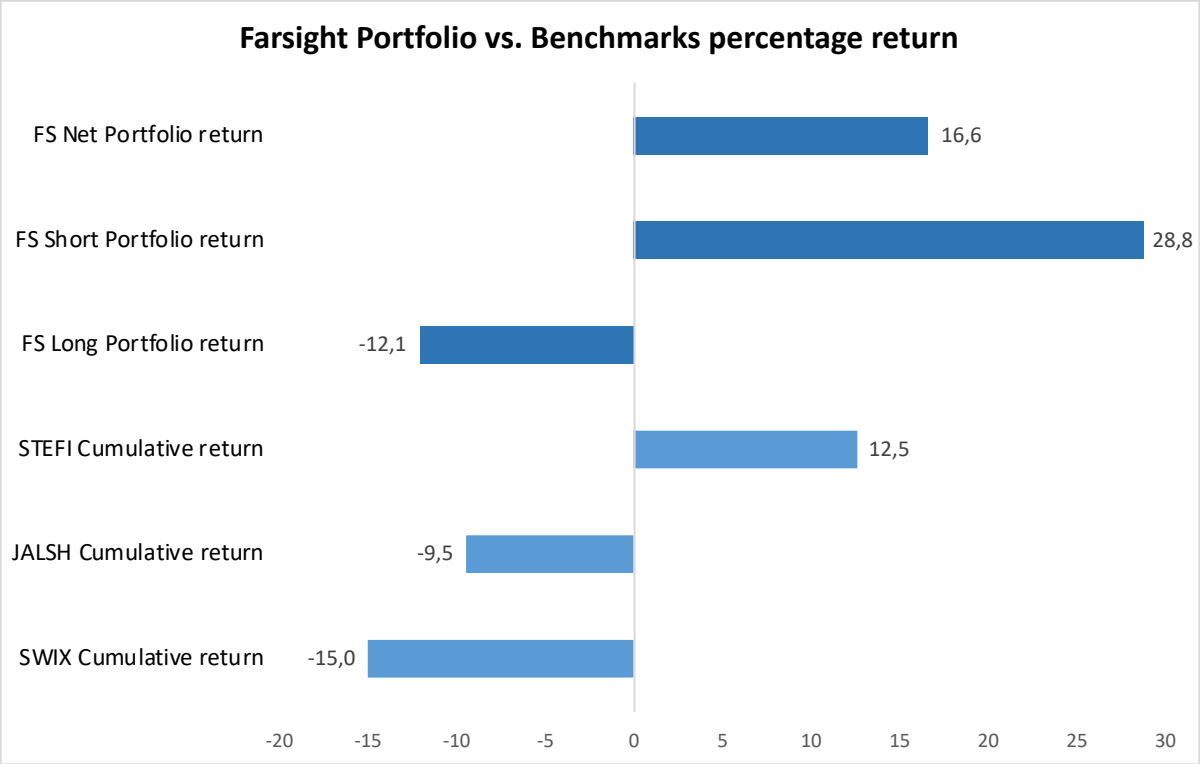
The accompanying table shows the average weighting for each issue at the industry level. In the FarSight model, each issue is weighted for its materiality to the individual company. For these weightings, see the industry summary pages in Annexure 1: FarSight review of top 100 companies on the JSE (2017-18)

Distribution of FarSight scores for the top 100 companies assessed

								BVT	5,0								
								GLN	4,9								
								FRS	4,8								
								ARI	4,3								
								BLU	3,1								
								DST	3,1								
								DCP	2,5								
								DTC	2,5								
								IDC	2,4								
								WHL	2,2								
								DBSA	1,9	OMN	14,2						
								SHP	1,6	TSH	14,1						
						RDF	-5,4	INL	1,3	OMU	13,6	IMP	23,6				
						TRU	-6,6	RBP	0,8	MTN	12,7	CPI	23,5				
						PIK	-6,8	SPP	0,6	CFR	12,6	AGL	23,4				
						DBSA	-7,0	SLM	0,5	LNDB	12,1	NTC	23,2				
						RCL	-7,1	AVI	0,4	GRT	11,3	IPL	21,8	KIO	35,0		
						AIP	-7,3	ACSA	-1,0	LBH	10,6	TRNS	20,6	ESKM	29,2		
		MMI	-26,0			MSM	-8,1	ABG	-1,4	BAW	10,5	SGL	20,1	AMS	30,7		
		MRF	-28,7			TBS	-9,7	MRP	-1,9	S32	9,4	CLH	19,9	BIL	26,9		
		ACSA	-29,3			IDC	-10,0	APN	-2,6	BTI	9,3	700	19,6	NED	26,5		
		ASC	-29,4	RFG	-15,4	SOL	-10,7	AFE	-2,9	OCE	8,9	LHC	19,3	HMN	26,1	LON	42,7
		NEP	-30,1	CLS	-17,2	SNRL	-11,3	NHM	-3,0	MDC	8,7	ACL	18,9	SNT	26,1	EXX	38,8
		NRO	-30,8	SPG	-17,9	SUI	-12,1	TON	-3,6	NPK	8,5	NPN	18,5	MNP	25,4	SAP	37,2
FFB	-38,8	ROC	-31,3	HYP	-21,9	TKG	-13,2	EOH	-3,9	TFG	8,2	CCO	16,8	ITU	25,3	NVO	37,0
RES	-40,7	ANH	-32,4	SNH	-24,5	PNR	-14,6	ASR	-4,7	BID	7,8	DSY	15,8	SBK	25,2	VOD	35,1

The accompanying graph shows how the FarSight scores are distributed between the worst (RES, -40,7) and the best (LON, 42,7), with the median score at +3,1.

FarSight portfolio vs. benchmarks (percentage return)



Calculation of scores

The returns for each of the counters in the portfolios graphed alongside were calculated from the date of the FarSight assessment for each industry. Twelve industrys were covered at two-month intervals, starting in the last quarter of 2016. The same inception dates were used for the counters making up the benchmark portfolios. For both the long and short FS portfolios, counters were weighted by their FarSight score alone. Thus, companies with high leadership maturity (positive FarSight scores) contributed proportionally more to the FS Long portfolio performance, while companies with low leadership maturity (negative FarSight scores) contributed proportionately more to the FS Short portfolio performance.

Conclusions drawn from the first application of the FarSight model

The FarSight model may serve as a hedge against down-turns in the market

In a rising market, all-share and shareholder-weighted indices should outperform cash as economic conditions make it worthwhile to invest, rather than save. The rising tide generally floats all boats. In the falling market experienced on JSE over the past two or more years, cash (as represented by SteFI in the graph above) has returned 12,5%, against losses of -9,5% and -15,0% for the JALSH and SWIX respectively.

The -12,1% returned by the FS Long Portfolio, shows that leadership maturity, on its own, is no defence against a falling market. On the other hand, the FS Short Portfolio shows that, on average, corporate leaders showing less maturity are far more likely to be exposed when the market turns. False promises and deceptive reporting can lead quickly to destruction in goodwill and stakeholder capital when investors lose confidence in the market.

The FS Net Portfolio return of 16,6% illustrates that investing purely on the basis of strength of leadership maturity, may be a sound hedge in a market downturn.

Considering that the FarSight model has not had the opportunity to be tested in a market up-turn, we cannot draw the conclusion that companies with higher leadership maturity would out-perform companies with less leadership maturity in all circumstances. For example, a case could be made that in fast-growing industries, such as the tech industry, companies with highly entrepreneurial leaders are more likely to outperform their peers. Mark Zuckerberg, the CEO and founder of Facebook, invested the resources of his company on the positive societal values to be gained from the social media industry, thereby beating out competitors for market-share. If Facebook had been, for example, a subdivision of a company with a more mature governance structure, it is possible that its leadership may have diverted resources to ensuring checks and balances, such as assuring regulators of the sustainable development of the social media industry. Company growth may have been less spectacular and possibly allowed for another, less scrupulous competitor to dominate the market.

The FarSight model as a guide to investing in leadership maturity

The FarSight Portfolio returns against the general market benchmarks further revealed a high correlation between companies that fell as a result of ESG factors and companies that FarSight had rated as having a poor response to their most material issues. Following is an analysis of the worst eight companies as rated by FarSight:

Company	FS Score	Market performance	Reason for FarSight score
			Reason for market performance
Resilient	-40,7	-56%	Dismissive governance, lack of disclosure re conflicts of interests re cross-directorships
			Top investors called on board to probe allegations of share-price manipulation
Fortress	-38,3	-66%	Dismissive governance, lack of disclosure re conflicts of interests re cross-directorships
			Top investors called on board to probe allegations of share-price manipulation
AB Inbev	-32,4	-31%	Immature reporting on product stewarship
			Post merger debt burden and decline in sales as a result of supply constraints
Nepi-Rockcastle	-30,8	-50%	Dismissive governance, lack of disclosure re conflicts of interests re cross-directorships
			Top investors called on board to probe allegations of share-price manipulation
Ascendis	-29,4	-79%	Largely dismissive reporting on customer issues, ethics and governance
			Loss of investor confidence in major shareholder Coast2Coast, re potential conflict of interest with minority shareholders
Merafe	-28,7	-6%	Perfunctory reporting, no response to potential community challenges
			Slight dip in production from maintenance interruptions

MMI	-26,0	-12%	Reporting on customers misleading, potentially self-deluding
			Poor management of crisis over insurance claim
Steinhoff	-24,5	-98%	Near complete absence of reporting on the building of relationships with stakeholders
			Fraudulent dealings by directors result in refusal by auditor to sign off financials, sparking collapse in share price

On the other hand, amongst all the companies that were scored positively for leadership maturity by FarSight, very few suffered a fall in share price as a result of ESG factors. In these cases, the ESG factors had been identified in our research and noted as a residual vulnerability, i.e. although the company responded maturely to the risk, there nonetheless remained a vulnerability to the issue. An example of this was Tencent, where the main ESG risk identified was the external societal risk associated with the Chinese government's determination to take control of its citizens' online activity. The share lost 20% of its value during 2018.

We can therefore conclude that if investors were to use the FarSight Rating to shift their capital more towards companies with mature leadership, then not only would shareholders be protected from resulting losses, but a strong signal would be sent to the market to pay more attention to ESG concerns, which would ultimately be to the benefit of society.

The FarSight model as a guide to emerging societal issues

In the process of researching societal issues, we identified a number where there appears to be a mismatch between society's view of their materiality and the underlying scientific evidence for materiality. For example, scientific evidence suggests that the global obesity epidemic, metabolic diseases and diabetes are all largely caused by the high proportion of processed carbohydrates and sugar in the western (and now global) diet. However, until society, through the press, advocacy groups and emerging legislation, makes this into an issue material to the business value proposition for food producers, it remains a rational strategy for these food producers to either ignore the evidence, or even continue to deceive consumers regarding the health benefits of the foods they produce.

The FarSight model can serve as a place where this conversation can begin and become noticed by all stakeholders. While FarSight cannot raise the materiality of product suitability in the food industry to crisis proportions while the issue is not yet judged by society to have reached this level, by nonetheless raising the consciousness of the issue through our materiality analysis, all stakeholders can begin to take notice. Advocacy groups may be encouraged to engage in the debate and companies with more mature management would begin to discuss the issue and report more insightfully. By looking ahead more strategically, these companies would begin to divert their production lines towards more healthy foods and away from foods with high sugar content, thus benefiting societal health.

The role that FarSight plays in this dynamic is to act as an early warning signal of situations that could potentially become crises. This occurs in two ways: First, by identifying issues that become the subject of attention, debate and ultimately response; second, by rating companies' responses to emerging issues, those that score poorly come under scrutiny by the asset management community. They, in turn, engage with the management of the companies concerned and put pressure on these companies to focus attention on issues well before they become crises.

The future of the FarSight model

The long-term plan for the FarSight's model is to develop it and grow its acceptance across not only emerging markets, such as South Africa, but also across markets world-wide. The ultimate aim is for FarSight to become recognised as the global standard rating of Leadership Maturity, indicated by its being adopted by the majority of the world's sovereign wealth funds. In order to achieve this scale, the model will have to be codified onto a web-based, platform, similar to a wiki, with the facility to crowd-source the wisdom of analysts from across the world, and curated by industry experts. In this way, society itself, facilitated by FarSight's model, will vote the most mature leaders to the most responsible positions. As a consequence, the positive power of capitalism to find solutions to societal challenges will be validated, while its excesses, such as the wage gap, labour exploitation, and rent-seeking behaviour, should show significant signs of being curbed.

Additional information on applying the FarSight model

Interpreting FarSight scores

- A company that responds with a high level of maturity to its serious challenges/ threats/ risks/ vulnerabilities will achieve a high FS score
- A company that responds immaturely to its serious challenges/ threats/ risks/ vulnerabilities will get a poor FS score, regardless of how well it responds to issues not relevant to the business
- A leadership team that presents clearly the importance of the issue and has a strategy in place to deal with the issue, backed up by well-defined milestones for achieving performance targets, would indicate a strong leadership culture. Such a leadership team could be relied upon to make responsible decisions and take real action to secure value generation into the future, not only for issues of concern to society, but also for traditional financial and operational issues.
- At the other extreme, a company that dismisses an issue as being less material (than assigned by FarSight), and then puts out misleading information about its performance (e.g. window-dressing), would score negatively, thus contributing to an assessment of an ineffectual leadership team that cannot be trusted to identify material issues well ahead of time and deal with them strategically and effectively.

Clearing up misconceptions

- FarSight does not penalise companies for being in so-called 'sin industries', rather we judge how responsibly the company responds to the vulnerabilities and risks of being in that industry
- The FarSight is designed to resist being 'gamed' by ticking the box with boilerplate policies and basic compliance. Positive scores can only be gained by sincere, decisive, measurable action
- FarSight aims not to be fooled by virtue signalling – the stiffest penalties (negative scoring) are assigned to insincere and misleading pronouncements and reporting
- The FarSight score is not a measurement of company impact on society/ environment, rather it is a measure of how responsibly the company responds to its challenges in the interests of its shareholders

- FarSight does not form an opinion based on indicators of past performance, rather, it looks for leading indicators of future performance. The FarSight score is itself an indicator of the strengths of the company's resources and relationships that, with good strategy, will take the company forward
- FarSight's assessment model is not not an arbitrary home brew, It applies internationally accepted ESG criteria (engagement, materiality, reliability, transparency, accountability, etc.), in turn based on financial accounting standards

How is FarSight different?

By measuring maturity of response, rather than policies and impacts, FarSight solves the problem that has long faced the ESG industry, namely that there is a poor correlation between ESG impact and operational and financial (and thus investment) risk. Realistically, policy response achieves no more than ticking boxes. Thus, traditional ratings score companies in 'dirty' industries facing serious challenges poorly, often in sharp contrast to the investment case. Such analysis discourages companies from taking on environmental or social risk.

FarSight, by contrast, will score a company highly if an excellent leadership team acquires a dirty, poorly run company and sets about addressing its challenges. A high FarSight score would thus indicate a mature management better able to take on the risk responsibly and unlock value.

What is leadership maturity?

Mature leadership, achieving high FarSight scores, are more likely to:

- Look further ahead and foresee:
    - potential shifts in market dynamics
    - threats from emerging legislation
    - societal concerns raised by their customers and other business partners
    - opportunities to innovate or position the company ahead of competitors
- convert potential threats to the industry into opportunities to win margin/market share, or save costs through efficiencies/increased productivity
- reap the benefits of a more reliable, engaged and fulfilled workforce

- build companies with sustained-ability to return profits over the long term

Guidance for the securities analyst

This analysis serves a number of purposes:

- a measure of the quality of a company's leadership
- a guide to non-financial issues emerging now, that may have an impact on the value creation ability of a company in a three- to five-year window
- a list of key issues when engaging with company management, or when delivering opinions around proxy voting
- a more valid application of ESG analysis than standard models that measure impact only, such as emissions, CSI spend, etc.

By applying this analysis, asset managers can exploit the integrated reporting industry's newly adopted approach to the concept of responsible business. This recognises that by taking into account the interests of society only where relevant to business, and responding with effective business strategies to these challenges, the company is better placed to serve the long-term interests of its shareholders.