

Chapter 6

Integrated Management for Capital Markets and Strategy: The Challenges of “Value” Versus “Values” Sustainability Investment, Smart Beta, and Their Consequences for Corporate Leadership



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6.1 Introduction

While discussion regarding sustainability strategy has largely focused on the integration of financial and non-financial data, a silent revolution in the financial asset management markets has been occurring. New techniques are emerging, such as smart beta analysis, that enable far-reaching recommendations on risks associated with a company’s strategies and leadership. As sustainability becomes part of mainstream asset management, corporations must re-examine their approach to strategic and organisational change in order to engage with an increasingly active and demanding investor community. At the same time, they must adopt an integrated management approach as they negotiate the cascade of new sustainability strategies. External analysis of performance levers and internal performance management processes have to align to ensure that ESG (environmental, social, governance) reporting is not simply a communication exercise, but an integral part of target-setting and monitoring that is anchored to leadership responsibilities through the company.

To navigate these changes, companies must develop and align two integrated process loops (see Fig. 6.1). First, the information requirements of rating and ranking organisations, as well as the asset managers themselves, must be addressed. As increasingly sophisticated techniques are used to isolate specific ESG risk or opportunity factors, the demands placed on companies to steer, manage, and align information flows will increase. This will require a more active process than the current one-way information flow, which only satisfies rating and ranking data requirements, in order to

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105

Financial risk and value driver loop

Strategy operationalisation loop

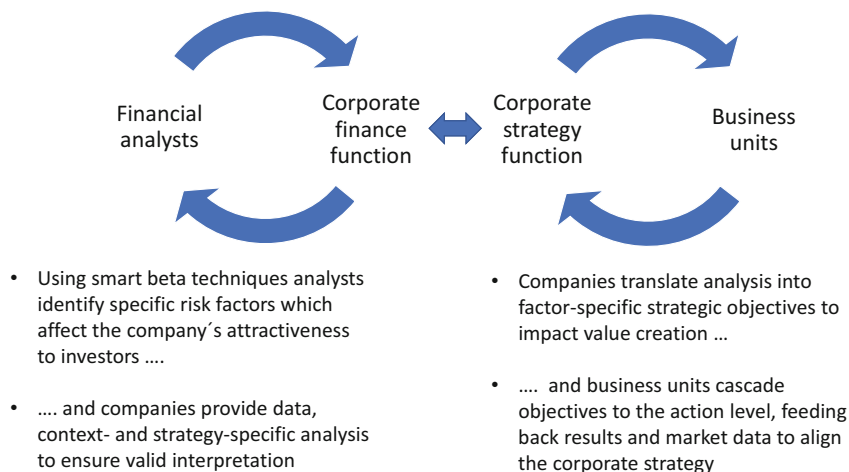


Fig. 6.1 Double loop model

engage capital market actors in a dynamic dialogue on material factors and company objectives and actions. Second, an equally important and challenging process loop will integrate external and internal financial, strategic, and sustainability objectives in a common, operational framework. This will facilitate multiple objectives throughout the organisation, driving alignment, focus on objectives, and robust reporting and feedback to highlight enterprise-wide value creation.

The first section of this chapter addresses developments in the capital markets and the consequences for corporate management.

6.2 New Developments in Sustainable Investment

Demand for sustainable investments¹ has been building, largely driven by institutional investors (Kasemir, Süess, & Zehnder, 2001), and has led to the development of an ever-increasing number of instruments and products that cover almost all geographies, sectors, and investment strategies (Laville, 2017). Over time, these classes of investment have proven to be largely comparable in terms of risk and

¹Sustainable investments are defined here broadly as socially responsible investments that take account of environmental, social, and governance issues (ESG), recognizing however that the term has been widely interpreted in the literature. For further discussion, see for example, the Equator Principles for a set of criteria applied by banks for investment due diligence purposes, or for a narrower definition of sustainable investment, Impact Investment, which demands clear targets for ESG project impacts.

return and in some cases outperform (Clark, Feiner, & Viehs, 2015). In addition to offering an opportunity for effective portfolio diversification, they allow investors to address three aspects of sustainability: the implementation of sustainable business objectives and processes; external sustainability compliance requirements and internal policies for sustainability; and improving their own risk/return profile (Zanker, 2017). The result is that companies are now faced with increasingly complex communication and management challenges regarding investor relations.

Managers recognise that legislative pressure regarding new regulations is increasing, and additional shareholder-driven topics are emerging, such as compulsory voting by shareholders on executive compensation. Additionally, stakeholder pressure is evolving, both from NGOs addressing environmental or social concerns and institutional investors looking at governance and responsible management practices such as compensation (Laville, 2017). This continually changing situation raises the question of how businesses should best address these issues in order to balance environmental, social, and governance (ESG) behaviour with commercial and investment performance.

6.3 ESG and Financial Investment

Managers are now confronted with investors who are using ESG data to analyse and make recommendations on stock selection. As this impacts both share price and volatility, understanding how ESG factors influence performance—economic company performance, cost of capital for companies, and stock performance—is vital. To understand the degree to which ESG factors have an economic impact, a short review of developments in financial theory is helpful, drawing on robust academic studies rather than commercially biased investment advisor recommendations.

Financial theory (e.g., Elton, Gruber, Brown, & Goetzmann, 2009), whether rooted in classical finance or more modern factor models (e.g., Fama-French three factor²), assumes that returns on financial assets are driven only by non-diversifiable financial risk. Expected returns are thus driven by factor exposure, and models are developed to find the optimal level of diversification of a portfolio for a given expected return. This presents investors with a paradox concerning sustainability: namely, that excluding certain asset segments for purely ethical or ESG-related arguments would theoretically deliver a sub-optimal portfolio that takes higher risks than necessary for the desired return level. To justify the inclusion of ESG factors in investment decisions from a theoretical standpoint, identifying circumstances where this factor information would be beneficial and could potentially *reduce* risk is necessary.

The first argument for ESG investment addresses the governance issues associated with the *agent-principal* problem. In the context of investment, this problem

²The Fama–French three-factor model is a model designed by Eugene Fama and Kenneth French to describe stock returns, encompassing (1) market risk, (2) the outperformance of small versus big companies, and (3) the outperformance of high book/market versus small book/market companies (Fama & French, 1992). However, the size and book/market ratio themselves are not in the model. For this reason, there is academic debate about the meaning of the last two factors.

states that investors (principals) provide capital for companies (agents) who act on their behalf (Golec, 1992). From the perspective of the principal, good governance would ensure that the agent acts in their interest rather than his own. Thus, agency can be viewed as a cost that financial markets must efficiently price into investment decisions. Good governance would then be associated with higher return expectations, and empirical evidence exists to support this conclusion (Bauer, Guenster, & Otten, 2004; Cremers & Nair, 2005).

Raising environmental and social standards within a company might be expected to incur higher costs, and if not associated with an additional revenue stream, lower profitability, and lower return on capital. Additionally, if externalities are zero, raising the cost of compliance on social issues and thus reducing profitability might appear to negatively affect social benefits, since, for example, less tax on profit might accrue. However, if externalities will be transferred back to the originating company through stakeholder pressure, legislation, or litigation, these risks must be priced accurately. If markets fail to include these factors, then inclusion by investors may lead to superior return expectations. Certain studies correlate environmental performance with superior stock performance (Derwall, Gunster, Bauer, & Koedijk, 2004; Dowell, Hart, & Yeung, 2000), though the scale of climate change and its possible impact on investor decision-making and government policy may go far beyond current empirical examples.

Reputational concerns are the most frequently applied company-level levers for including social factors as drivers of business performance. Though organisations are complex systems, not simple input-output mechanisms, empirical evidence suggests correlations between customer and employee satisfaction and stock performance. And again, if financial markets fail to correctly price the impact of these factors, then the supposed costs of a company's social policies might generate superior returns (Edmans, 2011; Edmans, Li, & Zhang, 2014).

Another important topic to address is the impact of overall ESG scores and stock prices, as funds incorporating only ESG stocks are easily benchmarked against peer groups. Khan, Serafeim, and Yoon (2015) argue that this may be addressed by assessing only material ESG topics when developing aggregate scores for individual companies. They believe that by adopting a common accounting standard such as SASB³ for materiality within a given industry they will achieve a greater degree of robustness. In the second part of this chapter, we argue that an external assessment of ESG factors needs to be matched with corresponding internal policies to ensure alignment and implementation. Strong empirical evidence will illustrate that good policies and practices on material ESG topics are associated with outperforming other ESG companies.

Additionally, Amel-Zadeh and Serafeim (2017) note in an empirical survey that senior investment professionals from so-called "mainstream (non-sustainable investment) funds", also consider ESG topics in investment decisions as they consider it financially material to investment performance, using the data to assess risk rather than a company's competitive positioning.

³See Chap. 13 for more information on the SASB standard and a comparison to the GRI standard.

It is also important to note that factors extend beyond the investment policies of commercial organisations. As legislation and regulation evolves, accounting standards will integrate and interpret these requirements in their recommendations, continuing a tendency for international or supranational institutions to negotiate or legislate for sustainability policies which will impact commercial organisations. For example, in May 2018 the European Commission presented a package of follow-up measures for its financing sustainable growth action plan, including proposals aimed at establishing a unified EU classification system of sustainable economic activities (“taxonomy”), improving disclosure requirements on how institutional investors integrate environmental, social, and governance (ESG) factors in their risk processes, and creating a new category of benchmarks to help investors compare the carbon footprint of their investments.⁴ China has recently strengthened its anti-pollution policies in the light of targets being significantly exceeded, and has introduced a 3-year plan aimed at achieving 80% “pollution-free” days by 2020. In the past, China has demonstrated that along with targets, the authorities have ordered certain industries, for example cement or steel plants, to reduce or cease production, if certain trigger points are exceeded. For commercial activities, this raises the question of whether this motivates individual firms to invest in pollution reduction, if they can also be penalized for the behaviour of their competitors, who fail to invest.

Further research (Nagy, Kassam, & Lee, 2015), albeit from a commercial source, examined a so-called ESG-tilted global equity portfolio measured against a comparable global benchmark. It distinguished multiple factors known to drive performance, such as size and value of the company as well as ESG factors, providing a means of empirically measuring performance on individual factors. The paper argued that while high ESG performance was associated with other company characteristics, certain sustainability practices also contributed to superior returns. Statman (2000), however, failed to establish superior performance of ESG funds compared with conventional funds. This may be related to conventional funds using stock-picking fundamentals behaviour that may partially mirror ESG funds, or that the US-based funds examined were using less sophisticated ESG techniques, such as exclusion based on previous events or elimination of “sin” stocks (e.g., tobacco or firearms). Managers should note that techniques now exist to identify and isolate specific factors related to ESG issues, enabling a more sophisticated assessment of ESG policies within the firm and an evolution of ESG reporting from a communication exercise to a broader management responsibility.

Lastly, practitioners should be aware of recent research that claims outperformance of ESG stocks, including Clark et al. (2015), though to what degree remains a subject of debate.

In summary, as Zanker (2017) and Schulz (2017) note, significant academic evidence supports that ESG factors influence returns of financial assets. Implementing ESG factors into management practice is associated with positive returns, but also with possible negative effects, such as economic costs, if actions fail to address sources of

⁴Retrieved July 18, 2018, from ec.europa.eu/info/publications/180524-proposal-sustainable-finance_en

risk. A plausible scenario is that as further cycles of regulation occur and the volume and variety of ESG assets increases, the focus of management attention will shift to better and more transparent information flow between companies and investment bankers and raters, and to ensuring integrated and aligned management practices within companies for robust delivery of strategy related to ESG topics. Both investors and companies could face significant economic risks with a poor ESG performance, but sound, well-implemented policies can be expected to benefit both.

6.4 The Emergence of “Smart Beta” and Factor Investing

Faced with the choice between actively creating a portfolio of investment elements (based on the assumption that stock prices do not always reflect all available information) or passively re-creating a portfolio that reflects the structure of a given index of shares (building on the assumption that all market information is already embedded in the prices), investment professionals have long sought a method that combines the benefits of both strategies (Kula, Raab, & Stahn, 2017).

This approach, commonly labelled “smart beta” investment, strives to obtain alpha (the excess return of the fund relative to the return of the benchmark index) to lower risk or increase diversification at a cost lower than traditional active management but marginally higher than straight index investing. In this sense, smart beta is simply the integration of the [efficient-market hypothesis](#) (passive) and [value investing](#) strategies (active). The goal of smart beta is to define a set of investment strategies that offer alternatives to traditional index definition practice. To do so, smart beta techniques identify and isolate specific investment information factors or create transparency concerning market inefficiency in a reproducible and transparent fashion. This approach reflects the increasing need among investment professionals to identify specific factors that enable more complex and direct decisions concerning portfolio construction and risk, and to model the impact of diversification. The increased popularity of smart beta is linked to a desire for portfolio risk management and diversification along factor dimensions, in addition to improving [risk-adjusted returns](#) versus benchmark indices. Thus, smart beta can be considered a further development of the foundations of Modern Portfolio Theory (Markowitz, 1952). However, as will be demonstrated, it generates a more profound impact in investors’ decision-making involving ESG topics. Managers should note that this is related to the increase in transparency of factor investing (including ESG factors) and the speed with which the popularity of the technique has made financial products dramatically more accessible and applicable. Without developing a method to allow ESG issues to enter the mainstream of financial investment, the mathematical techniques that isolate specific factors in portfolio decisions provide the basis to do so. And as the impact of ESG issues becomes ever more important, the application of the technique will become a de facto standard.

To understand the consequences, exploring the details further is necessary. To live up to their definition, operational smart beta strategies would need to both passively imitate indices, while integrating alternative weighting schemes such as

volatility, liquidity, quality, value, size, and momentum. In doing so, smart beta strategies are constructed in the identical fashion to typical index strategies, with set and transparent index rules. They differ from standard indices, such as the S&P 500, FTSE 100, and others, in the way they address factors within the market that offer opportunities for higher performance. We note however that the alternative weighting schemes are transparent and theoretically reproducible in principle, meaning that all information is freely available and that assumptions and models are open to scrutiny (e.g., Kahn & Lemmon, 2016).

Since smart beta can be applied to a multitude of investment possibilities, there is no unique method to create a corresponding investment strategy, as goals for investors can vary based on their needs. However, the more complex underlying methods become, the greater the need for investment professionals to create an underlying argument for value creation. This argument must be economically intuitive to the buyer, and comprehensible and actionable for corporate management, who must now address analysts' conclusions or risk the consequences from the financial markets. Thus, equity smart beta may redress inefficiencies inherent in market-capitalization-weighted benchmarks. In other words, these financial products address mispricing created by other investors who have ignored particular classes of risk, such as ESG-related factors, in the search for short-term performance. As their arguments regarding failure to consider specific risks reaches the financial analysis mainstream, then addressing ESG reporting as a communication issue alone will fail to recognise the profound changes that are taking place. A recent survey of the asset class by a commercial source (FTSE Russell, 2017) showed that more than half of the survey sample had introduced smart beta techniques to complement existing passive strategies, rising from 37% the previous year. And it is not surprising that many of these smart beta strategies include ESG factors in their analysis.

In summary, it can be concluded that smart beta investment practice is growing significantly, and that the advantages to investors relate to the ability to isolate specific factors, the transparency of the approach, and, as a prerequisite, the availability of the market information to reproduce or simulate the results. The consequences for management, as previously noted, are twofold. First, they need to understand and manage data flow to investment analysts, raters, and rankers, which embrace both regulatory and technological developments (for example XBRL reporting mark-ups). Second, to ensure that the external perceptions of their organisation reflect internal realities, corporate management teams should align external communications with internal management practices. This is addressed in the second section of this chapter.

6.5 Be Prepared: The Impact on External Corporate Reporting

Since smart beta analysis focuses on specific factors when assessing the risk of a given investment, examining the current flow of information from corporations to investors is appropriate. While these information flows are country-specific with

clearly defined reporting requirements, the reality is that investors find themselves juggling multiple external reports that are required by regulatory authorities—reports that do not necessarily provide a unified and integrated view.

Financial reporting focuses investor attention on material aspects of corporate performance. But recent developments related to non-financial information raise the question of how coherent these information flows have become. Analysis by Gardner (2018) sampled major US companies and compared public financial reports (e.g., 10-K)⁵ and sustainability report materiality topics. The research reviewed the material risk factors that these organisations communicated for 2017 via the two types of reports. In the case of the 10-K reports, material risks were discussed in a sub-section of the introductory assessment of business performance. These business-related risks were compared to the external sustainability reporting materiality factors communicated by the same company. Although companies used different frameworks, materiality encompassed the perspectives of both shareholders and stakeholders and took a long-term view of value creation rather than focusing on short-term profit maximisation. In the process of value creation, assuming that ESG factors will influence profitability is reasonable, and that assumption and causal relationship should be made transparent.

The analysis hypothesized that the risk factors disclosed in financial reporting would intersect with factors identified as being material in the corresponding sustainability reporting for the identical period. The research sample selected ten major corporations in the United States covering a broad variety of industry sectors, including technology, telecommunications, retail, heavy industry, and life sciences. Financial reporting identified a range of 15–20 risk factors per company, while sustainability reporting identified 8–35 different risk factors. This reflected the different ESG frameworks or approaches applied, although the sample generally showed a higher number of risk factors than seen in financial reporting. From an investor perspective, based on an interpretation of the efficient-market hypothesis, we might reasonably expect a high correlation between those risk factors listed in financial reports and those communicated in sustainability reporting.

However, for the period chosen, the factors found in both reports for the same company varied between 0 and 4, with the majority reporting only two common factors between both reports. Assuming the validity of both financial reporting and the sustainability materiality analysis, this raises the question of why such divergence occurs. As previously discussed, the application of smart beta techniques has resulted in an integration of ESG issues with other factors, leading to the emergence of a single perspective for investors that combines financial, business, and ESG data. It is therefore ironic, and should give managers pause for thought, that the overlap between issues described as material in publicly communicated financial reports and sustainability material issues is so modest.

⁵A Form 10-K is an annual report required by the U.S. Securities and Exchange Commission (SEC) that gives a comprehensive summary of a company's financial performance.

6.6 The Problems of Assessment of Sustainability Data

Diverging data within the same company illustrates the challenges facing the organisations that assess and judge sustainability data. Practitioners should be aware that although a limited number of agencies dominate the ratings industry in the area of sustainability (e.g., MSCI ESG, Thomson Reuters, Sustainalytics, or RepRisk, as listed on edp.com)⁶, the data is processed and analysed by numerous specialised companies, each with its own strategies, methods, and standards. These companies are hired by corporations that are confronted with a lack of information on how to assess their own organisations. As noted previously, to use data efficiently for smart beta analysis by both external analysts and corporate data sources, accessibility, and transparency is crucial to identify potential areas for out-performance. In other words, for companies to understand and act on the perception of risk by ratings agencies, they must be able to reproduce and operationalize the conclusions drawn.

It is ironic that the rating and ranking agencies that complain of the lack of transparency in corporate reporting often lack transparency themselves. This is partially related to the commercial nature of their business and the demand for confidentiality of intellectual property, but it is also due to the failure of regulatory authorities to set adequate standards for alignment of data and reporting requirements. This should not be read as a criticism of the analytical process of the agencies per se; two institutions analysing the same data pool and making divergent recommendations as a result of their underlying assumptions, strategies, and tactical decision-making is legitimate. However, the increasing number of ESG ranking and rating agencies, combined with the demand for ESG-related financial products, has already led to a wide variety of organisations offering assessment of ESG-related risk based on their own, often confidential methodologies—which further contributes to the opaque nature of summary performance information. For smart beta techniques to be fully comprehensible to both investors and corporations, having both data and methods readily available and results reproducible would be optimal in order to test the underlying economic logic. As this is increasingly no longer the case, problems emerge for corporations. As Bailey (2017, nb.com)⁷ remarks in an overview of the current situation, they have yet to see a rating agency fully disclose the methods used for ESG assessments and criticise the failure to address seriously the needs of investors. This chapter argues that this is only half the narrative. Without clarity of methods and conclusions, there is no closed loop between agencies and corporations, with all the consequences that this implies for effective management.

As Eccles and Stroehle (2018) note in their discussion of the migration of ESG performance metrics from a “value” to “values” investment paradigm, as both demand and supply for information about companies’ sustainability performance continue to grow, investors complain that the ESG data universe is getting too complex and confusing. Evidence even shows that rating agencies and data vendors

⁶Retrieved June 19, 2018, from edp.com/en/sustainability/economic-dimension/sustainability-indexes/esg-rating-agencies

⁷Retrieved June 19, 2018, from nb.com/pages/public/global/insights/rating-the-raters-on-esg.aspx

display very little agreement on how to construct and use ESG measures. They argue that consumers of analysis and companies who supply data should be aware of the positioning, norms, and values of raters and rankers. This chapter asks that while some rating agencies remain true to their ethical investment origins, there is a marked trend toward establishing more sophisticated analytical techniques than pure ethical scoring models, thus reinforcing the evolution to a “values” approach, as sustainable investment enters the mainstream.

Managers however should be aware of the methods used by rating agencies regardless of their approaches, and should note their possible shortcomings. Assessments of ESG risk rely on the willingness of corporations to share their data, generally beyond regulatory requirements. The burden on companies is growing, driven by the multitude of methods, including questionnaires, online surveys, and qualitative interviews, used by ratings and ranking organisations and, increasingly, financial institutions. The emerging problems with this approach are threefold. First, ensuring that communication to external investors and their representatives remains consistent, while also reflecting dynamic developments within the business environment and within the company, is challenging. It is reasonable to expect that fulfilling this fiduciary duty will become increasingly demanding. Second, there is the issue of the completeness and validity of data gathered, scoring models applied, and conclusions drawn. This covers aspects both mechanistic (for example, how agencies deal with missing data in their assessments) to systematic (for example, the transparency that they offer concerning the identification of key levers within their risk models). Last, the increasing interest of the investor community in the integration of financial and ESG data in stock assessment and portfolio models places managerial responsibility on the corporation to design, implement, and monitor a performance management system for strategic and operational target-setting and control that aligns and integrates financial and non-financial data. Should this be ignored, the company risks reputational damage if negative ESG-related events occur and faces strategy delivery challenges if it fails to reflect a balanced risk assessment in its internal target setting and monitoring processes.

6.7 Combining Smart Beta and Sustainability Investment Methods

Although they share underlying analytical challenges, smart beta and sustainability reporting have emerged as separate approaches with their own literature, technology, and methods. However, developments suggest that areas of consolidation are attainable. After 15 years of the asset management industry offering products that are targeted toward ethical ESG motivation factors, more recent approaches combine commitment to ESG with more sophisticated smart beta techniques, as the aforementioned FTSE Russell [2017](#) report confirms. Combining parameters of sustainability exposure with corresponding risk premia by factor exposure represents an integration of “values” with “value” investing. Nevertheless, the primary motivation

of the providers (Zanker, 2017) is typically avoidance of long-term risk rather than any ethical grounding, although this does not prevent buyers from selecting the product for ethical reasons. The FTSE Russell report argues that although the product class originally focused on the retail market (individuals choosing this asset class for ethical reasons), the increasing awareness of the economic drivers associated with sustainability, as well as the reality and growing risks for legacy companies involved in industries transitioning to the green economy, have driven the focus of ESG smart beta toward the institutional market.

For practitioners, understanding how ESG factors integrate with smart beta techniques is critical. To that purpose, a straightforward example of a typical integration methodology is appropriate. The example chosen, taken from a Deloitte publication (2017), is explicit in its description of method, and its authors have no conflicts of interest related to the provision of financial products. It presents one possible approach to incorporating ESG selection criteria based on values or beliefs with the factor identification techniques offered by smart beta, making portfolio construction simpler and the setting of priorities more direct.

A three-part approach is taken: First, controversy screening is used to eliminate industries that are viewed as unacceptable to an ESG-related selection; second, within industry peer groups the composite ESG-scores are calculated and the bottom 30% eliminated; last, the smart beta allocation techniques are applied to select stock to match the desired portfolio profile. This approach is worth examining in more detail. The argument is made that ESG data can be used to filter and exclude unsuitable companies from the potential investment universe prior to the commencement of any smart beta-driven financial analysis. The elimination of particular potential investments, or the development of portfolios around customer-specific criteria, is not unusual; indeed, it represents the purpose of the analytical toolset. The stated aim is to identify organisations within a market segment that present the same risk and factor exposure. The key assumption is that the information available allows for consistent and accurate assessment. As was previously noted, the available data provided by ratings and ranking agencies is often incomplete or summary in nature, and thus does not always fulfil these requirements.

The example described here uses performance data from 2009 to 2016 from US companies selected with the exclusion criteria described above, and representing a range of industries. The timescale chosen is based on the availability of ESG data, but it should be noted that this period coincides with the most profound economic crisis since the Great Depression. This may reasonably be expected to have an impact on investment required to maintain or expand ESG-relevant activities.

It is useful to examine the consequences of industry exclusion, as the analysis makes service industries inherently more attractive than manufacturing. The authors are concerned that this elimination of entire industries might deprive the investment pool of sectors or segments that are essential to maintaining the economic validity of the overall construction. Maintaining industries within the pool, despite overall ESG concerns, maintains the comprehensiveness of the pool and keeps options for market segments, risks, and diversification intact. However, it questions the degree to which ethical guidance can be adhered to and increases the risk of inconsistent compromise solutions.

The authors try to address this industry exclusion dilemma through a screening process for individual firms. Those industries that remain in the sample are subject to what is termed “controversy screening,” which excludes companies associated with severe and averred contestable behaviour and opts for firms with proof of responsible management. This approach, while frequently applied, appears not without its own difficulties. First, the contestable behaviour must be based on publicly available information and require value judgement regarding whether it represents a level of severity to warrant exclusion. Second, it assumes that averred contestable behaviour is a reason for exclusion rather than an opportunity to improve management as a result of public controversy. Perhaps equally troubling, it assumes that a lack of publicly known negative incidents indicates optimal governance. Practitioners may draw their own conclusions as to the robustness of the techniques but they need to be aware of the approaches being used that may affect both their industry and their own company.

The approach taken attempts to address this criticism and uses the blunt instrument of removing the bottom 30% of each peer group. The argument is made that an aggregate score of all ESG criteria is sufficient to eliminate those companies that present a long-term risk. This has the advantage of ensuring that all selected market segments remain present, but only at the cost of an assumption concerning the inherent ESG characteristics of individual sectors. Thus, the remaining members of the pool are by definition not those with the most superior ESG scores. For example, the financial sector would lose half of its weight were the approach to eliminate individual companies regardless of sector. In doing so, the approach inevitably underweights possible structural risk and management behavioural profiles of certain industries. As the paper notes, one approach might be to exclude a greater number of specific industries from investment portfolios, as certain industries have different structural ESG scores, but this possibility is excluded for the arguments cited above. The authors then draw on further analysis which argues that the two-step approach has not changed the exposure to risk factors (Fama-French). They note that highest ESG scores are associated with low volatility, though they argue that the results are not a proxy for a volatility filter. Instead they suggest that it is simply a result of a bias toward larger companies.

The paper summarily describes a number of different smart beta analyses, with and without ESG scoring, and notes that these results confirm that the technique can provide similar improvements with the same risk profile to an ESG investor.

A careful practitioner reading of this study would note that the most interesting part of their analysis is that smart beta investment techniques may be better suited to address very specific sustainability objectives (for example, carbon-related industry-specific challenges) rather than applying the catch-all of ESG aggregate scores if they want to identify opportunities that combine ethical investment with financial out-performance. For managers, identifying these factors, whether related to changing legislation or technological developments, would result in a “smarter” and future-oriented strategic approach to integrating specific ESG factors into main-stream business planning and monitoring.

In conclusion, this section has argued that companies must develop and align two integrated process loops, the first of which addresses the information requirements of

rating and ranking organisations and the asset managers themselves. As techniques for isolating specific risk or opportunity factors, including ESG topics, become increasingly sophisticated, the demands placed on companies to steer, manage, and align information flows will increase. This, as has been discussed, will require a more active process than the current largely one-way information flow, which satisfies rating and ranking data requirements instead of engaging capital market actors in a dynamic dialogue on material factors and company objectives and actions.

This chapter now turns to the second, equally important and challenging process loop, which focuses on integrating external and internal financial, strategic, and sustainability objectives in a common, operational framework. The goal of this second process loop is to facilitate alignment, clear focus on corporate and business unit-level initiatives to achieve objectives, and a robust, timely series of reporting and feedback processes to reflect the dynamics of value creation in the enterprise.

6.8 From the Investor to the Corporation Perspective: The Impact and Challenge of Integrated Reporting

To mirror how financial investment markets address risk factors associated with ESG issues, this chapter now turns to the reaction of companies and the accounting profession to both increased economic volatility and increasing demands from stakeholders concerning governance, social, and environmental issues. Within this context, the reporting of annual performance has been the subject of sometimes aggressive debate (Adams & Simnett, 2011), and the traditional reporting model has been criticised from both a shareholder and stakeholder perspective, arguing that it fails to adequately assess risk and future performance prospects (Flower, 2014). As was noted in the comparison of typical financial filings (e.g., 10-K) and sustainability reports, improvements can be made to both the comprehensiveness and the level of consistency of corporate reporting, including those aspects that allow for scrutiny of long-term viability and sustainability—information that can potentially impact business performance.

These developments emerged within the context of business reporting toward the end of the twentieth century. Elkington (1997) is credited with launching the debate on alternative non-financial reporting frameworks with his “triple bottom line (TBL) framework,” incorporating profit, people, and planet. Yet he was criticised for failing to provide a robust framework that integrated alternate perspectives and allowed for more action-driven implementation (Owen, 2013).

De Villiers, Rinaldi, and Unerman (2014) and others have argued that current stand-alone reports, financial and non-financial, suffer from increasing process and content complexity, failure to make dependencies transparent, lack of focus on strategic levers, and apparent contradictions when information is presented without consistent links to business strategy, past performance, or future potential and risks. These criticisms were addressed by the International Integrated Reporting Committee [renamed as the International Integrated Reporting Council (IIRC) in 2012], formed

in August 2010 under the patronage of the Prince of Wales' Accounting for Sustainability (A4S) Project and the Global Reporting Initiative (GRI) to create a globally accepted framework for "accounting for sustainability" (see Eccles & Krzus, 2010, 2015, for a full discussion of origins, aims, and development).⁸

The Framework released by IIRC is based on two assumptions: first, that companies do not exist simply to reward shareholders for the risks they take, but also take their stakeholders into account to ensure their continuing legitimacy; and second, that the process of value creation in a company draws on a spectrum of so-called capitals that must be considered and reported upon. The IR Framework categorizes these tangible and intangible capitals according to types—namely financial, manufactured, intellectual, human, social and relationship, and natural capitals—while noting that a company does not need to adhere to the IIRC's categories of capitals and can report on their most relevant ones.

The IIRC recognises that a central element of the IR Framework is the business model, defining it as "an organization's system of transforming inputs through its business activities into outputs and outcomes that aim to fulfil the organization's strategic purposes and create value over the short, medium and long term" (IIRC, 2013). According to the IIRC, the description of a company's business model provides investors and other stakeholders with insights into how different capitals are used and contribute to value creation. While the business model is at the centre of value creation, the choice of capital elements and the transformation of capital to output for shareholders, stakeholders, and broader society is schematic in the IIRC's guidance. In other words, little guidance is provided for how to construct such a model, and there are no requirements for what it should include. It remains the responsibility of the reporting company to design and develop its own model and thus deliver "integration" into its application of the IR framework.

Integration, and by implication "integrated management," is the central concept of IR and is defined by the IIRC as "the active consideration by an organisation of the relationships between its various operating and functional units and the capitals that the organisation uses and affects" (IIRC, 2013). The IIRC argues that the value of this integration is breaking down internal silos across all organisational functions, which in turn should enhance the quality of the information made available to the board for an effective decision-making process. As Bernardi (2016) summarises, the greatest value of the approach is found in the process of Integrated Reporting within a company, not simply within the report itself.

Practice has demonstrated three major points of criticism that can be levelled at the current status of Integrated Reporting. The first area addresses the apparent decline in relevance of social and environmental issues within the framework. Milne and Gray (2013), for example, argue that IR "is exclusively investor focused and it has virtually nothing—and certainly nothing substantive—to say about either accountability or sustainability." The growing popularity of the approach and the willingness of external stakeholders to engage with IR, however, indicates the

⁸For an overview of non-financial reporting initiatives see Chap. 13.

increasingly mainstream nature of the discourse around financial and non-financial objectives and indicators.

Not all participants involved in developing the original IR Discussion Paper and Framework have continued to support the initiative. For example, Elkington (2009) was critical of IR from the outset, outlining how “some companies have experimented with integrated reports” and created “Frankenstein’s Monsters” instead of “better information across the triple bottom line agenda, supplied to management in an integrated, user-friendly way.” However, similar criticisms could be made of the triple bottom line regarding its usefulness for implementing operational business decisions, if based on highly aggregated information.

The second area of criticism has begun to emerge but has not yet been addressed adequately in academic literature or in practice. It concerns the alignment between external analysts of ESG performance, who increasingly combine their results with financial analysis, and the process of corporate reporting. Despite the efforts of the IIRC to standardise accounting terminology and provide guidance, work remains to improve the practical analytical work of analysts and fund managers who are integrating ESG scoring and smart beta techniques. The development of multiple and conflicting terms, methods, and opaque recommendations by capital market actors should also be addressed. While deriving different conclusions from a common data pool is legitimate, managers should be aware that analysts and, more importantly, corporations have a fiduciary responsibility to ensure transparency and a management responsibility to integrate and align material financial and non-financial performance drivers and indicators. The irony is that fund managers criticise insufficient corporate transparency regarding performance data, while claiming that the methods and workings of their own analysis represent commercially sensitive “intellectual property,” which cannot be shared.

The last area of criticism focuses on the process by which the report is developed—specifically, the challenge of identifying material topics (echoing the findings concerning the use of smart beta and ESG scoring models) and the lack of integration with and impact on existing internal planning and performance monitoring processes. With the increasing use of ESG data by the financial markets, this second point is particularly significant, if an Integrated Reporting framework is intended to integrate into the management processes that drive value creation within the organisation. In other words, the topics that are relevant to the ESG performance and the value-creation process for the company should be managed comprehensively and robustly to ensure optimal long-term performance.

6.9 Integrated Management: Operationalizing Sustainable Strategy

If managers accept that ESG is increasingly a part of the mainstream of financial risk analysis by external investors, the next step is to move from an integrated but externally focused communication of value creation to investors and stakeholders

(currently the status of Integrated Reporting) to an alignment of external and internal financial and non-financial objectives and performance measures. This can be termed “Integrated Management”—as opposed to Integrated Reporting—to draw attention to the necessity of making financial and non-financial *reporting* an integral part of robust *management processes* that include planning, forecasting, and monitoring. These serve to instill value creation objectives throughout the organisation, reflecting both the specificities of business unit and functional strategies, and the need to align with corporate instruments of leadership and management control.

Ferreira and Otley (2009) remind us that strategy design, delivery, and management control, which they term performance management, is a multi-disciplinary concept. It combines business policy, accounting, leadership theory, and behavioural change to develop frameworks for understanding and influencing multiple performance dimensions and incorporate the perspectives of those within and outside the organisation. In a break with linear approaches, it absorbs aspects of systems thinking including taking a dynamic rather than a static view, thinking in models, recognizing feedback loops, and incorporating behavioural aspects of monitoring and influencing performance. Though multiple approaches to model representation have been taken (e.g., Gomez & Probst, 1995), it is possible to argue that the work of Kaplan and Norton (1996) represents the most recognised and practical adaptation of cause-and-effect systems thinking in a strategic context. Much of the practical use of the approach was driven by the recognition that delivery rather than design of strategy was the major stumbling block for many organisations, as confirmed more recently by the work of Vargas (2017) and Sull, Homkes, and Sull (2015), among others.

The multi-dimensional nature of ESG and financial objectives and reporting fits the context described above for performance management. However, despite the IIRC Integrated Reporting focus on the process of value creation through “six capitals,” little is said about the interactions and dependencies that exist between relevant topics within the capitals. Further, concentrating on a reduced set of topics that are “material” risks without explicit reference to value drivers and strategic context obscures the dynamics of the business model. The emerging list of material topics, which result from a mixed stakeholder and business-driven selection process, risks being deprived of any underlying strategic logic and understanding of broader cause-and-effect relationships. The process may then unintentionally create fragments of sustainable strategy rather than a comprehensive and implementable framework with the potential to improve the delivery process rather than simply distract from it.

Practitioners will recognise that material topics are generally structured around two axes, namely stakeholder and business relevance. They may also observe that stakeholder topics are commonly identified through interviews or questionnaires, where the choice of framework can influence stakeholder selection, choice of consultation method (structured vs. open), response rate, and breadth of data. Experienced managers will note the comparative lack of industry-specific data used for material topic identification and the limited number of comparisons or benchmarking exercises with relevant market segment participants. Additionally,

they will observe the inconsistency in approach between firms within the same industry regarding their focus on either the narrow boundaries of the legal entity or a broader view of the entire value chain (including suppliers and resellers) if these are under the indirect influence of the reporting company.

Internal business topics may then be defined by a project team charged with the development of the report without full management consultation. Practitioner project experience has also suggested that in many cases prior analysis, consultation of strategy documents, and development of strategic scenarios do not occur, and distinction between business unit strategies and integration of the views of external analysts is rarely undertaken. This last point is particularly telling given the analytical advances that investment professionals have developed with regard to smart beta and the isolation of specific ESG factors. Instead the process is defined through semi-structured interviews or written input from a limited circle of representatives. As is the case with stakeholder topic identification, little formal attempt is made to understand dependencies between individual topics.

Practitioners will note further that the process of establishing the materiality of topics, principally using the two-axis approach noted above, may resemble an internal negotiation to produce an acceptable result and meet the demands of external communication. Addressing the concerns and developing the foundation for alignment with internal management processes requires a robust and structured approach.

First, project experience suggests the need to actively model sustainable strategy using the framework selected to ensure completeness and consistency, and act as a basis for operationalization throughout the organisation. The illustration below uses a “sustainable strategy map” (see Fig. 6.2) based on the Integrated Reporting framework to distinguish between capitals and clearly communicate their dependencies. Further, it develops summaries per topic of current status and future objectives to better integrate existing data and obtain a coherent internal overview. This approach, which draws on the work of Kaplan and Norton (1996), aims for comprehensiveness at an appropriate level of aggregation, rather than the exclusion of certain topics associated with classic materiality representations.

Second, managers in complex, multi-business organisations are often asked to distinguish between corporate strategy topics and those relevant at the business-unit level and align the corresponding strategic themes (Wunder, 2016). Material topics, indeed business unit-specific objectives, may differ from corporate goals, and a successful operationalisation of sustainable strategy requires the involvement of unit management and a demonstration of how corporate management will contribute to value creation. Practitioners will note the importance of business units’ contributions to successful sustainability strategy, but more profoundly, the necessity of aligning those different levels with an Integrated Management approach to strategizing and monitoring implementation. Through this alignment process, which may occur through emergent BU initiatives, feedback loops are essential to providing input to reassessing corporate strategy needs.

The challenge of cascading strategy through an organisation will be familiar to practitioners who have worked in a corporate setting. The “parenting advantage” (Goold, Campbell, & Alexander, 1994) of corporate management in a multi-business

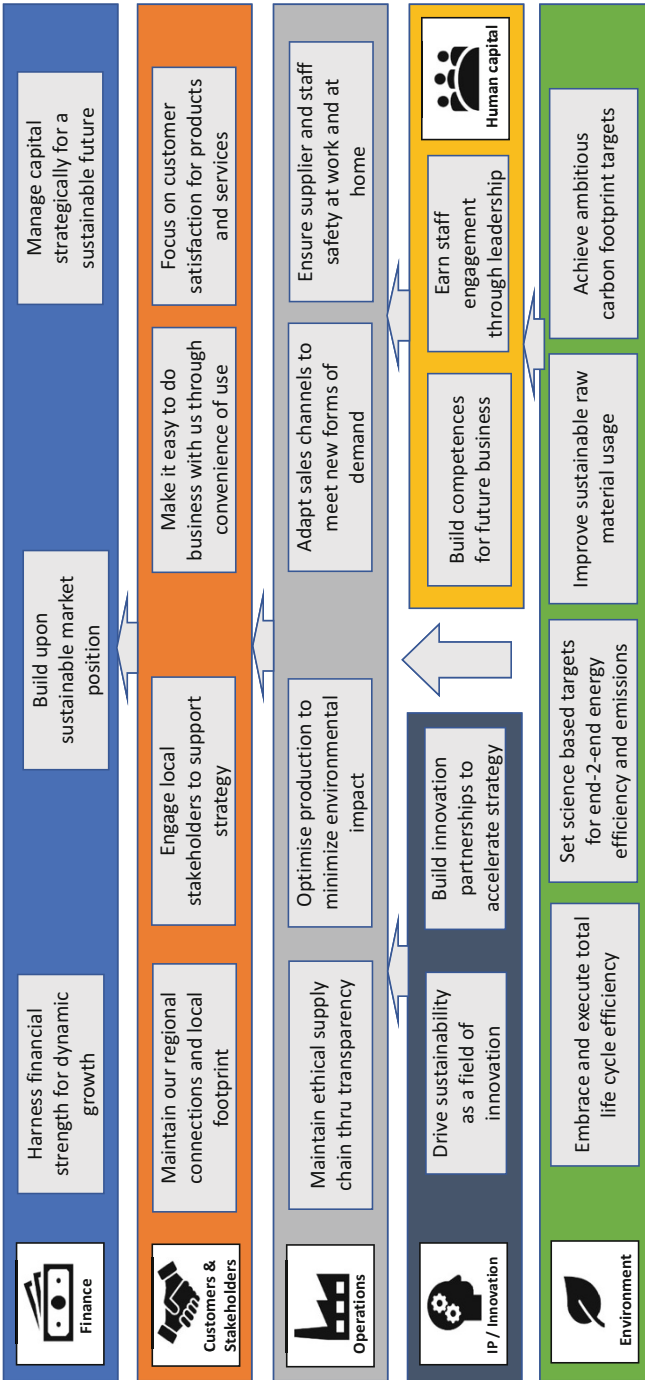


Fig. 6.2 Sustainable strategy map

organisation (i.e., the value-added by headquarters) generally has two aspects, strategic and operational, and both of these perspectives raise questions about the contribution and leadership that Integrated Management will deliver. Should headquarters define the content and focus of the chosen framework, imposing its financial and non-financial structure of objectives and performance indicators, or should it be a process and tool-set provider, leaving the questions of content to business units? This depends on both the strategic logic of the company (for example, a set of businesses focused on different parts of a value chain) and the leadership style that headquarters endeavours to apply (for example, centralised or decentralised). The closer the corporate group resembles a conglomerate, the more likely that initiatives to harmonize objectives will be successful if they focus on areas where headquarters creates synergy or where common values concerning environmental impact are required to protect corporate reputation.

Third, if the organisation is to avoid the syndrome of creating “another animal for the zoo” (Mountfield, 2009) by introducing external ESG performance indicators, then guidelines for setting integrated measurable objectives and a set of common performance indicators will be invaluable for aligning target-setting and leadership behaviour with an integrated view of strategy. As the full set of performance indicators and targets cannot be delegated en bloc to lower levels of the organisation, alignment with responsibility, influence, and existing recognition and incentive structures is required (see Fig. 6.3). Möller, Wirnsperger, and Gackstatter (2015) argue for setting targets at team level and delegating the authority to adapt measures and actions to the lowest possible hierarchy in the organisation.

The degree to which these targets and indicators are standardised across the corporation or differ between business units reflects how well frameworks have been harmonized and integrated. However, the degrees of strategic freedom that are available to different levels of the organisation should be clear, following the maxim that a manager requires the authority to act before he or she can be held accountable for outcomes.

Fourth, corporate management can support the implementation process by ensuring resource availability for the initiatives required for target achievement, distinguishing between those that require corporate-level support and those driven by business unit-level strategy. Practitioner experience has demonstrated that a small number of corporate initiatives cascaded through the organisation can be a robust first step for driving Integrated Management into the company.

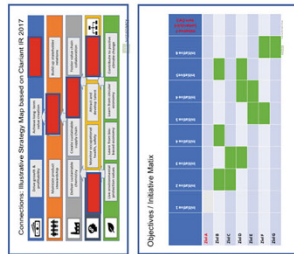
Practitioners have noted the value of harmonizing norms within an organisation by driving a limited number of relevant cross business-unit initiatives. Companies have chosen, for example, to raise awareness for material ESG topics through corporate-wide initiatives, financed by headquarters, as a practical and reasonably fast approach to building a foundation of awareness. This then sets the stage for integrating topics into a broader value-creation framework and rolling out objective-setting and performance management processes throughout the organisation.

Lastly, organisations must recognise that an integrated approach to strategy requires changes to both performance management and leadership behaviour (Mountfield, 2008). Leaders of Integrated Management initiatives have demonstrated

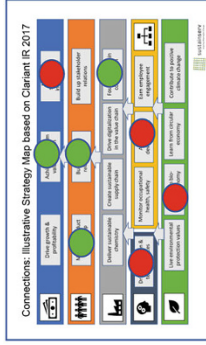
What is my individual responsibility?



What BU objectives must be set and what initiatives are required?



How was our performance?



Where do we need to act as a company?

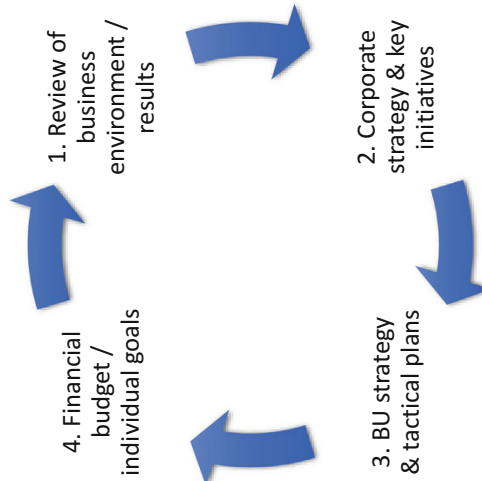
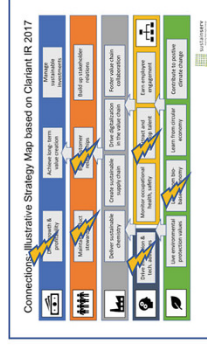


Fig. 6.3 Integrated management process

that while a well-constructed, clearly argued framework may be comparatively simple to communicate to investors, the process is experienced differently within the corporation. Changes to performance management and measurement impact not only value creation, but also the values and culture of the organisation. Introducing Integrated Management is a multi-cycle, phased approach moving from an external Integrated Reporting stage, through initial internal activities designed to harmonize internal and external measures, to a process and leadership model that aligns external communication with an internal commitment to making sustainable strategy everybody's job.

6.10 Conclusions: A Call for Action

As sustainability becomes part of mainstream financial and business practice, corporations must re-examine their approach to leading strategic and organisational change. To engage with an increasingly active and demanding investor community, organisations must ensure that the cascade of sustainable strategy into their organisation reflects the demands of integrated management.

First, in the absence of comprehensive and binding regulatory standards for integrated non-financial and financial reporting and in the face of increasing demands from external financial institutions, corporations must move from a reactive to an active footing. Using techniques such as Smart Beta or factor investing to identify material ESG factors, companies can align analysis performed by rating agencies with internal management processes to drive strategy delivery. This will require a deeper understanding of the needs and demands of data collectors, but also a greater openness and dialogue on their methods, analytics, and conclusions. By building or expanding the competencies required, corporations will gain a better understanding of the risk drivers tracked by rating agencies and will improve their own communication. Expanding the sharing of information will also heighten the responsibility to ensure that the processes for gathering and reviewing data are consistent and dynamic. This will place increasing demands on the often ad hoc data collection exercises currently in place for annual reporting of non-financial data, and will require further professionalisation of the communication and information feedback loops between corporations and external collectors and users of non-financial and financial information.

Second, there is an equal responsibility to further integrate external and internal reporting and performance management in order to provide a multi-dimensional perspective on objectives, performance measures, and initiatives to better implement strategy. Here again, there is a need to align the use of techniques such as Smart Beta for the identification of material risks with the issues developed in the corporate and business unit strategies. Corporate confusion and underperformance are the inevitable results, if management fails to align external and internal reporting or creates artificial barriers between financial and non-financial objectives and performance measures, rather than delivering integrated management of the strategic and

operational target-setting and monitoring processes. This approach requires not only changes to processes and systems, but leadership from corporate management that is responsive to challenges in the external environment and agile in delivering strategy throughout the organisation.

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