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A Generic Framework for ESG Analysis

The goal of this framework is to understand the sustainability-related risks a company faces by virtue of its industry as well as company-specific risk, and how these are integrated into company strategy. Importantly, sustainability-related risks include both upside and downside risks.

2.1 Corporate governance

Corporate governance, or the "G" in "ESG", tends to be material for all companies. In contrast to environmental and social factors, however, governance is rarely industry specific. We have therefore chosen to include the corporate governance discussion as a standalone section, before delving into the materiality matrix as a gateway to the industry-specific sustainability analysis.

According to the OECD Principles of Corporate Governance, the purpose of corporate governance *is to help build an environment of trust, transparency and accountability necessary for fostering long-term investment, financial stability and business integrity, thereby supporting stronger growth and more inclusive societies* (OECD, 2015, p. 7). Governance describes the practices, controls and procedures in place to ensure that the company is managed in the shareholders' interest.

From a valuation perspective, the goal in analysing corporate governance is to determine whether board and management interests are aligned with those of the shareholders. This includes examining the various incentives at work within the company, the board's effectiveness in setting a company strategy that is likely to lead to shareholder value creation, as well as monitoring management's execution of that strategy.

In terms of the formal governance structures, there is no universal consensus on what constitutes best practices. Even across the Nordic countries, there is significant variation in local corporate governance code recommendations. For purposes of this guide, our approach is not to advocate for specific best practices, but to highlight various topics the analyst ought to consider in determining how the company's governance structure may affect valuation. Below are some useful considerations to evaluate.

Board member skills and experience

It is important that the individual members have relevant experience to guide the company and challenge management. The board members should be able to serve as sparring partners for management and contribute to the quality of the company strategy they set.

As a quick check, the analyst can look to the board member biographies (often found on the company website).

- Are there board members with industry experience, for example?
- Are there any specific competencies important to the company's strategy that seem to be missing from the board?

The more difficult skills to assess from the outside concern the individual board members' contribution to the collegium.

- For example, are the individual members likely to bring different perspectives to the board discussions?

The composition of the board needs to include diverse perspectives to make sure the board members can challenge each other and collectively reach better decisions (NBIM, 2018). Objective diversity indicators can be a proxy, even if an imperfect, for diversity of thought.

Board member independence from management

For the board to effectively supervise and complement management, it needs to be sufficiently independent from management – not least because the board is responsible for hiring and firing the CEO. Under Norwegian corporate law, the CEO cannot be a member of the board. This is not the case for the other Nordic countries, however. In fact, CEO board members are relatively common in Swedish listed firms. For the analyst, gauging board independence from management can indicate the relative balance of power within the company.

- Does the board have a track record of efficiently monitoring and supervising management?

All things equal, we would expect the influence of the CEO to be greater when the CEO is a member of the board, and therefore, that CEO quality is likely to be relatively more important to the company's future performance than for companies in which the board provides a more robust check on management.

Board member share ownership

How the board is incentivised is likely to affect what decisions they make.

- Are there structures in place that might affect the board members' risk tolerance?

For example, board members who have meaningful shareholdings in the company are – all else being equal – intuitively more likely to be focused on long-term shareholder value than those who do not. As board members have access to more information about the company than the market, share ownership suggests underlying confidence in the company's outlook. In addition, their position as insiders significantly limits their ability to trade shares in the company, thus requiring a more long-term perspective. This is part of the reason that board member share trades are so closely followed by the market. Significant share sales from insiders are generally a negative share price signal.

Shareholder composition/ownership structure

The presence of a dominant shareholder is relatively common in listed companies across the Nordics. Examples include a foundation, such as the Carlsberg Foundation, which owns a majority stake in Carlsberg A/S. Family ownership stakes are also common, e.g., through the Wallenberg family-controlled Investor AB, which is itself a listed firm and also a controlling shareholder in several of the largest Swedish listed firms. Dominating state ownership is also a common feature, as with Equinor ASA and Fortum Oy.

The presence of an active controlling shareholder can hold the board's "feet to the fire", minimizing principal-agent conflicts. However, it can also pose a risk for minority shareholders, particularly when related-party transactions are involved. The board is mandated to work towards maximizing value for all shareholders. Different shareholders might have different views on how best to do this. It is the board's responsibility to weigh these interests and act in the interest of all shareholders by making decisions in the best interest for the long-term success of the company. Having a dispersed ownership can lead to collective action problems in that no individual shareholder has sufficient incentive to expend the resources necessary to effectively monitor management.

The point of this discussion is not to muse about which type of ownership structure is best, however. Rather, for the analyst, it is important to understand the priorities and ownership activities of the dominant shareholder, since these are likely to shape the board's priorities.

- For example, does the dominant shareholder have a history of promoting value creation in portfolio companies?
- Has the dominant shareholder respected the interests of minority shareholders in the past?

- Does the dominant shareholder take an active role through representation on the board or management or delegate representatives on their behalf?

Management quality and incentives

The board elects and appoints the CEO, who has the responsibility to carry out the company strategy. The CEO needs to have the right experience and track record to effectively manage the company, and the ability to build culture within the company.

- Is the CEO able to efficiently carry out the board's strategy?
- Does the CEO incentive structure support the company's strategy for long-term shareholder value creation?

Share price reactions in response to CEO changes illustrate the importance of this role to long-term shareholder value creation. CEO remuneration should reward increased shareholder value and incentivise the CEO to execute the company's strategy. The company's long-term success largely depends on management's priorities and day-to-day decision-making. As a result, it is important that the CEO is incentivised to work for the long-term success of the company (NBIM, 2017). A more detailed discussion of executive remuneration plans is beyond the scope of this guide. At a minimum, analysts can look to the executive remuneration plan, and specifically, any targets for variable remuneration, to understand the underlying incentives at work. If these are inconsistent with overall company strategy, the discrepancy ought to give the analyst pause before blindly incorporating management projections into forecasted cash flows.

2.2 Governance of sustainability, including stakeholder assessment

Governance of sustainability highlights the board's and management's role and responsibility to identify the sources of long-term value creation, to understand the link between long-term issues and the business case, to develop long-term metrics, and to transparently report these items publicly.

The Norwegian Code of Practice for Corporate Governance can be used as an example for what to expect of the board in terms of risk management, including sustainability risk. (Norsk utvalg for eierstyring og selskapsledelse, 2018)

Norwegian Code of Practice for Corporate Governance

Chapter 2: Business

- The board of directors should define clear objectives, strategies and risk profiles for the company's business activities such that the company creates value for shareholders.

  The company should have guidelines for how it integrates considerations related to its stakeholders into its value creation.

  The board of directors should evaluate these objectives, strategies and risk profiles at least yearly.

Chapter 10: Risk management and internal control

- The board of directors must ensure that the company has sound internal control and systems for risk management that are appropriate in relation to the extent and nature of the company's activities. Internal control and the systems should also encompass the company's guidelines etc. for how it integrates considerations related to stakeholders into its creation of value.

  The board of directors should carry out an annual review of the company's most important areas of exposure to risk and its internal control arrangements.

Benefits from good governance of sustainability issues may include:

- *Risk mitigation:* the company may be less likely to be involved in controversies, which in the most severe cases can lead to penalties or legal actions against the company.
- *Improved capital flow:* the company may experience more confidence from banks and investors due to its risk management and public reporting. This may improve access to capital and reduce the cost of capital.
- *Better decision-making:* if the company has a good understanding of its stakeholders, risks and opportunities, this will lead to better decisions and – all else being equal – increased firm value.

In determining the appropriate strategy to address sustainability-related risks (both positive and negative), the board needs to carry out a risk assessment that includes the expectations of the company's stakeholders. Stakeholders are defined as any group or individual that may affect, or be affected by, the activities of a company. This can be separated into internal and external stakeholders. Internal stakeholders are those with a direct relationship with the company, such as its employees or suppliers. External stakeholders are actors that affect, or are affected by the company's activities outside the organization, such as governments, local communities, etc.

This analysis can help the company identify ESG-related issues likely to be important to its stakeholders and material to the company. Note, however, that stakeholders may disagree on the appropriate priorities for the company's sustainability strategy. Ultimately, the board is answerable to the shareholders, who elect board members through the annual general meeting. The board's role as representatives of the shareholders is to sift through the feedback received to approve a strategy for long-term value creation that is consistent with the company's risk profile, including risk resulting from ESG-related issues.

2.3 Strategy and risk management

The next step in conducting an ESG analysis is to understand the material risks the company faces (both positive and negative), and how the company's strategy for long-term value creation addresses these risks. These risks may be structural, such as increasing physical risk from climate change, or they may be idiosyncratic to a specific firm. Section 2.5 describes the concept of materiality in more detail, with examples in Section 3 of ESG issues likely to be material within particular industries.

Geographic exposure is likely to be a key factor in evaluating the company's ESG risk profile. Jurisdictions vary in the extent to which they regulate company activities that may have a negative impact on environmental or social issues, e.g., working conditions and benefits for employees. The impact of geography can be positive as well, e.g., for an industrial company with access to inexpensive renewable energy. Customer and stakeholder expectations may vary by geography. For example, Nordic companies found to be involved in severe environmental damage or worker rights abuse, whether through direct operations or in their value chain, can expect negative media coverage and the associated damage to reputation as a result. By contrast, companies based in countries with more limited freedom of the press are unlikely to face the same level of scrutiny from stakeholders.

An analysis of ESG strategy and risk management does not necessarily differ from a traditional fundamental analysis. The specific issues and information sources may be new, but the methods are essentially the same. It is nevertheless important to think holistically about how the company interacts with, and in turn is affected by, environmental and social issues. Figure 2.1 below provides an example from Folketrygdfondet's investment process. ESG considerations may arise from several directions, such as new environmental regulations or policy goals, trends in consumer tastes towards more sustainable products, and technological innovations that change sector dynamics.

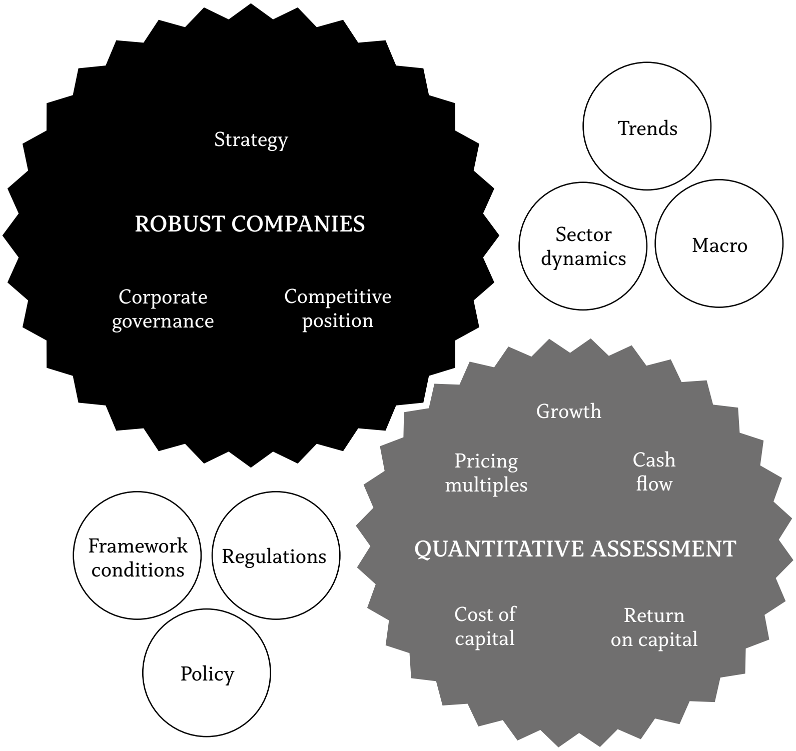

Figure 2.1 Illustration of Folketrygdfondet's Investment Process. Source: Folketrygdfondet.

A company's competitive advantage (or disadvantage) regarding ESG can be its ability to quickly adapt to new legislation and proactively find solutions and utilize best practices, rather than lobbying against a long-term structural trend. Another advantage can be corporate culture, e.g., an innovative organization that looks for sustainability-related business opportunities and has the financial resources to develop and commercialize new products or services to meet emerging demand.

Case Study: Automobile Original Equipment Manufacturers (OEMs)
Development of electric vehicles and improved battery technology is moving fast, and as a result, sales of combustion engine vehicles will eventually be phased out. How car manufacturers meet this change that affects the entire industry varies. Some car manufacturers try to manufacture both electric and non-electric cars, some go all electric, and some are looking at alternative energy sources. How the company performs in the short-to-medium run will depend on multiple different factors, some external to the company and industry like political decisions on emission levels for cars and consumer preference, and some internal like the company's ability to innovate, both financial and company culture.

2.4 Example questions for companies

The example questions below attempt to provide a generic framework for conducting dialogue with companies on their sustainability priorities in order to inform the expert's analysis of company strategy. Section 3 includes industry-specific examples for ESG topics likely to be material to the industry as a whole. The analyst should also tailor the questions to the company's business model, it's positioning within the value chain, and geographic exposure.

Governance

- What are the respective roles of the board and management in identifying and addressing ESG risk?

Strategy and risk management

- How does the company identify and address material ESG risks (both positive and negative)?
- To what extent is ESG integrated into the company's strategy?
- What does the company perceive as the most important long-term sustainability-related structural trends for the business?
- Where do you anticipate the company's sustainability work will be in 5-10 years? What are the main areas for improvement?
- How do the company's sustainability priorities affect its R&D strategy?

- How important is sustainability to the company's customers? Are they willing to pay a higher price and/or is sufficiently high performance a precondition for closing the deal (e.g., for a tendering process)?
- How does the company plan to comply with any coming environmental or social regulations, e.g., emissions requirements or increase in required employee benefits? Alternatively, is regulation necessary to drive new business initiatives forward, e.g., sufficient carbon price?

Metrics and targets

- Which key performance indicators and milestones/objectives should analysts look for in order to understand whether the company is successfully implementing its sustainability strategy?
- How does the company set its sustainability-related targets? How difficult are they to achieve?
- Which, if any, sustainability-related KPIs are integrated into management incentives? How?

2.5 Materiality matrix

Whether ESG-issues are a risk or opportunity, short or long-term, macro or specific to a corporation, we aim to show how they may affect company valuation. Not all sustainability factors are relevant to all companies or will be relevant in a financial context. Indeed, companies will tend to address sector challenges and opportunities differently and will have distinct risk exposures based on their specific operational footprint. It is therefore necessary to look at companies on a standalone basis to identify specific risks and opportunities related to such factors in the long-term. Analysts need to identify which ESG-related factors are likely to be financially material.

The International Accounting Standards Board provides the following definition of financial materiality:

> Materiality is an entity-specific aspect of relevance based on the nature or magnitude, or both, of the items to which the information relates in the context of an individual entity's financial report. Consequently, the board cannot specify a uniform quantitative threshold for materiality or predetermine what could be material in a particular situation. (IASB QC11)

In the U.S., materiality is the criterion regulators apply for disclosure of investment-relevant information by companies. SEC Rule 405 defines materiality as *those matters to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to purchase the security registered.* (SEC, 1999)

Note that the above definitions are different from the concept of materiality used in many reporting frameworks, such as the Global Reporting Initiative:

> Materiality
>
> 1.3 The report shall cover topics that:
>
> 1.3.1 reflect the reporting organization's significant economic, environmental, and social impacts; or
>
> 1.3.2 substantively influence the assessments and decisions of stakeholders. (Global Reporting Initiative, 2016, p. 10)

This guide adopts the narrower definition of financial materiality than GRI does, focusing on shareholders as stakeholders, since the purpose is to provide advice on how to incorporate ESG information into a valuation. Materiality in this sense determines which long-term economic, governance, social or environmental factors are likely to have the most significant impact on a company's growth, cost or risk, and ultimately, future financial performance. The parallel concepts of materiality used in practise are further analysed in Jørgensen et al. (2021).

The analysis of material factors should be done along different time horizons and probabilities of occurrence. The factors of greatest probable financial impacts will be highlighted in the materiality matrix and prioritised. It is important to note that an analysis of material ESG issues is therefore distinct from ESG scoring or assessments of a company's sustainability performance as such. The goal is not to determine how sustainable a company is, but rather how sustainability and governance-related factors might influence the company's financial performance over the long-term.

As the *PRI/CFA Institute Guide to ESG in Equity Analysis and Credit Analysis* explains:

> ESG integration involves integrating only the material ESG issues that are considered highly likely to affect corporate performance and investment performance:

- If ESG issues are considered material, an assessment of their impact is carried out.
- If ESG issues are analysed and found not to be material, an assessment is not carried out. (PRI/CFA institute, 2018)

The Sustainable Accounting Standards Board (SASB) attempts to identify the material ESG issues at an industry level that are financially relevant for investors. (SASB, 2018) The framework identifies the sustainability-related risks and opportunities most likely to affect a company's financial condition (e.g., its balance sheet), operating performance (e.g., its income statement), or risk profile (e.g., its market valuation and cost of capital) in the short, medium, or long-term.

A materiality matrix provides a framework for relevant countries and sectors to help incorporate environmental, social and governance risks and opportunities in the investment process by using fundamental analysis and assessing the materiality of the issue at stake. Sector assessments identify key common sustainability challenges and opportunities relevant to a certain business activity. When of particular relevance, country and sector level analyses may be combined for specific business activities in certain geographic areas.

The PRI (PRI/CFA institute, 2018) as well as Lydenberg, Rogers & Wood in a report for the Initiative for Responsible Investment at the Hauser Center at Harvard University (Wood, 2010), defined some of the risks and opportunities related to each of the ESG factors in a materiality matrix:

Table 2.1 Lydenberg, Roger & Wood (2010), p. 19

Environmental	Social	Governance
• Climate Change Management • Biodiversity • Water • Pollutants and Emissions • Materials & Waste • Product & Operational Efficiency • Product Environmental Impact • Product Quality and Innovation • Energy • Resource Depletion	• Working conditions (incl. Child and forced Labour) • Health and Safety • Diversity in Workforce • Stakeholder Engagement • Local communities • Conflict • Training and Development • Sourcing & Supply Chain • Data privacy • Product safety	• Business Model • Standards & Codes of Conduct • Executive compensation • Bribery and Corruption • Board Diversity & Structure • Tax Strategy • Lobbying and Political Contributions

A materiality matrix analysis at the company level should consider material ESG factors at an industry level and assess how the company addresses these factors on a forward-looking basis. The analysis should build upon the analyst's knowledge of the company and the industry. For example, how does the company's specific business model or placement in the value chain heighten or mitigate ESG risks common to its industry?

To be sure, the specific ESG issues likely to be material to a company or industry can evolve over time, a concept known as "dynamic materiality." (Kuh et al., 2020) These can be due to, for example, changes in stakeholder expectations. The pace of change, driven by revised or new regulations, innovation and disruptive technologies will impact materiality matrices over time. This is an important consideration for investors since it implies financial impacts may materialise over a period much longer than what is considered in traditional financial reporting. As a result, a materiality analysis should consider the relevant time horizon for investment, as well as the investor's risk tolerance. Long-term investors or asset owners might have different preferences than investors with shorter term horizons. What long-term investors deem material might differ from investors focusing on a two to three-year horizon.