



Charting the Future for Capital Markets

Sustainability in Capital Markets: A Survey of Current Progress and Practices

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Preface

At the High Meadows Institute we are exploring how private sector players within mainstream capital markets can contribute to a framework that ensures 21st century capital markets remain open, vibrant and sustainable, and operate in the long-term interests of both investors and society.

As part of this exploration, and in partnership with the Journal of Applied Corporate Finance, we are conducting research on how top institutional players view the challenges facing capital markets and how they are adapting their valuation models and business practices to address them. This report, prepared with the assistance of KKS Advisors, looks specifically at how these players are defining "sustainability" and how they are working to incorporate nonfinancial data on environmental, social, and governance (ESG) factors into their valuation models and investment strategies.

The report starts by examining the leading methodologies measuring the impact of "intangibles" and ESG factors on financial performance. It then looks at the current strategies and practices of top asset owners, asset managers, credit rating agencies and stock exchanges based on publicly available data.

In the introduction that follows, George Serafeim, Professor of Business Administration at the Harvard Business School and High Meadows Institute board member, provides an analysis of the key findings from this research. Building on this analysis, the Institute's goal is to engage leading players in capital markets in discussion of these findings. We hope to contribute to charting a practical path to value that will allow for the full integration of non-financial ESG factors into mainstream valuation models. For more information on the Institute's Future of Capital Markets project visit www.highmeadowsinstitute.org.

Chris Pinney

President & CEO, High Meadows Institute



Executive Summary

This landscape analysis commissioned by the High Meadows Institute provides a first of its kind overview of integration of nonfinancial data by major players of the capital markets value chain. Over the past ten years, major progress has been made in moving to a new investment paradigm where nonfinancial data are used to improve the capital allocation efficiency and therefore the functioning of global markets, with the goal being the private sector producing more sustainable and inclusive economic outcomes.

The report identifies a number of opportunities for further progress. First, although many worthwhile frameworks have been produced to date, we still lack convergence and standardization in measuring intangible assets and clarity in defining the 'path to value', i.e. how better management of intangible assets affects key financial parameters, namely return on capital, growth and cost of capital. Given this void, the Institute seeks to work with a number of financial institutions to enable the creation of a path to value.

Second, while certain asset owners have been the protagonists in ESG integration and incentivizing the rest of the capital market players to practice ESG integration, the analysis suggests that most of the largest asset owners do not have the governance and incentive systems that promote ESG integration. Relatedly, while most of the largest asset managers are now using nonfinancial data in their investment process, for many of them this involves screening techniques rather than 'true' ESG integration where nonfinancial data are formally embedded and accounted in valuation models. A critical element for true ESG integration is analysts and portfolio managers training in analyzing nonfinancial data. The Institute seeks to cooperate with educational organizations, such as the CFA Institute, in promoting education on ESG integration for financial analysts.

Third, the analysis identifies credit rating agencies as the institutions that lag in adopting ESG integration into business analysis models. This is somewhat counterintuitive since credit rating agencies are in the business of assessing downside risk and ESG factors have been thought of as providing an indication of business risks. We note that this is likely to change as investors are now asking credit rating agencies to adopt ESG integration as is evidenced by the shareholder resolution filed by Calvert Investments in the case of Moody's. The path to value and the training opportunities produced by the Institute and the industry's efforts might serve as enablers for credit rating agencies to move from laggards to leaders.

Finally, a significant number of stock exchanges have promoted sustainable investing by offering sustainability-related indices and providing training opportunities to companies and/or investors. However, still many of them have not adopted ESG disclosure requirements for listed companies. Industry self-regulation, where all stock exchanges agree to adopt a common set of disclosure regulations, might be a promising way forward. Given that a path to value will clearly illustrate how nonfinancial data can be used in business analysis and valuation, stock exchanges might find it useful when designing their future disclosure requirements.

George Serafeim



Methodology

The focus of this landscape analysis is to map the mainstream capital market ecosystem and the views and practices of its key stakeholders around the issue of long-term value creation. This analysis is timely since companies increasingly recognize the need to develop a sustainable strategy, the availability of nonfinancial information is rising, and investors have started to use nonfinancial data to develop investment strategies for the long-term.

The first section of the report discusses frameworks that have been created to measure and integrate sustainability into financial metrics and to use in financial valuation and business decision-making. Frameworks developed by major consulting firms, specialized firms, NGOs and financial institutions are examined. Although the purpose of this section is not to provide a comprehensive list of all available frameworks, an analysis of some of the major ones is helpful to identify similarities, differences, strengths and opportunities for these frameworks.

Each of the following sections of the report cover a different stakeholder, namely asset owners, asset managers, stock exchanges and credit rating agencies. For each stakeholder, a sample was selected that would satisfactorily represent current practices (25 top asset owners and managers by assets under management, 10 top stock exchanges by market capitalization, and 3 top credit rating agencies by market share).

A research methodology was developed using a set of questions that provide insights on each stakeholder's view on sustainability and practices around long-term investing. The desk research consisted of collecting information from company websites, company reports (annual reports, sustainability/integrated reports), Sustainable Investment Forums (SIFs) reports and United Nations Principles for Responsible Investment (UNPRI) transparency reports. We acknowledge that some information will be only available to clients or offered from specialized data providers and for this reason emphasize the fact that any information contained in this report consists only of publicly available data.

Sakis Kotsantonis

Managing Partner, KKS Advisors



Definitions

Sustainability

A system of corporate strategy, business model and operations by which companies manage their financial, social and environmental risks, obligations and opportunities in the long-term interests of their shareholders and society.

Long-term investing

For the purpose of this research, we define long-term investing within capital markets as the integration of "non-financial" social and environmental factors into valuation models and investment practices so as to ensure they function in the long-term interest of both investors and society. This form of prudence in investment strategy may also variously be referred to by different actors in markets as responsible investment, socially responsible investment, social investment, sustainable investment or ESG investing.

Intangibles

Factors that do not have a direct financial value but can have a profound impact on organizational and financial performance. An example is a company's reputation with customers and suppliers.



Introduction

Internalization of issues that were previously considered externalities is adding pressure to companies for a better understanding of the value creation process

The concept of sustainability first appeared in the 1970s as both companies and governments began to look beyond financial performance for a more holistic understanding of a company's long-term value-creating potential.

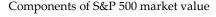
Since then, there have been significant changes in the socioeconomic ecosystem. For corporations, the prevalence of an agency logic of corporate control and the view that "the social responsibility of the firm is to increase its profits" gave way to the establishment of a new C-level executive position for sustainability officers (CSO). For investors, ethical investing transformed to sustainable investing. Finally for governments, the pursuit of sustainable development has been formalized after the publication of the Brundtland report.

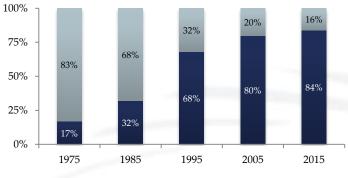
Despite the significant progress that has been made over the last years, there are still several challenges for all players of the ecosystem. Companies are facing difficulties in defining nonfinancial indicators of long-term value creation. Most importantly, they are having difficulties quantifying the relationship between nonfinancial and financial performance and communicating it to their stakeholders.

At the same time, the internalization of issues that were previously considered externalities is adding pressure to companies for a better understanding of the value creation process and the risks and opportunities associated with these externalities.

Investors are facing challenges in integrating environmental, social and governance (ESG) issues in their portfolio allocation decisions. This can be highlighted by the still relatively limited amount of assets under management (AUM) managed by sustainable investing firms or larger firms with sustainable investing funds.

Another challenge for investors is the growth in the value of intangible assets that can be observed when evaluating the market capitalization of the S&P 500 (see graph below). Given that the largest part of a company's valuation can now be attributed to its intangible assets, it is important for investors to understand how companies' business practices can enhance or negatively impact these intangible assets.





■ Intangible Assets ■ Tangible Assets

Source: Ocean Tomo, "Intellectual Capital Equity"



Research approach

Several organizations have been creating frameworks that attempt to assist in measuring and integrating sustainability into financial metrics that can be used in financial valuation and business decision-making.

This research identifies some of the key players and examines how their frameworks compare with each other. The research includes 4 different categories of organizations: consulting firms, specialized firms focusing on sustainability, non-governmental organizations and financial institutions. For each category, we carried out desk research to identify organizations with relevant frameworks. Publicly available

information was used for the purpose of this landscape analysis. Although this is not a comprehensive list of frameworks available, it provides the basis to identify trends and patterns.

Some of the questions this section addresses include:

- What are the various definitions of sustainability that different frameworks account for?
- •How does each framework attribute financial value to sustainability?
- •Are the sustainability issues covered by each framework similar to each other?
- Are there any real example of the use of these frameworks?

The information presented in this report represents:



Publicly available information

Our sample:





Consulting firms – definitions of sustainability

Consulting firms consist of major consultancies and small specialized firms that have created frameworks to assist their clients with integrating sustainability issues in their corporate strategy.

Consulting firms use various definitions of sustainability:

KPMG: Corporate sustainability is adopting business strategies that meet the needs of the enterprise and its stakeholders today, while sustaining the resources, both human and natural, that will be needed in the future. This includes anything from environmental awareness and involvement in local community issues to capturing, measuring, and reporting green house gas (GHG) emissions data, to modifying company business processes to reduce the operational use of natural resources and energy.

Ernst & Young: Sustainability is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce, their families, the local community and society at large.

Deloitte: Sustainability is now broadly recognized as a discipline that delivers tangible benefits to business. Thinking differently about stakeholders, markets, processes and externalities leads to opportunities to better mitigate risk, identify new revenue streams, address costs or build trust.

Frameworks developed by consulting firms have focused on two main objectives:

- How to quantify the environmental and social impact of a business.
- How to understand and quantify externalities and the likelihood they will affect a company's earning capabilities and risk profile in the future.

For most of the frameworks examined, there is a lack of real client examples. Instead, hypothetical examples are given to illustrate the practical use of the frameworks. The lack of client examples could be related to either a slow adoption rate by the market or an inadequacy of the current frameworks to provide tangible benefits.



Consulting firms – research findings

Key Findings

1. There is lack of real client examples. Most of the consulting frameworks use 'imaginary' clients to show their applicability

2. There is a significant degree of overlap in terms of the ESG issues being covered

3. The ESG issues covered the most are the ones that are easier to measure and quantify

Issue Coverage by Consultancies:

100% -Health & Safety 80%- Energy Management 80%- GHG/Non-GHG Emissions

20% -Equality & Diversity 20%- Executive Remuneration 0%-Corporate Ethics The frameworks examined cover a broad range of sustainability issues and there is significant overlap between them. Not surprisingly, the issues most covered are usually the ones that are considered to be the easiest to measure and quantify.

An example of such an issue that is covered by all the frameworks in our sample was health & safety. A company investing in health and safety education and processes can easily relate these investments to the average number of accidents per year and measure the financial impact of the changes.

Other issues widely covered are energy and water management and greenhouse gas emissions.

Issues that are less covered include corporate ethics, executive remuneration and equality & diversity, mainly due to the difficulty of relating them to financial performance.

Specialized firms develop frameworks that go in depth in the particular area of interest of each individual firm. For example, Intellectual Capital Services (ICS) focuses on the valuation of intellectual capital in its framework. The range of sustainability issues covered by these firms are much smaller relative to the consulting firms.

KPMG- True Value Methodology



- Assess the company's 'true' earnings by identifying and quantifying its material externalities
- Understand future earnings at risk by analyzing exposure to the forces of internalization
- Create corporate (cash flow/earnings) and societal value

Effects on EBITDA margin (\$)

PwC - Total Impact Measurement and Management (TIMM)



Measures Social, Environmental, Economic and Tax impact of a business

Illustrates the way to compare different business options



Non-governmental organizations

Key Findings

1. The majority of issues covered by NGOs are under the environmental and social dimension of ESG

 NGOs can assist by catalysing the development of standards and frameworks for measuring the impact of ESG.

Issue Coverage by NGOs:

100% - Supply chain 100% - Employee engagement 75% - Energy, water, waste management

0% - Board structure (remuneration/diversity) 0% - Corporate ethics NGOs are a heterogeneous group. They each have a different coverage of issues and some even focus in particular areas, similar to specialized organizations. Examples include:

True Price: a social enterprise that aims to contribute to the creation of an economy that creates value for all. With their true pricing methodology they aim to assign monetary value to social and environmental externalities and allow organizations to quantify their societal impacts.

Natural Capital Coalition: a global multi-stakeholder open source platform for supporting the development of methods for natural and social capital valuation in business. They are currently working on the development of a standardized framework for business to measure and value their direct and indirect impacts and dependencies on natural capital.

The Prince's Accounting for
Sustainability: defines sustainability
as balancing social, environmental and
economic issues – people, planet and
profit. It is about more than just
managing carbon efficiently, though
that is, of course, an important part of
the equation and a great place to start.
A sustainable company is one whose
business model enhances economic,
human, social and natural capital in a
stable, long-term manner and thereby
delivers sustainable financial
performance.

The coverage of issues of NGOs is different than the one found in consulting firms. Supply chain and employee relations / engagement were two of the issues most widely covered. The majority of the issues covered by NGOs are under the environmental and social dimensions of ESG.

RETURN ON CAPITAL EMPLOYED To requity shareholder value added! RESK MANAGEMENT Coperational Efficiency Human Capital Management Reputation Pricing Power Management Reputation Risk Supply Chain Risk Leaderhship & Adaptability

UNGC - True Value Driver Model

- A tool that provides a simple and direct approach that companies can use to assess and communicate the financial impact of their sustainable business strategies.
- The tool has an investor perspective.
- The case studies are from companies that report key aspects of the model to their shareholders and other interested parties, rather than companies that implement the model.
- · Key factors:
- Sustainability-advantaged growth (S/G): Measuring a company's revenue volume and growth rate from products they define as sustainability-advantaged in comparison to their predecessors and/or competitors.
- Sustainability-driven productivity (S/P): Measuring the aggregate financial impact on a company's cost structure as reported by the company from all sustainability-related initiatives in a given time period.
- Sustainability-related risk management (S/R): Measuring performance over time on the critical metrics that a company (often in consultation with stakeholders) believes pose meaningful risk to revenue and reputation.



Financial institutions

Key Findings

1. As financial institutions are increasingly exploring ways to invest with a more long-term outlook, the need for relevant data is becoming essential

2. The majority of issues covered by financial institution frameworks are under the governance dimension of ESG

Issue Coverage by Financial Institutions:

75% -Shareholder engagement / dialogue 75%- Board structure (executive remuneration / diversity) 75%- Reporting and transparency

0% - Recruitment and retention

The financial institutions sample consists of both asset owners and asset managers that exhibit best practices and disclose their methodologies around ESG integration.

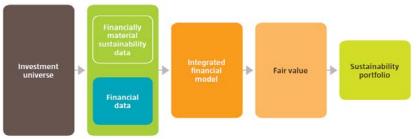
Although financial institutions use the term sustainable investing to describe a range of techniques used by investors (ethical/environmental/social negative screening, positive screening, social investing, best-in-class, sustainability/climate change thematic, etc.), the focus of this research is on ESG integration, defined as the proactive use of ESG factors in investment research and decision-making as part of the firms fundamental analytical framework and valuation models.

In order to successfully integrated ESG factors into financial analysis, financial institutions need quantitative sustainability metrics. As a result they are putting pressure on companies to report on material issues and provide key performance indicators (KPIs) linked to them.

By examining the sustainable investing frameworks of the researched sample, the majority of issues covered by the frameworks are under the governance dimension of ESG.

Governance issues are of key priority for financial institutions. Governance issues are also the major focus of academic studies designed to demonstrate the value of ESG.¹

RobecoSAM – Sustainable Investing



Sustainability is a company's capacity to prosper in a hyper-competitive and changing global business environment. Companies that anticipate and manage current and future economic, environmental and social opportunities and risks by focusing on quality, innovation and productivity will emerge as leaders that are more likely to create a competitive advantage and long-term stakeholder value.

ESG Integration: In its most fundamental sense, integration involves the adjustment of financial model assumptions based on the sustainability performance of a company. In order to be successful, integration should derive a single fair value price from a financial model that combines both financial projections and an assessment of the company's sustainability performance: a truly integrated view of a company's value.

${\bf RobecoSAM\ approach: True\ sustainability\ integration}$

The analysis of a company's sustainability performance must focus on the factors that are most relevant to the company's financial performance.

- Identify the most relevant factors through a
 materiality framework. For each industry, the
 materiality framework prioritizes sustainability factors
 according to the likelihood and the expected
 magnitude of their impact on business drivers such as
 growth, profitability, capital efficiency and risk.
- Create a materiality matrix for each industry, which maps each factor in relation to each other and provides an illustration of the most important factors for each industry.
- Shift focus to the company level and evaluate how company management is addressing the three or four most material factors according to the materiality matrix
- Once the company's performance on the selected material sustainability factors has been analyzed, it is important to consider each factor's impact on the company's long-term value drivers, which will in turn influence the long-term assumptions that are used to model its future cash flows.

¹ Deutsche Bank Climate Change Advisors, June 2012. 'Sustainable Investing – Establishing Long-Term Value and Performance'



Asset Owners & Asset Managers

Introduction

Today, long-term investing is an investment strategy that explicitly seeks to perform competitively rather than simply represent an ethical stance on behalf of its investors Since the 1980s, a shift in the prevailing institutional logic has been taking place within the investment community. Initially launched in Europe, the long-term investing movement has gained momentum worldwide. In its early years, long-term investing was largely grounded and justified in terms of religious beliefs (e.g. exclusion of guns, tobacco or alcohol), therefore indistinguishable from ethical investing in terms of the values-driven investment screening applied.

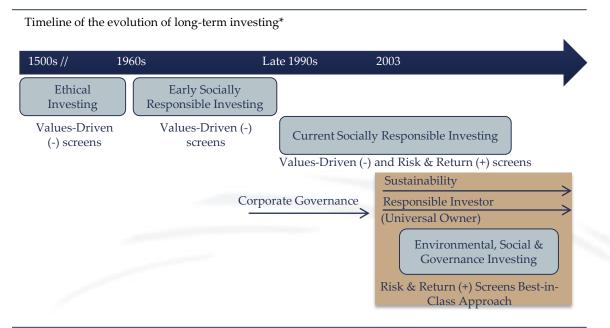
Today, long-term investing has moved away from emphasizing ethics towards the incorporation of environmental, social and governance (ESG) factors into investment decisions, thereby becoming an investment strategy (ESG incorporation) that explicitly seeks to outperform rather than simply adopt

an ethical stance on behalf of its investors.

An increasing amount of research around the materiality of ESG issues, together with demand from regulators, clients and beneficiaries are among some of the key drivers behind the adoption of long-term investing practices.

Despite the significant progress over the last two decades, there is still relatively slow adoption of long-term investing practices. No more than 11% of AUM in the US are managed by long-term investing firms or larger firms with long-term investing funds.

In a time when many parts of the financial industry are under pressure to demonstrate value, it is expected that the proportion of assets managed with reference to ESG considerations will rise.





Asset Owners & Asset Managers

How successful are long-term investing practices?

The underlying concept of long-term investing is valid, but implementation is still deficient

Findings show that investors are yet to successfully capture ESG factors in their capital allocation processes despite the fact that:²

- Long-term investing and conventional funds run by the same asset management company yield comparable returns
- Long-term investing funds run by specialized asset management companies outperform comparable conventional funds by more than 2.6% annually

However, at a company level, integration of ESG factors has been proven to provide significant economic, accounting, reputational and market advantages:³

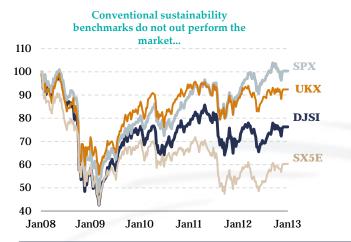
- Companies that adopted corporate policies related to environmental and social issues before the adoption of such policies became widespread outperformed their peers over the long-term, both in terms of stock market and accounting performance.³
- Companies that integrate ESG factors

are significantly more likely to attract dedicated long-term investors rather than transient investors. Transient investors have high portfolio turnover and highly diversified portfolios; in contrast dedicated investors have low turnover and more concentrated holdings.

These results show that the underlying concept of long-term investing is valid, but that implementation is still deficient. Many reasons could explain these implementation difficulties. Reporting on nonfinancial data is still evolving and currently is less rigorous than financial reporting. The majority of investors are using 'screening' investment strategies that do not necessarily capture the growth potential of individual firms.

One solution would be to develop ESG integration strategies to enable better understanding around nonfinancial performance, but this has proven to be a more complicated task requiring specialized knowledge.

Performance of sustainability funds



Performance of sustainable companies



² Gil-Bazo, J., Ruiz-Verdu, P., Santos, A.P. 2010. 'The Performance of Socially Responsible Mutual Funds: The Role of Fees and Management Companies, Journal of Business Ethics, Vol 94, Issue 2, pp. 243-263

³ Eccles, R., Ioannou I., and Serafeim G. 2014. The Impact of Corporate Sustainability on Organizational Processes and Performance. *Management Science* 60, no. 11: 2835–2857.



Research approach

In this section, mainstream asset owners are examined. The aim is to identify how asset owners currently define and view sustainability and value long-term financial performance.

Some of the questions this section addresses include:

- What are the most common ESG incorporation strategies?
- How are incentives set for longterm investing?
- What is the engagement level between asset owners and organizations or initiatives that promote long-term investing?

The top 25 asset owners by assets under management (AUM) were selected. As a share of global AUM, the top 25 asset managers control more than 18%.⁴ Since the top 25 asset owners represent almost one fifth of the total assets under management globally, they can provide a representative view of mainstream current practices.

For the purpose of this study, publicly available information for each organization was used. This information was collected from company websites, related reports and articles, and UNPRI transparency reports.

The information presented in this report represents:



25 Top asset owners (by AUM)



More than 18% of total global AUM



Publicly available information



10 European firms, 7 East Asian firms,

5 US firms and 3 Middle-Eastern firms

⁴ Boston Consulting Group, 'Global Asset Management 2014: Steering the Course to Growth.'



Most common ESG incorporation strategies

Long-term investing is an approach to investment that explicitly acknowledges the relevance to the investor of ESG factors and of the long-term health and stability of the market as a whole⁵

Many of the world's largest asset owners covered in this study are pension funds and must necessarily take a long-term perspective in the management of their portfolio.

Long-term investing is an approach to investment that explicitly acknowledges the relevance to the investor of ESG factors and of the long-term health and stability of the market as a whole. It recognizes that the generation of long-term sustainable returns is dependent on stable, well-functioning and well governed social, environmental and economic systems.⁵

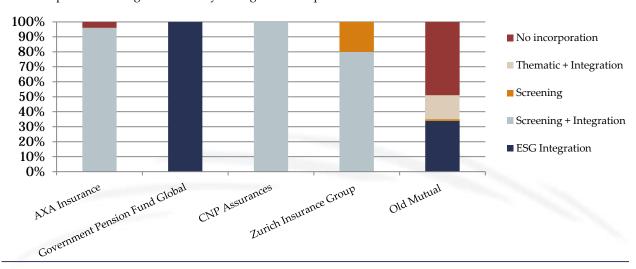
In this context, most large asset owners are increasingly working to integrate ESG factors into their investment strategy using three basic strategies.

 Screenings consist of negative / positive screenings that involve excluding or preferentially investing in companies or sectors on the basis of criteria relating to their products, activities, policies or performance. A best-in-class screening involves preferentially investing in companies with better ESG performance and management practices.

- Thematic investment involves selecting assets on the basis of investment themes such as climate change or demographic change.
- ESG Integration involves the proactive consideration of ESG factors in investment research and decision-making. These factors are integrated into traditional financial analysis.

The graph below shows the ESG incorporation strategies for actively managed listed equities of the top 25 asset owners. Information on the incorporation strategies could only be found for 5 out of the 25 asset owners. The strategies that asset owners use are screening, thematic, integration, a combination of these or no ESG incorporation strategy.

ESG incorporation strategies for actively managed listed equities





ESG integration case study

This detailed risk assessment process led to a number of risk-based divestments in recent years

Government Pension Fund Global

ESG integration is an integral part of Government Pension Fund Global's (GPFG) mission of safeguarding and building financial wealth for future generations of Norwegians. Norges Bank, the Central Bank of Norway and operating Manager of the GPFG, incorporates ESG issues into many areas. These include: investment approach, risk management, and company engagement.⁶

Investment Approach: Norges Bank incorporates ESG issues into the financial modelling of potential investments. As a long-term investor, the GPFG must ensure that it has a holistic understanding of an asset prior to and throughout its investment. Incorporating ESG issues into its financial modelling ensures that the GPFG benefits from healthy and sustainable development in the companies and markets that it invests in.

Prior to financial modelling and research, ESG considerations affect the initial selection process of investments. Norway's Ministry of Finance, the owner of the GPFG, issues guidelines on the observation and exclusion of companies. The criteria for observation and exclusion have been endorsed by the Storting, the Norwegian Parliament. Large companies such as British American Tobacco and Rio Tinto have been excluded due to ESG issues. An independent Council on Ethics has been set up by the Ministry of Finance to advise on the observation and exclusion of companies from the fund's portfolio.

Risk Assessment: ESG criteria are applied to risk assessment processes. Norges Bank's risk assessments and surveys covered more than 1,533 companies in 2014. The aim of these assessments and surveys were to contribute greater insights on companies and portfolio risks. Risks were analyzed on a country, sector and company level.

This detailed risk assessment process has led to a number of risk-based divestments in recent years. In 2014, the GPFG divested from 49 companies, for which Norges considered there was a high level of uncertainty about the sustainability of their business model.

The work on risk management is linked to the fund's ESG focus areas: children's rights, water management and climate change. Norges has formulated expectations in each of these areas for how companies should manage risk and report on their activities.

Company Engagement: As a shareholder in over 9,000 companies, Norges utilizes company meetings to raise ESG issues. These meetings offer an opportunity for Norges to present their views on sustainable business practices. In 2014, Norges raised ESG issues in 623 company meetings, almost a quarter of all the company meetings that year. Norges considers it important that ESG issues are managed by the company and integrated into its reporting practices.

⁶ Norges Bank Investment Management (2014) '2014 Responsible Investment: Government Pension Fund Global.



Incentive systems for long-term investing

As long-term investing is gaining momentum, appropriate governance mechanisms need to complement implementation. The questions to be answered are:

- Who is ultimately responsible for long-term investing within the mainstream asset owners?
- Are compensation incentives linked to performance on long-term investing?

8 asset owners have introduced board oversight for long-term investing. 7 asset owners have their CEO, CIO or investment committee oversee long-term investing policies and practices. 3 asset owners are assigning the implementation of long-term investing practices and policies to the CEO and/or the CIO.

Prudential Financial: Aims to integrate the concept of long-term value creation throughout its organization. The Vice President of Environment and Sustainability has specific performance accountabilities and compensation tied to the overall execution of strategies, embracing the concept of long-term value creation.⁷

Generali Group: To ensure that sustainability is treated with importance, the Chairman of Generali receives attendance fees for participating in the Committee for Social and Environmental Sustainability. Generali's approach provides for a greater weighting of variable remuneration assigned to the long-term component. This strengthens the creation of sustainable value for shareholders over the long-term.⁸ Investment analysts at the firm have their pay linked to long-term investing performance.⁹

Zurich Insurance Group: Zurich believes that navigating the complexity of insurance investment management and practicing long-term investing at the same time can only be achieved by fully integrating longterm investing practices into the overall investment approach and making them part of everyday investment decision-making. Longterm investing must become part of an organization's DNA and its culture. To accelerate and support this process, Zurich has incorporated responsible investment into its technical competency framework used to determine job profiles and training requirements. Its investment team's variable pay is linked to long-term investing performance.¹⁰

⁷ Prudential Financial (2013) '2013 Sustainability Report' ⁸ Generali Group (2015) '2015 Remuneration Report' ⁹ UNPRI (2014) 'Responsible Investment Transparency Report: Generali Group' ¹⁰ UNPRI (2014) 'Responsible Investment Transparency Report: Zurich Insurance Group'

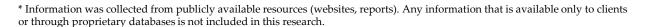
8 out of 25 asset owners

Assign oversight/accountability of longterm investing to the board members or trustees

7 out of 25 asset owners Assign oversight/accountability of long-term investing to the CEO, CIO, or investment committee

3 out of 25 asset owners

Assign implementation of long-term investing to the CEO, CIO, or investment committee





Engagement with organizations or initiatives that promote longterm investing

There are several organizations and initiatives that promote long-term investing. These organizations and initiatives cover a broad spectrum of activities such as promoting good corporate governance practices, supporting environmental stewardship, setting principles for

long-term investing, and establishing sustainability standards.

The graph below shows the collaborative organizations and initiatives of which the top 25 asset owners are a member or in which they participate.

This analysis enabled us to identify certain trends in organizations' partaking in responsible investment initiatives. The most widely adopted initiative is the UN-led Principles for Responsible Investment

(10 out of the 25 asset owners).

The total number of long-term investing frameworks and standards that organizations are involved in vary widely. The largest figure is 16, while for most of the asset owners the information on organizations that they engage with was not publicly available.

36% UNPRI United Nations Principles for Responsible Investment is an initiative to promote responsible investment principles (integration of sustainability into investment decision-making) and its implementation by investors.

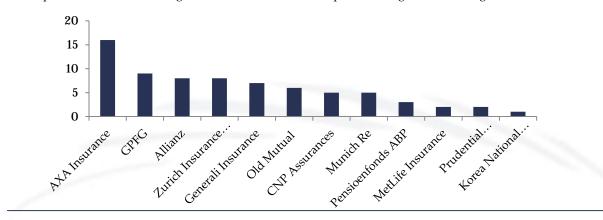
 $28\%\ UNGC\$ United Nations Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

28% CDP Carbon Disclosure Project: provides investors with access to a global source of year to year information that supports long-term analysis (companies' GHG emissions, water usage, strategies for managing climate change, etc.)

20%~SIFs~ Social Investment Forums (regional and national) is a network where practices, information and expertise are shared to guide social investment policies.

16% UNEP FI United Nations Environment Program Finance Initiative is a global partnership between UNEP and the financial sector. Over 300 institutions including banks, insurers and fund managers work with UNEP to understand the impact of environmental and social considerations on financial performance.

Participation in collaborative organizations or initiatives that promote long-term investing





Research approach

In this section, the mainstream asset managers are examined. The aim is to identify how financial managers currently define and view sustainability and value long-term financial performance.

Some of the questions this section addresses include:

- What are the most common ESG incorporation strategies?
- How are incentives set for longterm investing?
- What is the engagement level between asset managers and organizations or initiatives that promote long-term investing?

The top 25 asset managers by assets under management (AUM) were selected. As a share of global AUM, the top 25 asset managers control 46%. Since the top 25 asset managers represent almost half of the total assets under management globally, they can provide a representative view of mainstream current practices.

For the purpose of this study, publicly available information for each organization was used. This information was collected from company websites, related reports and articles, and UNPRI transparency reports.

The information presented in this report represents:



25 Top asset managers (by AUM)



46% of total global AUM



Publicly available information



16 US-based firms, 9 European firms

¹¹ Boston Consulting Group , 'Global Asset Management 2014: Steering the Course to Growth.'



Most common ESG incorporation strategies

Long-term investing is an approach to investment that explicitly acknowledges the relevance to the investor of ESG factors and of the long-term health and stability of the market as a whole¹²

An increasing number of asset owners are requesting their asset managers to integrate ESG issues in their investment strategies. Most large asset managers integrate ESG factors into their investment strategy using three basic strategies.

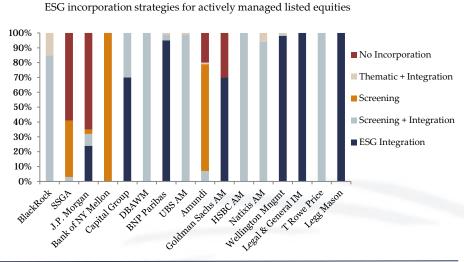
- Screenings consist of negative / positive screenings that involve excluding or preferentially investing in companies or sectors on the basis of criteria relating to their products, activities, policies or performance. A best-in-class screening involves preferentially investing in companies with better ESG performance and management practices.
- Thematic investment involves selecting assets on the basis of investment themes such as climate change or demographic change.

 ESG Integration involves the proactive consideration of ESG factors in investment research and decision-making. These factors are integrated into traditional financial analysis.

The graph below shows the ESG incorporation strategies for actively managed listed equities of the top 25 financial managers. Information on the incorporation strategies could be found for 16 out of the 25 asset managers.* The strategies that financial managers use are screening, thematic, integration or combination of these or no ESG incorporation strategy.

A recent report by the US Forum for Sustainable and Responsible Investment showed that among US asset managers who responded to an information request about their ESG incorporation strategies, more than half use negative screening, others use positive screening and thematic investing, while the incorporation strategy that affected the highest number of assets was ESG integration. Our results support these findings. Screening and ESG integration are the strategies predominately in use.

Among the firms that disclose their ESG incorporation strategies, only 4 report that the have no ESG incorporation strategy for part of their actively managed listed equities.



¹² UNPRI, 'What is responsible investment"

 $^{^{13}}$ US SIF The Forum for Sustainable and Responsible Investment, 2014. 'US Sustainable, Responsible and Impact Investing Trends 2014

^{*} was collected from publicly available resources (websites, reports). Any information that is available only to clients or throughInformation proprietary databases is not included in this research.



ESG integration case studies

Wellington believes that the practice of ESG integration can enhance return and mitigate risk from an investment

Wellington Management

For Wellington, ESG criteria are one set of factors that should be weighed appropriately to inform investment decision-making. Wellington believes that ESG integration can enhance return and mitigate risk from an investment. ESG issues are integrated into 4 key areas of the business:¹⁴

Research: There is an in-house research team whose purpose is to deepen intelligence on ESG issues and ask investment teams to consider these issues when making investment decisions. The proprietary research on ESG issues is supplemented by relationships to over 400 external research providers. The research is condensed by the ESG team into ESG sector/country guides. According to Wellington, analyzing how a company deploys its various forms of capital (human, physical, financial, etc.) gives a more detailed understanding of the value creation process of that company and its investment potential. This ultimately helps investment decision-making.

Investment Approach: Thanks to the research of the ESG team, the investment teams can analyze portfolios to identify holdings with the greatest ESG strengths and risks. Once these are identified, they can alter their investment approach to ensure investors' objectives are met. Wellington states that its portfolio managers integrate ESG issues into their investment approach to the point that they firmly believe that ESG issues may influence the long-term success of a company and its investment returns.

<u>Company Engagement</u>: As an active manager, Wellington include ESG issues as one of the topics they discuss with company management. This type of engagement usually relates to communication about ESG risks a company might be facing.

<u>Proxy Voting</u>: Since a proxy vote must reflect the specific situation at stake, ESG issues, as well as financial issues, are analyzed before proxy voting. This ensures that a proxy vote reflects all the important information available.

Fidelity

For Fidelity, the cornerstone of their investment approach is bottom-up research. As well as studying financial results, their portfolio managers and analysts are dedicated to carrying out additional qualitative analysis of potential investments which includes ESG factors. Some examples of ESG factors that their equity, fixed income and real estate investment teams may consider include:

- Changes to regulation (e.g. laws on environmental pollution, governance codes)
- Physical threats (e.g. extreme weather)
- Cost implications (e.g. reduced cost of capital, environmental improvements)
- Brand and reputational issues (e.g. poor health and safety record, excessive remuneration)
- Fines (e.g. polluting incidents)
- Product evolution (e.g. low energy products, medicines)
- Shareholder rights (e.g. election of directors, capital amendments)



Incentive systems for long-term investing

As an example, Prudential Financial includes sustainability expertise as a core criterion for board member selection As long-term investing is gaining momentum, appropriate governance mechanisms need to complement implementation. As an example, Prudential Financial includes sustainability expertise as a core criterion for board member selection.

The questions to be answered in this section include:

- Who is ultimately responsible for long-term investing within the mainstream asset managers?
- Are compensation incentives linked to performance on long-term investing?

Information on who is responsible for long-term investing could be found for 20 out of the 25 firms.* 9 asset managers have introduced board oversight for long-term investing. 19 asset managers have their CEO, CIO or investment committee oversee long-term investing policies and practices. 5 asset managers assign the implementation of long-term investing practices to the CEO and/or the CIO.

Several mainstream asset managers have started linking compensation incentives to the performance of long-term investing practices:

9 out of 25 asset managers Assign oversight/accountability of longterm investing to the board members or trustees

19 out of 25 asset managers Assign oversight/accountability of long-term investing to the CEO, CIO, or investment committee BNP Paribas Investment Partners includes long-term investing criteria as a formal component of its asset managers performance evaluation.

HSBC Asset Management links the performance evaluation for both its Global Heads of ESG Research and Corporate Governance to sustainable investing criteria.

Amundi links compensation to nonfinancial metrics for both its executive management and its sustainable investing employees. Their corporate governance procedures evaluate sustainable investing performance and decide on compensation based on the evaluation. One of the features of this evaluation is to assess societal performance. The assessment of progress on societal performance provides an index that has an impact on the variable remuneration of Amundi's top executives. An independent organization certifies this process.

Natixis has adopted measures to encourage sell-side analysts to develop and improve their ESG research publications. One of their measures is that a portion of their analysts' compensation is linked to the quality of their ESG input.



5 out of 25 asset managers
Assign implementation of long-term
investing to the CEO, CIO, or investment
committee

^{*} Information was collected from publicly available resources (websites, reports). Any information that is available only to clients or through proprietary databases is not included in this research.



Engagement with organizations or initiatives that promote long-term investing

There are several organizations and initiatives that promote long-term investing. These organizations and initiatives cover a broad spectrum of activities like promoting good corporate governance practices, supporting environmental stewardship, setting principles for long-term investing, establishing sustainability standards and more.

84% UNPRI United Nations Principles for Responsible Investment is an initiative to promote responsible investment principles (integration of sustainability into investment decision-making) and its implementation by investors.

64% CDP Carbon Disclosure Project: provides investors with access to a global source of year to year information that supports long-term analysis (companies' GHG emissions, water usage, strategies for managing climate change etc.)

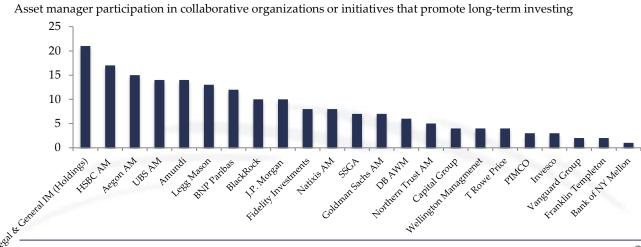
52% SIFs Social Investment Forums (regional and national) is a network where practices, information and expertise are shared to guide social investment policies.

44% ICGN International Corporate Governance Network: investor-led organization of governance professionals with the mission to inspire and promote effective standard of corporate governance to advance efficient markets and economies world-wide

The graph below shows the collaborative organizations and/or initiatives of which the top 25 asset managers are a member or in which they participate.

This analysis has identified certain trends in terms of organizations partaking in sustainable investing initiatives. The total number of sustainable investing frameworks and standards that organizations are involved in vary widely. The UN-led Principles for Responsible Investment is widely adopted by the asset managers in the sample; only 3 out of 25 are not UNPRI signatories.

Looking at the type of standards and initiatives, it is interesting to note that most are related to environmental and governance considerations. Those that are the least adopted by asset managers are namely frameworks and standards around sustainability reporting (GRI, SASB) and integrated reporting (IIRC).





Investment Consulting Firms

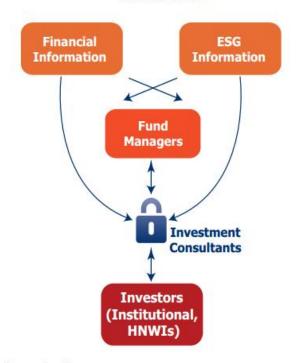
Introduction

Investment management is complex and demanding, particularly for large institutional investors such as pension funds, mutual funds, and insurers that individually control hundreds of billions of dollars and in aggregate much more. Given their size, these investors face a heavy fiduciary burden and therefore occasionally seek to shift duties of asset allocation or manager selection to outside entities such as investment consultants.

Demand for this third-party support is strong. McKinsey & Company estimated that about one quarter of

financial assets are managed externally. 15 According to a survey conducted in 2011 by "Pensions and Investments," 94% of pension funds use a consultant. Of those, nearly a quarter of the pension funds indicated that the recommendation by a consultant was "crucial" to their decisions about investor allocation and manager selection and 40% said it was "very important." 16 Therefore, as institutional investors begin to hear about ESG integration as a viable or perhaps even superior investment strategy, it is likely that the need for counsel from investment consultants will increase.

Investment Consultants: Gatekeepers within the Financial Services Chain



Source : Eurosif

¹⁵ Blackrock (Viewpoint), "Who Owns the Assets? Developing a Better Understanding of the Flow of Assets and the Implications for Financial Regulation", 2014.

¹⁶ Sorkin, Andrew Ross (2013, September 30). Doubts Raised on Value of Investment Consultants to Pensions. New York Times Dealbook.



Investment Consulting Firms

Findings

Review of 10 key investment consulting firms found that, as it relates to ESG issues and integration, consulting firms either tout their experience or they don't. For example, roughly half of the consultants examined barely make mention of ESG matters in their list of services, nor did these firms publish any publicly available ESG reports.

Conversely, consultants such as Russell Investments, Mercer, and Towers Watson make it clear that ESG and corporate governance are well within their areas of expertise. Russell describes its pledge to the UN PRI and the seven principles of the UK Stewardship Code, and has established a "Sustainability Council" to support these commitments and wider sustainability initiatives. Mercer Consulting formed its own responsible investment team more than ten years ago and evaluates managers on the degree to which they actively integrate ESG factors into mainstream investment processes. Towers Watson also has its own sustainable investing division and publishes extensively on ESG issues and strategies.

These mixed results are not unexpected as a good number of consultants still appear to have ongoing doubts or not enough information about the effects of ESG strategies on portfolio performance. A survey by the Social Investment Forum Foundation in 2009 of 40 US investment consulting firms of various

sizes found that 30% of respondents didn't know how ESG strategies affect performance. Further, nearly 80% said that they don't raise the issue of ESG integration as standard procedure when meeting with clients. ¹⁷ The survey did show, however, that consultants recognize the permanence of client interest in ESG and responsible investing issues.

Not surprisingly, the research found that larger consultancies have betterestablished ESG and corporate governance practices and, consequently, more in-depth and practical research reports. Russell, with over 2,800 institutional clients, and Towers Watson with more than 1,000, publish papers that consider ESG to be an integral part of fiduciary responsibility and fundamental to the investment decision-making process. These firms are also weighing in on executive compensation and broader corporate governance issues. In contrast, Callan Associates, with 180 investment manager clients, is in the midst of an ESG practice-building stage, indicated by a lack of publically available ESG. It would seem that they, along with Pension Consulting Alliance, RVK, SIS, and Wilshire simply do not have the staff to work on these issues. Again, the Social Investment Forum Foundation survey echoes this finding – roughly half of respondent firms indicated they had no employees or only a fraction of a single full-time staff member specializing in ESG.

¹⁷ Social Investment Forum Foundation (Report), "Investment Consultants and Responsible Investing: Current Practice and Outlook in the United States," 2009.



Stock Exchanges

Introduction

Stock exchanges provide a central point of interaction between investors, companies, policy makers and regulators Stock exchanges provide a central point of interaction between investors, companies, policy makers and regulators. Exchanges have traditionally played a crucial role in building transparent, regulated markets and promoting best practices in financial and corporate governance disclosure among listed companies.

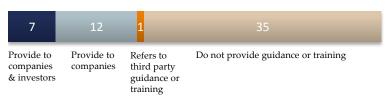
With the growing importance of nonfinancial information in investment decisions, it is natural that such a vital economic actor like stock exchanges must accommodate the changing environment where sustainability issues are becoming significant for investors, governments and organizations alike.

Summary of 55 stock exchanges' sustainability initiatives. Units equal number of exchanges found to have initiatives in place.¹⁷

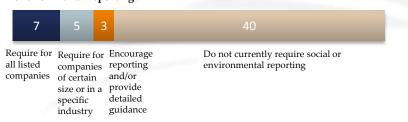
Does the stock exchange offer sustainability-related indices?



Does the stock exchange offer sustainability-related guidance or training to companies and/or investors?



Does the stock exchange require or encourage some social and environmental reporting?



 $^{^{18}}$ Sustainable Stock Exchanges Initiative $\underline{\text{http://www.sseinitiative.org}}$

Having established the need for increased attention to sustainability issues, the United Nations (UN) established a platform to foster the discourse around sustainability. In collaboration with the UN **Environment Programme Finance** Initiative (UNEP-FI), the UN Principles for Responsible Investment (UNPRI), the UN Global Compact (UNGC) and the UN Conference on Trade and Development (UNCTAD), the Sustainable Stock Exchanges Initiative (SSEI) was created to facilitate dialogue among stock exchanges, investors, regulators and companies on how to promote sustainable investment, raise awareness around sustainability issues and enhance corporate transparency.¹⁸

Together with SSEI, the World
Federation of Exchanges (WFE) – an
authoritative trade association of
exchanges – has the mission of
improving markets, promoting market
standards and increased transparency.
Thus, it also has the ability to foster
the discussion around sustainable
investment, greater disclosure, and
compliance with ESG-related
information and standards.¹⁹

Stock exchanges are uniquely placed to promote long-term investing with a variety of measures at their disposal. These include listing requirements related to sustainability reporting, voluntary initiatives, guidance documents and training for both companies and investors, and sustainable investment products such as indexes that focus on ESG issues.²⁰

¹⁹ World Federation of Exchanges http://www.world-exchanges.org

²⁰ SSE Initiative, 2014. 'Sustainable Stock Exchanges – 2014 Report on Progress'



Stock Exchanges

Findings

The 10 top stock exchanges by market capitalization were examined to understand their views and practices around sustainability issues. Publicly available information was collected on several key indicators that are related to sustainability practices.

8stock exchanges offer sustainabilityrelated indices. Half of the top 10 stock exchanges have signed the SSE Initiative Commitment Letter. 4 stock exchanges require comprehensive sustainability reporting as a listing rule. 4 stock exchanges offer sustainability guidance or training for investors while 7 offer guidance or training for companies. Only 1 stock exchange – BM&F Bovespa – is a signatory to the United Nations Principles for Responsible Investment (UNPRI).

Regarding the engagement of the stock exchanges with organizations and initiatives that promote long-term investing, 8 stock exchanges are part of the World Federation of Exchanges Sustainability Working Group, 5 are members of the Global Reporting Initiative and 2 are part of the Carbon Disclosure Project.

OF THE 10 TOP STOCK EXCHANGES

- 8 offer sustainability-related indices
- 5 have signed the SSE Commitment Letter
- 4 require comprehensive sustainability reporting as a listing rule
- 4 offer sustainability guidance or training for investors
- 7 offer sustainability guidance or training for companies

Engagement with organizations or initiatives that promote long-term investing

80% WFESWG World Federation of Exchanges Sustainability Working Group is a sustainability working group formed by the WFE, comprised of representatives from a diverse array of global stock exchanges with a mandate to build consensus on the purpose, practicality and materiality of ESG data.

50% GRI Global Reporting Initiative: promotes the use of sustainability reporting as a way for organizations to become more sustainable and contribute to sustainable development.

20% CDP Carbon Disclosure Project: provides investors with access to a global source of year to year information that supports long-term analysis (companies' GHG emissions, water usage, strategies for managing climate change, etc.)

Sustainability-related index example The NYSE Arca Environmental Services Index (AXENV)

"The Index includes common stocks or ADRs of selected companies that are involved in management, removal and storage of consumer waste and industrial by-products, and related environmental services, including waste collection, transfer and disposal services, recycling services, soil remediation, wastewater management, and environmental consulting services." ²¹



Credit Rating Agencies

Introduction

CRAs do not yet embed ESG issues in their ratings criteria or processes them in any systematic or transparent way Credit rating agencies (CRAs) are essential to the smooth functioning of global debt markets. Their purpose is to assign ratings to various debt securities, most notably corporate and sovereign debt. These ratings attempt to assess the likelihood of a debtor defaulting on their repayment. Analyzing the creditworthiness of debt securities assists investors in fully understanding the potential risks associated with an investment.

S&P, along with Moody's and Fitch ('The Big Three'), have about 95% market share of CRAs.²² As a result, the oligopolistic structure of the CRAs market means the 'Big Three' can play an influential role in global capital markets.

According to S&P, the oldest of 'The Big Three,' a credit rating is a forward-looking opinion about relative credit risk. By offering a rating, investors can compare debt securities across geographies and sectors based solely on their riskiness, in the form of default risk. The rating is not meant to

be a method that defines an organization on a scale of good to bad. Nor is it supposed to be substituted as investment advice. Credit ratings act as information intermediaries that link borrowers with investors in an independent manner.

In recent years, CRAs have been criticized both for their independence and for their role as "key enablers" of the financial crisis.^{23,24}

Given the influence CRAs can exert, they have an important role in the transition to a sustainable economy. However, CRAs do not yet integrate environmental, social and governance (ESG) issues in their ratings criteria or processes them in any systematic and transparent way.²⁴

A recent paper on the role of CRAs in the transition to a sustainable economy argues that the lack of ESG integration within the criteria and ratings of CRAs actually increases credit risk for individual issuers and raises systemic risk for the market as a whole.²⁴

S&P's rating criteria for both corporate and sovereign debt Key Elements of Corporate Rating Criteria



Key Elements of Sovereign Rating Criteria



²² Eccles, R.G. and Youmans, T. (2015) 'Implied Materiality and Material Disclosures of Credit Ratings, Working Paper 15-079, Harvard Business School.

²³ Rivero, R. (2014), 'An Introduction to Standard & Poor's Ratings Services,' S&P

²⁴ McAdam, Matthew, (2010). 'Exploring the role and responsibility of credit rating agencies in the transition to a sustainable economy,' Cambridge Programme for Sustainability Leadership



Credit Rating Agencies

Case study

S&P

S&P (Standard & Poor's Ratings) is one of the ratings agencies that is developing an ESG policy.²⁵ The policy aims to provide transparency of a company's financial fitness and also its ESG performance.

S&P has mainly focused on understanding environmental performance. It has collaborated with the Carbon Tracker Initiative, a non-profit think tank, as part of its efforts to align corporate credit analysis and climate change. Through analyzing both the oil and coal sectors, S&P concluded that carbon constraints might negatively impact industries in the short to medium term. A negative impact from carbon constraints may lead to a credit downgrade, something that traditional credit analysis would fail to incorporate.

S&P is also involved in a number of other projects focused on environmental issues:

- Work with the UNEP Finance Initiative's "E-RISC" project, which integrates ecological factors into credit risk models for sovereign bonds.
- Involvement with the Stranded Assets Programme at Oxford University's Smith School, sharing research on how environmental risks may increasingly result in stranded assets.
- Produce special reports on the water sector. S&P has started to build water conservation, pricing and supply risks into its sector analysis.

Mainstreaming Environmental Finance: Green Bonds

S&P works with the Climate Bonds Initiative, an international organization striving to mobilize a \$80 trillion bond market for climate change solutions. As a member of the Board and Industry Working Group, S&P consults on the structure and content of the Climate Bonds certification and verification processes. S&P also helped develop the Climate Bonds Standard, a screening tool that assists investors in determining the integrity of environmental claims for green bonds.



Credit Rating Agencies

Case study

Moody's

Moody's has also developed an ESG policy, but unlike S&P it is more focused on the link between ESG performance and long-term investing.²⁶

According to Moody's, for some investors, long-term investing means avoiding investing in certain industries altogether, while for others it means incorporating ESG data into their investment research and portfolio construction. Although most of the focus has been on equity investing, more investors are seeking to apply a long-term investing approach to their entire portfolio. This would mean taking ESG factors into account when making fixed income investments.

Moody's is researching how asset managers and pension fund managers are viewing ESG information in making their fixed income investment decisions. Moody's is working with Mercer, a leading consultant to pension funds, to survey asset managers worldwide and discern the trends in this area. The two companies will jointly publish the findings for the benefit of asset managers, consultants, corporations and investors. Moody's hopes to add clarity around social responsible investing (SRI) in fixedincome investing, revealing the extent to which asset managers are currently using ESG and how they plan to use it in the future.

Investors pressure for ESG incorporation

With a recent shareholder resolution, Calvert Asset Management requested Moody's Board of Directors to report to shareholders their assessment of the feasibility and relevance of incorporating ESG risk assessments qualitatively and quantitatively into all credit rating methodologies conducted by Moody's in a uniform, consistent manner across all firms, sectors and geographies so that institutional investors can compare and contrast forward-looking credit rating agencies.

Most common ESG incorporation strategies

Long-term investing is an approach that explicitly acknowledges the relevance to the investor of ESG factors and of the long-term health and stability of the market as a whole²⁷

Boutique investment managers specialize in integrating ESG issues in their investment practices. There are three basic strategies currently employed by boutique investment managers:

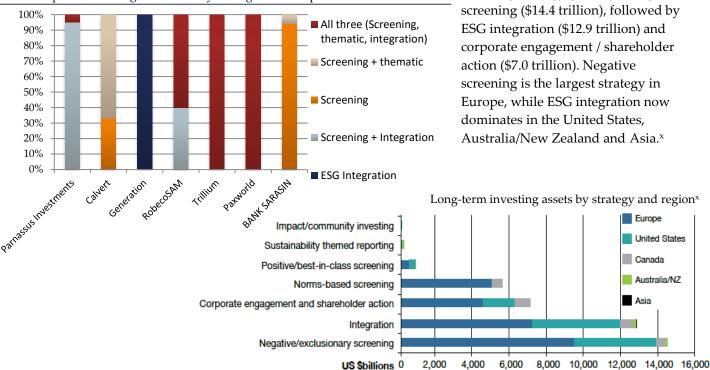
- **Screening**s consist of *negative* / positive screenings that involve excluding or preferentially investing in companies or sectors on the basis of criteria relating to their products, activities, policies or performance. A best-in-class screening involves preferentially investing in companies with better ESG performance and management practices.
- Thematic investment involves selecting assets on the basis of investment themes such as climate change or demographic change.

 ESG integration involves the proactive consideration of ESG factors in investment research and decision-making. These factors are integrated into traditional financial analysis.

The graph below shows the ESG incorporation strategies for actively managed listed equities of 7 major boutique investment managers. Information on the incorporation strategies were found for all of the companies.* The strategies that boutique investment managers use are screening, thematic, integration or a combination of these.

A recent report by the Global Sustainable Investment Alliance showed that the largest long-term investing strategy globally is negative





²⁷ UNPRI, 'What is responsible investment"

[×] Global Sustainable Investment Alliance, 2014. ′2014 Global Sustainable Investment Review′

^{*} Collected from publicly available resources (websites, reports). Any information that is available only to clients or through proprietary databases is not included in this research.

ESG integration case studies

Generation

Generation was formed around the concept of integrating sustainability research into long-term investing. They fully integrate sustainability factors into their traditional investment process across all their investment products. For each of their investment strategies, they offer one integrated product (i.e. they don't offer a 'traditional' and 'SRI' product).

Trillium

Trillium utilizes a high-conviction, higher-tracking error sustainability-themed strategy that invests in companies positioned to thrive as we transition to a more sustainable economy.

Investment Process: The strategy uses a thematic approach to identify companies addressing sustainability challenges in 3 areas: Green Solutions, Economic Empowerment and Healthy Living. A team of fundamental, sector focused analysts conduct bottom-up financial analysis including a rigorous integrated review of ESG factors.

Pax World

Pax World was one of the first investment managers to integrate ESG factors into investment analysis and decision-making.

<u>Investment Process</u>: The process includes identifying top-down global investment themes, looking at companies through bottom-up fundamental analysis and integrating comprehensive sustainability analysis with rigorous financial metrics.

Pax World's sustainability / criteria include such issues as:

Environmental: emissions (air, water and soil), pollution prevention, recycling and waste reduction, energy and resource efficiency, use of clean and renewable energy, climate change initiatives and other policies and practices focused on promoting sustainable development.

Workplace: diversity, equal opportunity based on gender, race, religion, age, disability or sexual orientation; workplace health and safety; labor-management relations; vendor standards and human rights, including indigenous peoples' rights.

Corporate governance: board independence and diversity, executive compensation, auditor independence, shareholder rights, disclosure, conflict of interest, bribery and corruption, transparency, disclosure of political contributions, business ethics and legal and regulatory compliance.

Community: companies' commitment to and relationships with the communities in which they do business (including their commitment to sustainable development abroad), their philanthropic activities and, in the case of financial institutions, responsible lending practices.

Product integrity: product health and safety (including public health issues associated with product abuse and addiction), animal welfare, consumer issues and emerging technology issues.

Incentive systems for long-term investing

Most of the boutique investment managers link compensation incentives to the performance of long-term investing practices

As long-term investing is gaining momentum, appropriate governance mechanisms need to complement implementation.

Questions to be answered in this section include:

- Who is ultimately responsible for long-term investing among mainstream asset managers?
- Are compensation incentives linked to performance on long-term investing?

Information on who is responsible for long-term investing could be found for all of the companies.* 5 boutique investment managers have introduced board oversight for long-term investing. All of the investment managers have their CEO, CIO or investment committee oversee long-term investing policies and practices, and also assign the implementation of long-term investing practices to the CEO and/or the CIO.

Most of the boutique investment managers link compensation incentives to the performance of longterm investing practices:

Pax World, Calvert, RobecoSAM: The CEO, CIO and investment committee have long-term investing KPIs and/or goals included in their objectives. Long-term investing is included in their appraisal process and their personal development and training plans. Their variable pay is also linked to long-term investing performance.

RobecoSAM: Long-term investing is included in the personal development and training plan for the board members/board of trustees. As an investment specialist exclusively dedicated to long-term investing, RobecoSAM's board is fully committed to sustainability investing and very engaged on this topic in all board discussions. Furthermore, to ensure that the company is aligned to deliver on group-wide long-term investing objectives, the targets are broken down into departments, teams and individuals targets. Collaboration between different teams and departments is emphasized through these shared objectives, as well as the use of internal stakeholders feedback in individuals' performance appraisals and the promotion of "collaborative growth" as one of five RobecoSAM's corporate values.



5 out of 7 boutique investment managers assign oversight / accountability of long-term investing to the board members or trustees

7 out of 7 boutique investment managers assign oversight/accountability of long-term investing to the CEO, CIO, or investment committee 7 out of 7 boutique investment managers assign implementation of longterm investing to the CEO, CIO, or investment committee

^{*} Information was collected from publicly available resources (websites, reports). Any information that is available only to clients or through proprietary databases is not included in this research.

Engagement with organizations or initiatives that promote longterm investing

There are several organizations and initiatives that promote long-term investing. They cover a broad spectrum of activities like promoting good corporate governance practices, supporting environmental stewardship, setting principles for long-term investing, establishing sustainability standards and more.

Number of boutique investment manager firms (as a percentage of the total sample) that engage with the following collaborative organizations / initiatives

100% UNPRI United Nations Principles for Responsible Investment promotes responsible investment principles (integration of sustainability into investment decision-making) and its implementation by investors.

100% CDP Carbon Disclosure Project provides investors with access to a global source of year to year information that supports long-term analysis (companies' GHG emissions, water usage, strategies for managing climate change etc.).

86% SIFs Social Investment Forums (regional and national) is a network where practices, information and expertise are shared to guide social investment policies.

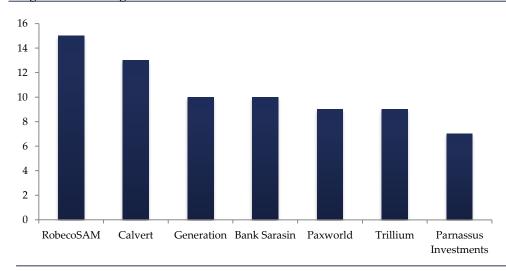
86% INCR / CERES Investor Network on Climate Risk is a network of more than 110 institutional investors committed to addressing the risks and seizing the opportunities resulting from climate change and other sustainability challenges.

The graph below shows the collaborative organizations and/or initiatives of which the boutique investment managers are a member or in which they participate.

The UN-led Principles for Responsible Investment and the Carbon Disclosure Project are the two initiatives most widely adopted.

The trend of organizations or initiatives that boutique investment managers engage with is similar to the one for the top 25 mainstream asset managers. Most of these organizations or initiatives are related to environmental and governance considerations, and those that are least adopted are namely frameworks and standards around sustainability reporting (GRI, SASB) and integrated reporting (IIRC).

Boutique investment manager participation in collaborative organizations / initiatives that promote long-term investing



ESG Measurement and Reporting

Major organizations

1,380



UNPRI Signatories

Includes asset owners, investment managers & service providers

\$59 Trillion



Assets under management

United Nations Principles for Responsible Investment (UNPRI)

The UNPRI initiative is an international network of investors working together to put the 6 Principles for Responsible Investment into practice. Its goal is to understand the implications of sustainability for investors and support signatories to incorporate these issues into their investment decision-making and ownership practices.

The signatory base has recently hit \$59 trillion, a 29% year-on-year increase. This comprises just over half of the world's institutional assets. Past year notable signatories include Vanguard, Harvard University, University of California and Bank of America's Global Wealth and Investment Management.

Sustainability Accounting Standards Board (SASB)

The Sustainability Accounting Standards Board (SASB) is an independent 501(c)3 non-profit.

SASB Universe of Sustainability Issues

Communications and engagement.
Community development impact from facilities customer shalfsaction. Customer health and safety bisclosure and labeling. Marketing and ethical advertising. Access to services. Customer privacy. New markets.

Child and forced labo



- Cong term vability of core business
- Accounting for externalities
- Research, development and innovation
- Product societal value
- Product societal value
- Product societal value
- Product procing
- Product standards, and safety

- Regulatory and legal challenges
- Policies, standards, codes of conduct
- Business ethics and competitive behavior
- Shareholder engagement
- Board structure and independence
- Executive compensation
- Lobbying and political contributions
- Raw material demand
- Supply chain standards and

Supply chain engagement & transparency SASB's mission is to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors. That mission is accomplished through a rigorous process that includes evidence-based research and broad stakeholder participation.

Carbon Disclosure Project (CDP)

The CDP works to transform the way the world does business to prevent climate change and protect the Earth's natural resources. CDP believes that companies that measure their environmental risk are better able to manage it strategically. Those that are transparent and disclose this information are providing decision-makers with access to a critical source of global data that delivers the evidence and insight required to drive action.

The CDP provides investors with access to a global source of year to year information that supports long-term analysis. This includes evidence and insight into companies' greenhouse gas emissions, water usage and strategies for managing climate change, water and deforestation risks. CDP was backed in 2015 by more than 822 institutional investors representing over \$95 trillion USD in assets.

ESG Measurement and Reporting

Major organizations

UNGC

8,402 Companies

162 Countries

35,750 Public reports

United Nations Global Compact (UNGC)

The UNGC is one of the largest corporate sustainability initiatives. UNGC aims to align companies' strategies and operations with universal principles on human rights, labor, environment and anticorruption and takes action that advance societal goals.

The UNGC supports companies to:

- 1. Do business responsibly by aligning their strategies and operations with Ten Principles on human rights, labor, environment and anti-corruption
- Take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation.

International Organization for Standardization (ISO)

ISO is an independent, non-governmental international organization with a membership of 162 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensusbased, market relevant international standards that support innovation and provide solutions to global challenges. There are currently two ISO standards related to sustainability:

ISO 14000 - Environmental management The ISO 14000 family of standards provides practical tools for companies and organizations of all kinds looking to manage their environmental responsibilities. ISO 14001:2015 and its supporting standards such as ISO 14006:2011 focus on environmental systems to achieve this. The other standards in the family focus on specific approaches such as audits, communications, and environmental challenges such as climate change. The ISO 14001 helps organizations improve their environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of

ISO 26000 - Social responsibility

stakeholders.

ISO 26000 provides guidance on how businesses and organizations can operate in a socially responsible way. This means acting in an ethical and transparent way that contributes to the health and welfare of society. ISO 26000:2010 provides guidance rather than requirements, so it cannot be certified to, unlike some other well known ISO standards. Instead, it helps clarify what social responsibility is, helps businesses and organizations translate principles into effective actions and shares best practices relating to social responsibility.

ESG Measurement and Reporting

Major organizations

Of 250 of the world's largest corporations, 93% report on their sustainability performance and 82% of these use the GRI's Standards to do so.*

Global Reporting Initiative (GRI)

The GRI is an international, independent organization that helps businesses, governments and other organizations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights, corruption and many others.

Of the world's largest 250 corporations, 93% report on their sustainability performance and 82% of these use the GRI's standards to do so.*

AccountAbility

AccountAbility is a leading global organization providing innovative solutions to the most critical challenges in corporate responsibility and sustainable development.

AccountAbility's AA1000 series are principle-based standards to help organizations become more accountable, responsible and sustainable. They address issues affecting governance, business models and organizational strategy, as well as provide operational guidance on sustainability assurance and stakeholder engagement.

The AA1000 AccountAbility
Principles Standard (AA1000APS)
provides a framework for an
organization to identify, prioritize and
respond to its sustainability
challenges.

The AA1000 Assurance Standard (AA1000AS) provides a methodology for assurance practitioners to evaluate the nature and extent to which an organization adheres to the AccountAbility Principles.

The AA1000 Stakeholder Engagement Standard (AA1000SES) provides a framework to help organizations ensure stakeholder engagement processes are purpose driven, robust and deliver results.

^{*} www.global reporting.org/information/sustainability-reporting/Pages/gri-standards.aspx

Regulators & Industry Accounting Bodies

Accounting bodies and standard setters have not yet carried out any significant work to incorporate ESG information into financial reporting. Neither the Financial Accounting Standards Board (FASB), which develops U.S. financial reporting standards (U.S. GAAP), nor the International Accounting Standards Board (IASB), which develops international financial accounting standards (IFRS), have made sustainability reporting a priority.

In the U.S., the Securities and Exchange Commission (SEC), in response to investor pressure to issue guidance outlining climate-related 'material risks' such as new regulations, physical impacts, new economic and business opportunities and other climate-related trends that companies should be disclosing to investors, issued Release No. 33-9106 Commission Guidance Regarding Disclosure Related to Climate Change.

The other area that the SEC has incorporate ESG data into regulatory filings has been conflict minerals. In 2012, the SEC issued Release No. 34-67716 *Conflict Minerals*. The release requires public companies to disclose information about their sourcing of certain materials from mines in the eastern Democratic Republic of the Congo.

A recent study showed that only 128 of the 4,609 largest listed companies disclose the most basic sustainability information. According to the study, 97% of companies fail to provide data on the full set of "first-generation" sustainability indicators - employee turnover, energy, GHG emissions, injury rate, pay equity, waste & water. As a result, pressure has been put on regulators like the International Organization of Securities Commissions (IOSCO) to coordinate more effective reporting (see case study below).

Investors pressure for co-ordination of more effective reporting

With a recent letter to IOSCO Board Members, investors representing \$9.3 trillion USD in assets under management requested that IOSCO work more closely with regulators, stock exchanges and other related parties to improve the disclosure of material and high-quality ESG information in the global marketplace. Given IOSCO's core objective to "cooperate in developing, implementing and promoting adherence to internationally recognised and consistent standards," the group of investors specifically urged IOSCO to consider the following as part of its strategic planning process for 2015-2020:

- Lead dialogue with regulators and exchange operators to determine a pathway for more consistent ESG disclosure rules to be brought forward in each market.
- Develop disclosure rules and accountability mechanisms that facilitate meaningful, comparable and consistent ESG disclosures across markets, without imposing undue compliance or liability risks on issuers.
- Create a task force dedicated to improving ESG disclosures market-wide and whose work would feed into IOSCO's Issuer Accounting, Auditing and Disclosure Committee (CI).
- Publish an official statement explaining the rationale for ESG disclosure to help issuers and capital market influencers better understand the benefits.



About High Meadows Institute

The High Meadows Institute is working to understand how private sector leadership can drive the changes needed to ensure global capital markets are free, vibrant, and sustainable and operate in the long-term interests of both investors and society.

www.highmeadowsinstitute.org

About KKS Advisors

KKS Advisors is an advisory services firm working with companies, investors, NGOs, and public officials to find innovative solutions that enable the creation of more sustainable business models and communities. Private and public sector leaders come to KKS when they face the most challenging issues for their organizations.

www.kksadvisors.com