North Carolina Department of the State Treasurer

# "Long Term Stewardship: A Pragmatic Approach for ESG Integration for Institutional Investment"

September 21, 2016

## Contents

## Purpose

For the past eighteen months, the Investment Management Division ("IMD") and Corporate Governance ("CG") staff undertook a research project to critically evaluated evidence for and against considering Environmental, Social, and Governance ("ESG") issues in the investment process. The first phase of this project included compiling and codifying IMD's values, mission, vision statements, organizational aspirations, and investment beliefs. The second phase of this project included deliberately assessing the fundamental arguments for and against ESG considerations in the investment process and then critically thinking about how best to implement ESG-related investment beliefs through corporate governance, risk management, or portfolio management activities. This paper discusses the approach and key findings from the second phase of the research project. The Long Term Stewardship Practices policy, proposed to the Department of State Treasurer ("DST"), has resulted directly from this research effort.

## Context & Approach

"ESG" is a generic term used to describe the non-classical financial performance and risk factors that allow investors to evaluate corporate behavior and the impact of these factors on public and private markets investments. Examples of specific environmental, social and governance factors are shown in Figure 1.

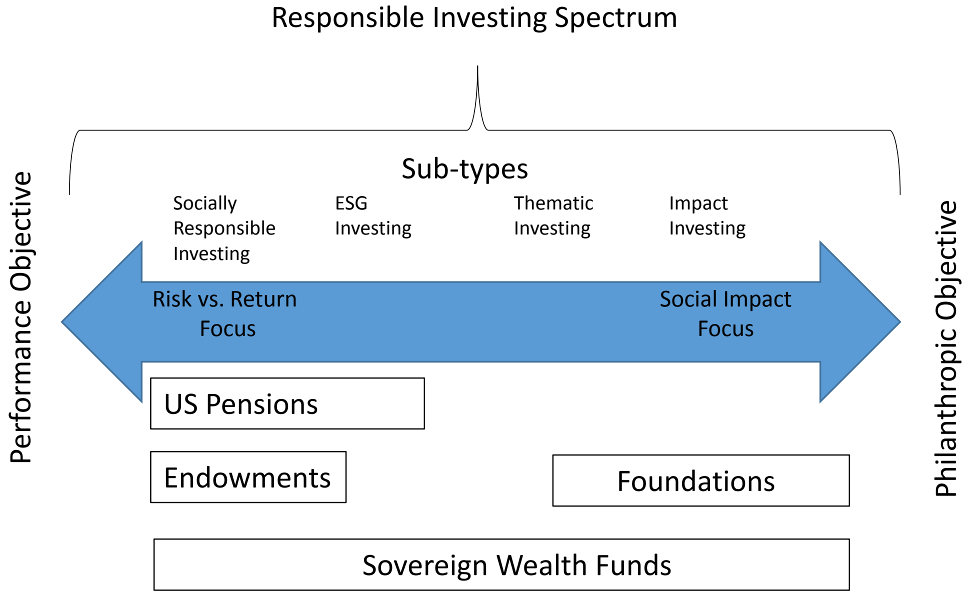
**Figure 1 – Environmental, Social & Governance Factors**

| Environmental | Social | Governance |
|---|---|---|
| • Water scarcity | • Labor relations | • Board structure |
| • Climate change | • Health & safety | • Compensation |
| • Energy efficiency | • Supply chain | • Shareholder rights |
| • Pollution | • Corruption | • Transparency |

"Responsible investing" is a term applied by the United Nations PRI[1] to cover all forms of investing that incorporate ESG issues. Responsible investing spans a range of objectives with one end of the spectrum focusing on maximizing risk-adjusted returns (i.e. "Socially Responsible Investing") to the other end, "Impact Investing" which is focused on ethical considerations linked to a social outcome. As illustrated in Figure 2, institutional investors participate in different parts of this spectrum, depending on their objectives and fiduciary obligations. Given their legal responsibility to pay benefits, U.S. pension plans orient towards socially responsible investing while foundations tend towards impact investing. Sovereign wealth funds are a very heterogeneous group, with considerable variation in their origins, governance structure, missions, cultural backgrounds, and staff resources. As such, they span the full range of responsible investing objectives.

[1] United Nations Principle of Responsible Investing: http://www.unpri.org. "Responsible investing" is used synonymously with "sustainable investing".

**Figure 2 – Responsible Investing Objectives**




The second phase of this research project began with a set of questions, posed from an investment perspective:

- What, if any, ESG issues contribute to the financial performance of a company?
- Which ESG issues matter by asset class or investment strategy?
- How have ESG targeted investments performed?
- How beneficial are ESG considerations in mitigating downside risk for a portfolio?
- How are other institutional investors addressing ESG issues?

The approach to an answering these questions involved the following steps:

- Benchmarking peer groups on their ESG activity
  - 61 U.S. Public Pensions
  - 19 Endowments & Foundations
  - 11 Sovereign Wealth Funds
- Determining which ESG factors are material to performance and risk management
  - Understanding ESG data and standards issues
  - Reviewing academic literature
  - Evaluating why and how certain public and private market managers integrate ESG into their investment process
- Developing and implementing EDGE, an educational speaker series designed to gain a deeper understanding of how practitioners, academics, consultants and other institutional investors are approaching ESG
- Evaluating ESG capabilities of investment consultants
- Determining current best practices for ESG integration

# Findings

## *Benchmarking*

### Background

Staff interviewed 61 public pension plans across all fifty U.S. states regarding their policies and investment approaches towards ESG issues. The interviews were done by phone and allowed staff to probe and gain a nuanced understanding of a plan's ESG activity. The size of these public pension plans ranged from less than $5 billion to greater than $100 billion.[2] Staff also interviewed 19 endowments and foundation, based in the United States. The majority of this group had assets under management ("AUM") greater than $1 billion, with the average AUM being approximately $10 billion.[3] IMD staff concluded its peer benchmarking by interviewing 11 of the largest sovereign wealth funds that manage a combined $5.2 trillion in assets.[4] An investor was categorized as being "Active" if it had an established ESG policy, incorporated ESG factors into either its investment or risk management process or had a systematic approach to corporate governance issues such as shareholder activism.[5] An investor was categorized as "Work In Progress" ("WIP") if it was not Active, but met one or more of the following conditions: 1) investor is working on establishing an ESG policy; 2) the investor lacks a formal ESG policy, but is incorporating certain ESG factors into its due diligence for investments; or 3) the investor is active in corporate engagement on a matter-by-matter basis, rather than adopting a systematic approach. An investor was labelled as "Inactive" if it was neither Active nor WIP. The Inactive plans self-reported this status. Both Active and WIP pensions were given the opportunity to discuss and review their ESG labels. The ESG Active plans also reviewed summaries of their ESG activity to insure accuracy.

### Results & Analysis

Using the previously described classification, the ESG activity, by investor type, is shown in Table I:

**Table I – ESG Activity by Investor Type**

| Investor Group | Active | WIP | Inactive | Sample Size |
|---|---|---|---|---|
| US Public Pensions | 15% | 26% | 59% | 61 |
| Endowments | 53% | 0% | 47% | 14 |
| Foundations | 80% | 0% | 20% | 5 |
| Sovereign Wealth Funds | 15% | 26% | 59% | 11 |

Source: IMD Staff

[2] Based on valuations done for FY2014 or FY2015

[3] Based on valuations done for FY2015 for endowments as reported to NACUBO; FY2014 or FY2015 for foundations

[4] Based on valuations done for 2015 and converted to USD

[5] Divestment related to Iran, Sudan, Cuba or Northern Ireland were excluded from counting towards ESG activity as this activity is largely driven by legal considerations.

The highest percentage of ESG activity is observed for Foundations while the lowest percentage is observed for US Public Pensions and Sovereign Wealth Funds. Both Endowments and Foundations show a binary pattern of either being Active or Inactive, with none of the 19 survey participants fitting the "Work In Progress" category. For Endowments, this binary pattern largely reflects the response to divestment from fossil fuels. For Foundations, it reflects tendency towards impact investing.

The impetus for being ESG active for various investor types is shown in Tables II, III and IV respectively:

**Table II – Impetus for ESG Activity for US Public Pension Plans**

| Public Pension | Impetus | Comment |
|---|---|---|
| Pacific A | Board, CEO & CIO | Early mover, before 2005 |
| Pacific B | Treasurer | Early mover, before 2005 |
| Northeast A | Legislature | Statutory requirements allow consideration of ESG factors in investment decisions |
| Southeast | Senior management | Well established corporate governance program |
| Northeast B | Senior management, divestment push | Shift to alternative investments and response to activist fossil fuel divestment push targeting legislature |
| Northeast C | Senior leadership | Focus on climate change & shareholder activism |
| Northeast D | Senior management | Shift to private investments, complemented by legislative and activist interest. |
| Pacific C | Board & senior management | Views climate change as risk to portfolio |
| Midwest | Board, CIO | Well established corporate governance program |

Source: IMD & CG Staff

Pacific A Plan and Pacific B Plan are the early movers in the pension peer group, with their ESG activity starting in the early 2000's. Both plans also have a long history of shareholder activism, dating back over thirty years. For Pacific A Plan, the current ESG framework was derived top down from its Board and the effort was facilitated by its senior management and a consulting group. For a variety of reasons, Pacific A Plan is still working on systematically integrating ESG factors into its investment process. Pacific B Plan's current ESG activities date back twelve years when the Treasurer, at that time, began viewing climate change as a risk and pushed for clean tech investments.

Northeast B Plan developed its ESG policy as part of its entry into alternative investment and this effort was accelerated by a fossil fuel divestment push from activists targeting the legislature. As such, Northeast B Plan's ESG integration is focused on the manager selection process in the private markets. Northeast D Plan's ESG efforts were also motivated shift to private market allocations and complemented by legislative and activist interest in fossil fuel divestment. After demonstrating the negative impact of fossil fuel divestment on its portfolio, Northeast D Plan developed an ESG policy that provides a framework for evaluating ESG-themed investments and divestment issues. Both activities must be evaluated through their overall impact on the portfolio and fiduciary obligations.

Pacific C Plan's ESG activity arises from its long standing activity in active corporate engagement. Pacific C Plan views climate change as a risk to its portfolio and shareholder activism as an effective method for maximizing the value of the stocks it owns. These beliefs are expressed in writing for its defined benefit retirement funds. Pacific C Plan's Board and senior management were all aligned in expressing this belief. Currently, the efforts to integrate ESG factors into its investment process are limited, partially due to the majority of its Pubic Equity being passively managed and relatively recent entry into certain private market areas. Similar to Pacific C Plan, Midwest Plan has a well-established corporate governance group. Midwest Plan's current CIO has also been active in promoting the integration of ESG factors into stock selection for its active, internally managed Public Equity portfolio. Similar to Pacific C and Midwest Plans, Southeast Plan has a well-established corporate governance group that actively engages companies on a number of ESG issues. Southeast Plan's senior management has supported these efforts. Unlike Midwest Plan, there is currently no ESG integration into Southeast Plan's investment process.

**Table III – Impetus for ESG Activity for Sovereign Wealth Funds**

| Sovereign Wealth Fund | Impetus | Comment |
|---|---|---|
| SWF1 | Mission driven | Seeking social justice<br>Limit negative physical & financial impact of climate change |
| SWF2 | Performance driven | Seeking better risk-adjusted returns through integration of material governance factors into Private Equity transactions |
| SWF3 | Risk management | Limit negative impact of climate change & poor company management on Private Equity and Real Estate investments |
| SWF4 | Performance & Mission driven | Seeking better risk-adjusted returns through ESG integration<br>Promote economic stability and growth of middle class in South East Asia & other emerging markets |
| SWF5 | Mission driven & risk management | Seeking to be a responsible corporate citizen and to mitigate select risks |

Source: IMD Staff

Despite their shared long- term investment horizon and sizeable portfolios, it is important to note that sovereign wealth funds are otherwise a very heterogeneous group. There is considerable variety between their origins, age, governance structure, cultural backgrounds, objectives, staff resources, approaches to portfolio management and relationships to the governments of their respective countries. While several of these funds have acquired their wealth from oil or natural gas, most of the Asian funds have arisen from either privatization efforts, the need to provide financial/currency stability to the domiciles' housing, globally important banking insitutions or supporting political stability while undergoing economic transformation. And while certain funds are essentially run like global private equity firms, other sovereign wealth funds literally exist in the structures of their central banks, with nationalistic and monetary policy objectives guiding them. This heterogeneity also is expressed in the different motivations for their ESG activity, as shown in Table III.

**Table IV – Impetus for ESG Activity for Endowments & Foundations**

| EnF | Impetus | Comment |
|---|---|---|
| Endowment 1 | Compliance | Certain ESG issues part of operational due diligence |
| Endowment 2 | Divestment & risk management | Response to student & faculty concerns on fossil fuels & mitigating climate change risk |
| Endowment 3 | Risk management | Material ESG factors part of manager due diligence |
| Endowment 4 | Divestment | Response to student & faculty concerns on fossil fuel |
| Endowment 5 | Divestment | Response to student & faculty concerns on fossil fuel |
| Endowment 6 | Alumni gift | Donation earmarked for ESG themed iinvestments |
| Foundation 1 | Alignment with philanthropic goals | Negative screening done by external managers |
| Foundation 2 | Alignment with philanthropic goals | ESG targeted investments |
| Foundation 3 | Alignment with philanthropic goals | ESG targeted investments |
| Foundation 4 | Divestment | Negative screening & low carbon index |

Source: IMD Staff

While ESG policy originates at the board level for both the endowments and foundations surveyed, the impetus for ESG activity is different between the two groups. For many of the university endowments, the activity is a direct response to faculty and student concerns, usually a divestment push related to a topic such as climate change (current) or apartheid (1980s and 1990s). Two notable exceptions are: one endowment needing to manage a large alumni donation earmarked for ESG themed investments and another endowment having developed a sophisticated, risk based approach for evaluating material ESG factors as part of the due diligence for its external managers. For foundations, the impetus arises at either the board level or from program staff (i.e. non-investment staff responsible for administering grant money to specific projects) seeking to align investments with the philanthropic goals of their grant programs (i.e. impact investing). In one case, a foundation opted to divest from coal while also working towards lowering the overall carbon footprint of its portfolio, mainly by shifting its equity exposure to a low carbon passive equity index product.

## Key Observations for Endowments & Foundations

- For both endowments and foundations, investment staff is generally not an active participant in ESG policy creation. Most expressed a clear preference to steer clear of this activity and look to have it housed elsewhere, either at a university level committee or at the board level. Typically, a chief operating officer or general counsel versus the chief investment officer is the appointed representative to such a committee. Investment staff views themselves as being responsible for implementation versus formulation of ESG policy.

- While the ESG issues on the radar of both endowments and foundations range from human rights to sustainability policies, a recurrent theme is divestment from fossil fuel companies, particularly coal. A noticeable split in viewpoints is evident between investment staff and stakeholders on this topic, with investment staff concerned about potential negative impact on portfolio returns, stranded assets costs and risks associated with alternative energy investments.

- The following ESG viewpoints were consistently expressed by the investment staff of both endowments and foundations:

    - For most of the endowments, ESG policy is generally viewed as an impediment to achieving targeted portfolio returns. Consistent frustration was expressed by the investment staff with stakeholders not understanding potential negative impact of divestment or exclusion policies on a portfolio.
    - Climate change is viewed as long term risk for their portfolios and both groups welcome networking to discuss methods for hedging this risk without compromising portfolio performance.
    - ESG issues are easier to evaluate and control for direct investments versus those done via external managers.

- For institutions incorporating ESG issues in their due diligence of external managers, this information is captured in the operational risk assessment of the manager. As such, the responsibility tends to fall on operational or compliance staff that coordinates with internal portfolio managers running the due diligence process. ESG factors are weighed similarly to other operational due diligence factors (valuation, disaster recovery plans etc.) in selecting a manager.

- The governance structure for foundations seems to provide the least friction between creating ESG policy and successful implementation with the investment staff. This seems to result from two factors: i) board members and trustees coming from finance or investment backgrounds, for the foundations survey for this study ii) shared values and beliefs existing between governance group and investment staff.

- Institutional quality ESG investment opportunities are few and can be difficult to access. For institutions with ESG specific investments, returns have often either been disappointing or it is too early to judge their performance.

- The use of consultants is sparse by endowments and foundations. The limited use of consultants has been primarily by foundations for sourcing and evaluating ESG specific investments.

## Key Observations from Sovereign Wealth Funds

- Climate Change as Risk. The Active and WIP sovereign wealth funds view climate change as a risk but have not yet developed a quantified method for assessing its impact. For their Private Equity investments, the approach to climate change is generally a qualitative assessment of which industries are most at risk and then mitigating it through either diversification into companies in less sensitive industries or by direct investments into later stage clean technology. SWF1 is furthest along in developing an integrated ESG risk model. For its larger stock positions in public companies, SWF1 may directly engage these companies on a variety of issues, including climate change. For the remainder of the companies, SWF1 is trying to develop a "heat map" approach based on themes such as climate change and water scarcity that can be aggregated up to a total risk exposure at the Public Equity portfolio level. The goal is to be able to benchmark and manage ESG risks to certain limits for the entire Public Equity portfolio similar to what is done for managing to a volatility limit. SWF1 also uses negative screening in stock selection and recently divested from coal mining and power companies that derived more than 30% income from use of thermal coal.

- “G” Forces. Most of the Active and WIP sovereign wealth funds recognize good governance as a factor that correlates with better company performance and liability management. How a sovereign wealth fund approaches “G” issues depends on whether it is a direct Private Equity investor or a public stock holder. Some practice shareholder activism while others may do it through direct control of the company and its management. For its Private Equity transactions, SWF7 takes a quantitative approach in using certain governance factors to identify a private company’s potential to outperform its industry peers over a 10 year horizon. This analysis is used to determine participation and potential co-investment deal size.

- ESG Policy & Integration. SWF1 is currently the only one, in this sample group, with an established ESG policy. All of the Middle Eastern funds have investment restrictions based on Sharia law but otherwise have no explicit ESG policies. However, the Private Equity group of one of these funds has developed a robust, proprietary database for privately held companies. This group has determined which ESG factors are material by industry and it uses this information in the valuations of its Private Equity transactions. Some of the Asian funds incorporate social mandates into their investment and corporate policies. Some are currently in the process of researching how to integrate ESG issues into their investment process and actively developing tools to evaluating a broad range of ESG issues. One Asian fund explicitly tracks the potential impact of climate change on its externally managed Private Equity portfolio.

## Key Observations from US Public Plans

- Defining investment beliefs. Defining investment beliefs is important in determining how ESG activity fits within an investment program. This exercise is usually done as an initial step in establishing an ESG policy. Interviewees expressed the view that without sharing common investment beliefs, effective ESG activity is a non-starter. It is also important to include, from the outset, the investment staff in defining the beliefs and how these beliefs relate to ESG issues. The first ESG movers identified early involvement of the investment staff as an important “lesson learned.” Much of their subsequent efforts have been geared towards engagement of the investment staff.

- Engagement over Divestment. For most of the Active plans, engagement with companies on ESG issues is viewed as being more impactful than divestment. This viewpoint is supported by empirical studies and the pensions’ direct experience. Impactful corporate engagement is both time and staff intensive. Consequently, smaller plans are interested in collaborating with larger ones on certain shareholder resolutions. Plans may also outsource this activity to external firms that provide corporate engagement services.

- Holistic approach. Boards, senior management, corporate governance and investment staff have different responsibilities and different levels of experience with ESG issues. Taking a holistic approach that coordinates the efforts of the boards, senior management, corporate governance and investment staff is felt to produce the best results for development of an ESG policy that can be implemented through portfolio management and that supports impactful shareholder activism and proxy voting. Otherwise, ESG activity can become limited to governance issues addressed only by corporate governance staff. A holistic approach enables a pension fund to determine which ESG issues are material for performance and best addressed by portfolio management, risk management, or corporate governance staff.

- Climate Change as Risk: All of the Active and WIP US pension funds view climate change as a risk to their portfolios while the Inactive plans do not. Three of the Active US pension plans have hired the same investment consultant to model the potential impact of climate change on their portfolio through scenario analysis. This modeling has helped them understand which of their assets are most vulnerable to losing value under different temperature increase scenarios over different time periods.

- ESG Activity: Statistical analysis was done on several factors to see what, if any, correlation was observed for ESG activity for US pension funds. Factors evaluated included: size, funded ratio, percentage of internal vs. external management and percentage of public vs. private market investments. Three of these four factors showed no meaningful statistical correlation. A slight correlation was observed for size as five of largest US pension plans are in the ESG Active category. A statistically significant correlation was also observed between how "green" a state was and its overall ESG activity.[6]

## *Materiality*

The first steps in answering the question of which ESG issues were material to financial performance involved critically evaluating the ESG data disclosed by companies and reviewing the academic literature.

### Data & Standards Issues

As show in Table V, there are numerous groups collecting and providing ESG data. Unfortunately, only a subset of them, highlighted in yellow, do this from an investment perspective. Morevoer, there are currently[7] no regulatory requirements for companies to disclose ESG information in a consistent or timely way. The ESG data disclosed by companies is self-reported. Moreover, the data is neither audited or annually collected. As validated by industry

[6] http://wallethub.com/edu/greenest-states/11987
[7] Starting in 2017, listed companies, in the European Union with more than 5000 employees, will be required to disclose certain ESG information in their annual reports. Http://news.iwfinancial.com/esg/eu-will-require-large-companies-to-disclose-esg-data-by-2017.

practitioners, both sell and buy-side analysts currently need to do further research to validate the information, either through direct contact with the company or through third party specialists. These additional efforts can be time consuming and costly. Moreover, much of the ESG data disclosed does not align around economic value creation or financial performance (i.e. materiality). It is difficult to measure performance attribution from ESG factors, so companies choose easier metrics to report. Without regulatory requirements, it appears easier for a company to communicate their status as a good corporate citizen than to report material governance or environmental issues to their shareholders. This challenge is further compounded by some ESG staff coming from a compliance, policy, or corporate governance background versus having financial analyst or portfolio management experience.[8] Consequently, most ESG reporting is not tied material factors important to investors or analysts.

**Table V – ESG Data Sources**

**Enviromental – Climate**

- Carbon Disclosure Project (CDP)
- Global Framework for Climate Risk Disclosure
- Greenhouse Gas Protocol
- Institutional Investore Group on Climate Change (IIGCC)
- Investor Network on Climate Risk (INCR)

**Social**

- Fair Trade Federation (FTF)
- Fairtrade Labelling Organization (FLO)
- Business & Human Rights Resouce Center
- International Labor Organization (ILO)
- Social Accountability International (SAI)

**Governance**

- International Corporate Governance Network (ICGN)
- Global Corporate Governance Forum
- European Center for Corporate Engagement (ECCE)

Source: IMD Staff

Given these issues, there is a significant need to improve the relevance, comparability and consistency of ESG information. In particular, the financial industry needs to clearly define what ESG information is material to the financial performance of companies, their investors and equity analysts. The next step involves doing the hard, quantitative work of measuring ESG attribution to performance and then adopting a framework for how to integrate material ESG factors into investment decisions.

[8] Based on observations made by IMD staff on backgrounds of ESG staff from benchmarking studies, EDGE series participants, external managers and third party vendors.

## ESG Integration Frameworks

The Sustainability and Accounting Standards Board ("SASB")[9] and State Street Global Advisors ("SSGA") have developed ESG integration frameworks that are based on the concept of "materiality" as it relates to information necessary for investors to make informed decisions about buying or selling securities. SASB's goal is to develop accounting standards that help public companies report ESG information that is useful to investors. SASB's framework involves a rigorous process that includes evidence-based research on 79 industries and broad stakeholder participation. SASB uses the same criteria as the Securities Exchange Commission ("SEC") in determining the materiality on financial information. The ESG issues deemed material by SASB can be explored through their interactive on-line tool, "Materiality Map.™"[10]

Project Delphi is a European-focused, collaborative project sponsored by SSGA.[11] Its goal is to create an open-source platform that enables investors and other users to identify and update material ESG factors. (For example, fundamental equity analysts could use Project Delphi to refine their valuation models while governance staff could use it to prioritize issues for corporate engagement.) Table VI gives a snapshot that compares the two ESG integration frameworks.

**Table VI – SASB versus Project Delphi**

| | SASB | Delphi |
|---|---|---|
| **Purpose** | To develop and disseminate sustainability accounting standards that help public companies disclose material information to investors | To enhance ESG integration in asset management by clarifying the ESG investment process |
| **Definition of Materiality** | Evidence-based via three areas<br>• Evidence of financial impact<br>• Evidence of interest<br>• Forward looking adjustments | ESG factor is considered material if it<br>• has financial impact on defined value drivers for investments<br>• Allows prioritization of issues for investment decision making<br>• Is based on research<br>• Is rigorous (replicable, credible, defensible)<br>• Is practical (simple enough to use widely<br>• Is sophisticated enough for modeling |
| **Primary Audience** | Companies & Investors | Investors |

Source: High Meadows Institute

## Academic Studies & Performance

The number of academic papers analyzing responsible investing is large, with over 1000 papers published year to date 2016.[12] IMD and Corporate Governance staff found it helpful to manage

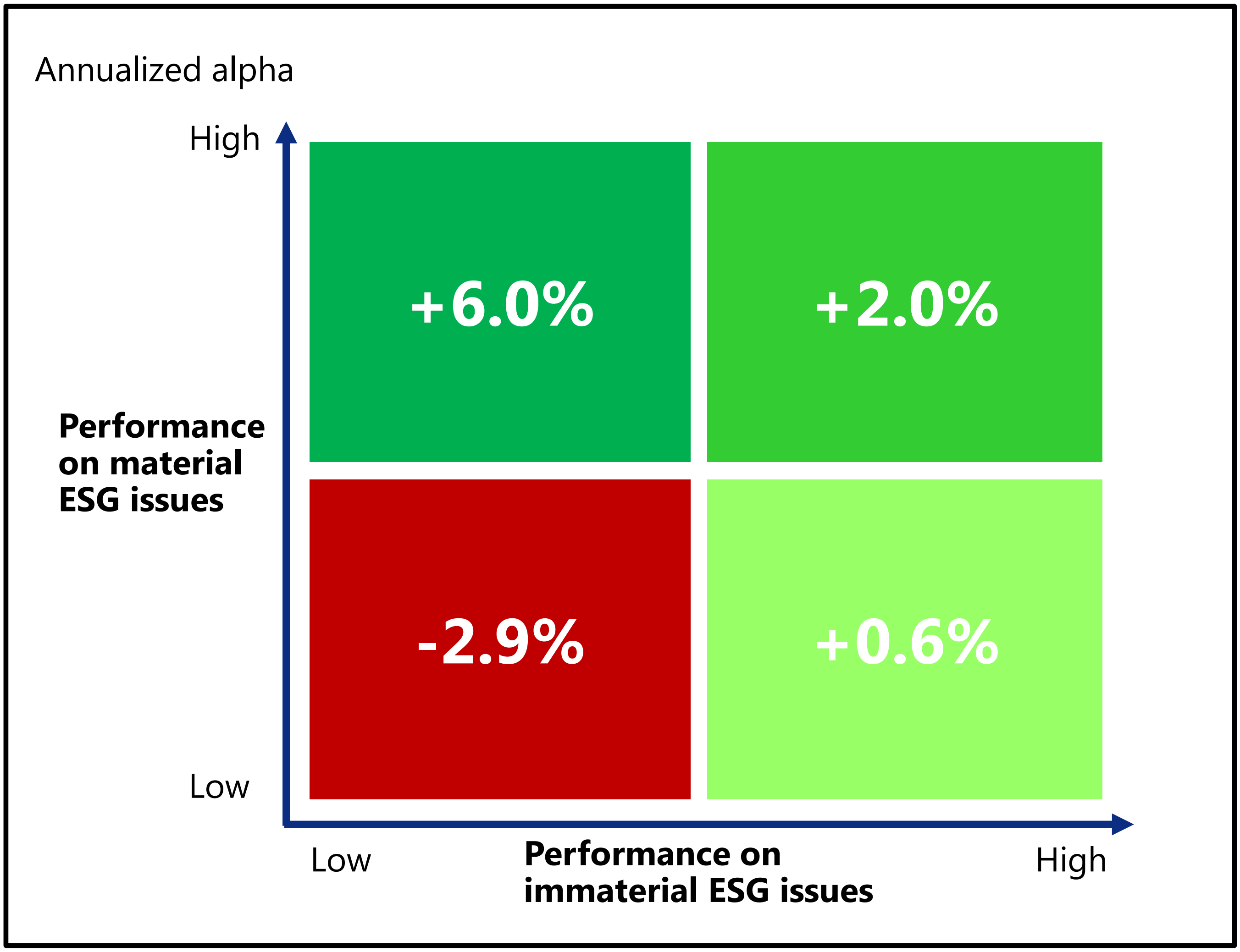
9 http://www.sasb.org/
10 http://www.sasb.org/materiality/sasb-materiality-map/
11 http://www.proxywatch.com/wp-content/uploads/2014/06/Delphi-Overview-for-March-18-FINALFINAL-3.pdf
12 http://www.ssrn.com

this volume by reviewing holdings in the Sustainable Investment Research Initiative ("SIRI") library,[13] reviewing recent meta-studies[14],[15] and by having direct discussions with leading academics. Analysis of this literature is also complicated by researchers asking different questions about the relationship between financial performance and responsible investing. Some studies have shown that companies with higher ESG scores have shown better risk-adjusted returns[16] while more recent results have shown the opposite. Through 2014, there is mixed evidence in the literature on the relationship between ESG issues and financial performance.[17],[18]

These previous studies also did not account for the difference in material impact of ESG issues across industries (i.e. importance of water scarcity on a beverage company versus a bank). While the amount of ESG data disclosed by companies has grown exponentially, until recently, no organization was providing guidance on what specific data was material for financial performance. SASB has the objective to help change this situation by developing standards that help public companies report ESG information that is useful to shareholders. In 2015, Serafeim[19] and his colleagues at Harvard Business School ("Serafeim") used SASB's approach to develop a unique data set to measure which ESG factors are material for financial performance. Serafeim mapped the industry specific data from SASB onto the MSCI KLD data base for companies for a variety of ESG issues. By regressing this unique data set against known variables impacting company performance (e.g. size, market-to-book ratio, leverage, profitability, R&D intensity, advertising intensity, institutional ownership and sector membership) and using the residuals to construct a porfolio, Serafeim was able to test for future stock return performance of the portfolio. With this approach, Serafeim found that companies with strong ratings on material ESG issues outperform companies with poor ratings on these issues (as measured by annualized alpha). In contrast, companies with strong ratings on immaterial ESG issues do not outperform companies with poor ratings on the same issues. Serafeim's findings are illustrated in Table VII. Serfeim's work is seminal as it is the first study to provide strong evidence that only material ESG factors matter for financial performance.

[13] https://www.calpers.ca.gov/page/investments/governance/sustainable-investing/siri-library
[14] 'Sustainable Investing, Establishing Long-Term Value and Performance' Deutsche Bank, June 2012.
[15] "From The Stockholder to the Stakeholder: How Sustainability Can Drive Financial Performance" Gordon C. Clark, Andreas Feiner, Michael Viehs, publication on Social Science Reaserach Network, March 2015 version.
[16] "Stakeholder relations and stock returns: on errors in investors' expectations and learning."Borgers, A., Derwall, J., Koedijk, K., & Ter Horst, J *Journal of Empirical Finance* 22: 159-175. 2013.
[17] "Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance." [17] Barnett, M. L. & Salomon, R. M *Strategic Management Journal*, 27(11): 1101-1122. 2006.
[18] "Does it Pay to Be Good...And Does it Matter? A Meta-Analysis of the Relationship between Corporate Social and Financial Performance." Margolis, Joshua D. and Elfenbein, Hillary Anger and Walsh, James P .Working paper. 2009.
[19] "Corporate Sustainability: First Evidence of Materiality." Mozzar Khan, George Serafeim and Aaron Yoon. Harvard Business School Working Paper, March 9, 2015. Forthcoming in *Accounting Review*.

**Table VII – Impact of Material vs. Immaterial ESG Issues on Company Performance**




Source: McKinsey presentation March 2016

As noted, there is mixed academic evidence in the literature on the relationship between ESG issues and financial performance, largely stemming from the lack of distinction made between material and immaterial ESG issues across industries. IMD staff also observed that the self-reported performance has been disappointing for the early ESG-targeted investments made by three of the Active public pension plans. In particular, the clean tech allocations have uniformly underperformed. This observation is consistent with the cautionary findings of recent studies, namely done through the National Bureau of Economic Research ("NBER")[20] and the Wharton Social Impact Iniative ("WSII").[21]

[20] "Local Overweighting and Underperformance: Evidence from Limited Partner Private Equity Investments." Yael V. Hochberg, Joshua D. Rauh. Working Paper 17122. National Bureau of Economic Research. June 2011.
[21] "Great Expectations: Mission Preservation And Financial Performance in Impact Investing" https://socialimpact.wharton.upenn.edu/

The NBER group sought quantify the impact of home-state private equity (”PE”) investments by examing a merged database of limited partner PE investments from 1980 – 2009.[22] The limited partners came from four classes of investors: endowments, foundations, corporate and public pensions. The NBER group found that all four classes exhibited a substantial home-state bias when investing in private equity. This effect was particularly pronounced for public pension funds, where the local overweighting amounts to 9.7% of the private equity portfolio on average, based on 5-year rolling average benchmarks. Moreover, public pension funds’ own-state investments performed significantly worse than their out-of-state investments, an average of 3-4 percentage points of net IRR per year, and those that that overweight their portfolios towards home-state investments also perform worse overall. These underperformance patterns are not evident for other types of institutional investors, such as endowments, foundations and corporate pension funds,. The overweighting and underperformance of local investments cost public pension funds between $0.9 and $1.2 billion per year, depending on the benchmark.

The WSII group surveyed 53 impact investing PE funds to see if the general partners (“GPs”) need to sacrifice some of the social impact (a.k.a “mission”) objectives of their portoflio companies in exchange for investment returns. As impact investing can include specific concession of returns for achieving social impact, the WSII group focused on the sub-set of 16 impact PE funds that sought market rate returns. As can be seen from Table VIII, for the time period from September 30, 2001 to September 30, 2014, the impact PE funds slightly underpeformed their non-impact counterparts while both groups outperformed their respective market benchmarks.

**Table VIII – Realized Market-Rate-Seeking Impact Funds’ Exits Vs. All Market-Rate-Seeking Exits**

| | Gross IRR | Gross mIRR | Microcap PME* | S&P500 PME | # of Portfolio Companies |
|---|---|---|---|---|---|
| **All Exits** | 35.01% | 10.85% | 2.46 | 2.56 | 32 |
| **Impact Aligned Exits** | 33.52% | 10.34% | 3.09 | 3.26 | 16 |

* PME = public equivalent ratio that measures time-weighted performance relative to market index

## Synthesized Best Practices for ESG

Responsible investing is an evolving area for institutional investors. However, as illustrated in the benchmarking studies, long term, institutional investors are a very diverse group with varying governance structures, fiduciary obligations, staff resources and approaches to portfolio management. As such, the following “best practices” for approaching ESG issues should be viewed as a high level guide that needs to be tailored to a specific investor and their investment objectives. That being said, we have synthesized a list of some commonly shared best ESG

[22] Sources for merged data base: Thomson Reuters’ Venture Economics (VE), Private Equity, Intelligence (Preqin), VentureOne (V1) and Capital IQ (CIQ).

practices from the benchmarking groups, which have also been echoed by consultants and investment managers active in this area:

- Providing ESG Education. Informing staff on responsible investing is seen as a key step for developing an ESG policy and approach. Often, responsible investing is conflated with impact or mission driven investing or simply divestment. Sharing information and gaining an understanding of which ESG issues matter to investors makes for more constructive dialogue and policy creation. Senior management, corporate governance, portfolio management, risk management, compliance and other investment-related staff often exist in silos, given their different responsibilities and they may have different levels of understanding and experience with ESG issues. Providing ESG information in a structured and non-biased way helps to facilitate integrating all parties into a single investment process.

- Determining materiality. It is important to understand which specific ESG issues are material for an investor for solely performance considerations (e.g., returns, risks, etc.) versus what may be important to other stakeholders for non-performance reasons (e.g., ethical, reputational, etc.). Most of the currently disclosed ESG data is not material for investors and is heavily focused on public equities. Despite SASB's excellent efforts, the current lack of uniform company reporting of material ESG issues makes it difficult to determine if a company's ESG score is representative of its quality for investment. Similarly, most ESG ratings for external managers are idiosyncratic and not based on materialility. Through a bottoms-up process, investment and risk management staff should establish what ESG issues are important to investigate by asset classs and strategy. Otherwise, it can simply be a box-checking exercise in an otherwise rigorous due diligence process.

- Risk Management themes: Climate change was a recurrent risk in the benchmarking studies. Currently, no ESG Active institutional investor has a fully developed, quantitative risk approach to climate change that is comparable with measuring volatility, duration or credit risk for their portfolios. That being said, one sovereign wealth fund is actively developing such a model. In addition, three US pension plans have hired the same investment consultant to model the potential impact of climate change on their portfolio through scenario analysis. This modeling has helped them estimate which of their assets are most vulnerable to losing value under different temperature increase scenarios over different time periods. Several foundations have also used total return swaps, as both hedging and return generating insturments, to reduce their fossil fuel exposure. Use of customized, low carbon equity indices is also being favored by pension plans and foundations. The Active and WIP sovereign wealth funds devote ESG and risk staff resources to manage reputational risks, such as bribery and corruption and labor rights abuses chains. This ESG activity is mirrored by two global private equity firms with significant emerging market exposure.

- Integration versus Allocation. Self-reported performance has been disappointing for the early ESG targeted investments made by three of the Active public pension plans. In particular, the clean tech allocations have uniformly underperformed. In addition, these plans have found it hard to deploy capital at scale, which has led to developing customized, low carbon index products as a way of addressing that limitation. One foundation has also been disappointed with performance in its ESG targeted private market investments while another foundation has ESG targeted investments, in public markets, that have outperformed their benchmarks. Only one endowment has done an ESG targeted investment through an external manager in public markets. This investment has outperformed its benchmark. A very large endowment views integrating material ESG factors into the due diligence process of its external managers as a better approach than directly allocating capital to ESG tagged investments. The majority of WIP institutions surveyed are also favoring ESG integration over allocation.

## Long Term Stewardship Practices

The key findings (a.k.a "best practices") from this research have led to the development of an investment policy that is focused on integrating material ESG issues into the investment, risk management and corporate governance activities of North Carolina's defined benefit plan. The goal of this investment policy is to better facilitate meeting the portfolio's long term objectives. These findings are expressed in the "Long Term Stewardship Practices" policy. Here are the three major components of DST's Long Term Stewardship Practices:

- **Governance.** Adopting and advocating well-recognized and sound governance and regulatory principles and policy.
- **Global Risks Management.** Managing assets with an appropriate cognizance of material long-term economic, environmental, geopolitical, societal, and technological risks and trends.
- **Integration.** Systematically integrating these governance and long-term risk considerations across portfolio management and corporate governance processes.

Long Term Stewardship reflects the learning that ESG materiality varies by industry, asset class and investment strategies. As such, it is best best addressed by a bottoms-up approach that considers which ESG issues matter for a specific asset class or security. Given the cautionary lessons learned from the performance of ESG-themed investments, Long Term Stewardship favors integration over direct capital allocation. Clear attribution of certain governance factors to realizing better financial performance is captured in the "Governance" component. The "Global Risk Management" component reflects findings that certain ESG issues are beneficial for mitigating downside risk for a portfolio over the long term. These three components and their implementation are discussed more fully in the Long Term Stewardship Practice policy document.

## APPENDIX A

The following topics also influenced staff's thinking on ESG issues :

- Long Termism
- Risk Management
- Legal Considerations
- Benchmarking

**Long Termism**

"The Case for Long-Termism," Keith Ambachtsheer, Rotman International Journal of Pension Management. Volume 7 (2) Fall 2014.

"Behaving Like an Owner: Plugging Investment Chain Leakages." Keith Ambachtsheer, R. Fuller, D. Hindocha. Rotman International Journal of Pension Management. Volume 6 (2) Fall 2013.

"Focusing Capital on the Long-Term," Dominic Barton, M. Wiseman. Harvard Business Review. Jan-Feb. 2014.

"Investing For The Future," Focusing Capital on the Long Term Institute, publication. March 2015.

"Long-Term Portfolio Guide," Focusing Capital on the Long Term Institue, publication. March 2015.

"Long-Term Investing as an Agency Problem," David Neal, G. Warren. Future Fund & Centre for International Finance and Regulation. Working Paper. June 2015.

**Risk Management**

"Global Risks 2014 Ninth Edition", World Economic Forum, Insight Report 2014.

"Risky Business: The Economic Risks of Climate Change in the United States." Kate Gordon, Executive Director for Risky Business Project & Rhodium Group, publication. June 2014.

**Legal Considerations**

"Fiduciary Duty in the 21st Century," Rory Sullivan, Will Martindale, Elodie Feller and Anna Bordon. UN PRI publication. July 2015.

"Interpretive Bulletin Relating to the Fiduciary Standard under ERISA in Considering Economically Targeted Investments" Department of Labor, publication. October 2015.

**Benchmarking**

"Introducing the Impact Investing Benchmark," Cambridge Associates & Global Impact Investing Network, publication. 2015.

# APPENDIX B

## EDGE Series

In 2016, NC DST launched EDGE, a 13-part educational series for staff that examined how other institutional investors, investment managers, academics, and consultants address ESG issues. Each participant addressed the following questions:

- Why is ESG part of your investment process or service offering?
- How do you incorporate ESG issues?
- Does ESG add alpha?
- What lessons have you learned about ESG integration or investing?

On average, 24 staff attended the presenations, with particpation from the Investment Management Division, Office of State Treasurer, Supplemental Retirement Plans, Local & State Government and Department of Justice. In addition, several US public pension plans and an endowment dialed-in for the two panel discussions and select practitioner presentations. One sovereign wealth fund consistently requested presentation materials to be shared with them, due to time zone differences.

The list of speakers for the EDGE series is shown below:

**EDGE Series Speakers**

**Ballie Gifford - January 20th 2016**

- Marianne Harper Gow, Director
- Nick Thomas, Partner & Portfolio Manager

**Blackrock - January 29th 2016**

- Debbie McCoy, Managing Director, SAE Sustainability Group
- Yumi Narita, Vice President, Americas CG & Sustainability Group
- John McKinley, Vice President, Impact Investing

**GSAM (Imprint) - February 16st 2016**

- John Goldstein, MD and Founder of Imprint Investing
- Megan Starr, Associate, GSAM ESG Practice

**Generation Investment - February 17th 2016**

- Renee Beaumont, Partner
- Tammie Arnold, Partner

**Academic Perspectives – February 23rd 2016**

- Lloyd Kurtz – Haas School of Business (Berkeley)

**Mercer - March 8th 2016**

- Chas Mansfield, Senior Investment Consultant, NA ESG Practice

**Green Bond Round Table – March 10th 2016**

- Jeff Smith, Director of Fixed Income, IMD
- Greg Gaskins, Deputy Treasurer for State & Local Government
- Steve Schemmel, Managing Director, Bank of America

**Hermes EOS – March 15th 2016**

- Colin Melvin, Chief Executive officer

**Public Plan Panel – March 28th 2016**

- Mark Anson, CIO Commonfund
- Terrijo Saarela, head of CG group for Wisconsin SIB
- Sandy Matheson, Executive Director, Maine PERS
- Tracy Stewart, Senior CG Analyst, SBA of Florida

**McKinsey "Focusing Capital on the Long Term" – March 29th 2016**

- Josh Zoffer, Consultant
- Jonathan Bailey, Consultant
- Bryce Klempner, Director

**"Other Institutional Investor Perspectives: Endowments, Foundations & The Canadians" - April 28th 2016**

- Jameela Pendicini, formerly at Harvard Management Company & currently Director at Agility
- Joy Williams, Portfolio Manager, Ontario Teachers' Pension Plan

**Warburg Pincus – May 25th 2016**

- Ken Juster, Managing Director, ESG practice
- Greg Baecher, Relationship Manager

**"A Pragmatic Approach to Climate Change"– August 22nd 2016**

- Bob Litterman, Kepos Capital, also chairperson of Commonfund Board, member of Board for Alfred P. Sloan and Robert Wood Johnson Foundations.

# APPENDIX C

## Consultants ESG Activities

Staff evaluated the ESG capabalities of several investment consulting firms vis-à-vis their experience with US public pension plans. The findings are summarized in Table VIII. Mercer, Russell and Imprint Capital (acquired by Goldman Sachs Asset Management in 2015) have the most developed ESG capabalities, which range from providing ESG scoring of external managers to performing scenario analysis on climate change risk for a portfolio to sourcing and performing due diligence on ESG-themed investments. Both Imprint and Russell have also developed ESG products for their clients. Tower Watson is also very active but mainly in Europe and with a focus on helping boards and senior management codify their investment beliefs around ESG issues. Cambridge Associates has a well-established mission driven practice that is primarily focused on foundations and, to lesser extent, endowments. While Cambridge Associates has a large number of pension fund clients, it has limited experience in doing ESG-related work for them.

### Table VIII – ESG Capabilities of Investment Consultants

| Firm | Assets Under Advisement | ESG factors disclosed | ESG investment methodology disclosed | US Pension Experience |
|---|---|---|---|---|
| **Callan** | Yes | No | No | Yes |
| **Cambridge Associates** | No | No | No | Yes |
| **Imprint Capital (GSAM)** | Yes | Yes | Yes | Limited |
| **Mercer** | No | Yes | Yes | Yes |
| **Russell** | Yes | Yes | Yes | Yes |
| **Towers Watson** | Yes | Yes | No | Limited |
| **Wilshire** | Yes | No | No | Yes |

Source: IMD Staff