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WHERE'S THE "F" IN "ESG'?

Why it may be prudent to analyze the potential Financial impacts from ESG risks sooner rather than later

Things take longer to happen than you think they will and then they happen faster than you thought they could. Professor Rudi Dornbusch

Introduction

While there may not be a consensus, there is a growing body of research demonstrating how Environmental, Social and Governance (ESG) issues can have a direct relationship with long-term financial value - the "F" in ESG[1].

Some investors may believe that discussions about ESG issues are misplaced in an investment context and potentially even in conflict with their fiduciary obligations. However, the U.S. Department of Labor's position is that fiduciaries may consider ESG factors when investing plan assets as part of an economic analysis of the merits of competing investment choices. They stated that, "Plan fiduciaries should appropriately consider factors that potentially influence risk and return. ESG issues may have a direct relationship to the economic value of the plan's investment. In these instances, such issues are not merely collateral considerations or tie-breakers, but rather are proper components of the fiduciary's primary analysis of the economic merits of competing investment choices"[2].

With the challenges of meeting investment targets keeping asset allocators awake at night, it may be tempting to postpone, or even dismiss entirely, the daunting task of determining how long-term, broader financial risks and opportunities such as resource efficiency, human capital management and board composition could affect a fund's value. Delaying this process may seem sensible if these risks and opportunities take longer to materialize than some think they will. **What if, however, risks accelerate to impact the fund's value faster and to a greater extent than anticipated?**

The first section of this paper describes how Wilshire Consulting incorporates ESG considerations into our Risk Lens framework and, within that context, explores the link between ESG, drawdown and behavioral risks. The second section of this paper is designed for organizations who want to incorporate the "F" in "ESG". We outline three steps to help guide this process:

- Step 1. Identify what matters;
- Step 2. Clarify objectives and trade-offs; and
- Step 3. Integrate into investment decisions.

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Section I: Wilshire Consulting's Risk Lens Framework

For the purposes of this paper we define ESG risks and opportunities as: broader financial and economic indicators that can impact long-term value, including issues such as resource efficiency, human capital management and board composition (see Exhibit 1). Cases such as Volkswagen's $25bn fine for selling tainted diesel cars, Wells Fargo's mis-selling scandal and Equifax's cybersecurity breach are a sobering reminder that some of the most significant corporate scandals of the 21st Century have been caused by governance failures.

Exhibit 1: Non-exhaustive list of ESG examples

ENVIRONMENTAL	SOCIAL	GOVERNANCE
• Energy & fuel efficiency • Water scarcity & sanitation • Waste management • Air pollution • Extreme weather events	• Supply chain & materials sourcing management • Data & cyber security • Labor management & community relations	• Board composition & diversity • Ownership, control & investor rights • Executive compensation • Corporate behavior, accounting & audit practices

Source: All sources Wilshire Consulting unless stated otherwise

Wilshire Consulting views the investment landscape through a framework of essential Risk Lenses that are faced by all investors (see Exhibit 2). We believe these risks should be viewed holistically, considered as an explicit part of the investment process and balanced to strike an appropriate trade-off between risk mitigating and risk taking, which is the key to long-term success[3]. As they relate to ESG considerations, the most relevant of Wilshire Consulting's Risk Lenses are Drawdown and Behavioral risks.

Exhibit 2: Wilshire's Risk Lens framework

INVESTMENT RISKS

- **Drawdown:** a measure of investment losses, drawdown risks are more significant in growth oriented asset classes.
- **Inflation:** reflects the potential for financial assets to lose purchasing power over time, inflation risk can be reduced by allocating to real assets.
- **Active:** risk associated with investment strategies that attempt to outperform broad markets by changing portfolio exposures and holdings.
- **Liquidity:** a measure of how easily an asset or security can be priced and traded, investors can demand a premium return for giving up liquidity.

ORGANIZATIONAL RISKS

- **Behavioral:** a reminder of the risk that investors can fall victim to well-documented biases that negatively affect decision making processes.
- **Shortfall:** describes the potential for an organization to fall short of the long-term objectives outlined in the Investment Policy.

BROADER RISKS

- **ESG:** risks associated with reputation, intangibles and externalities which can contribute to investment and organizational risks.

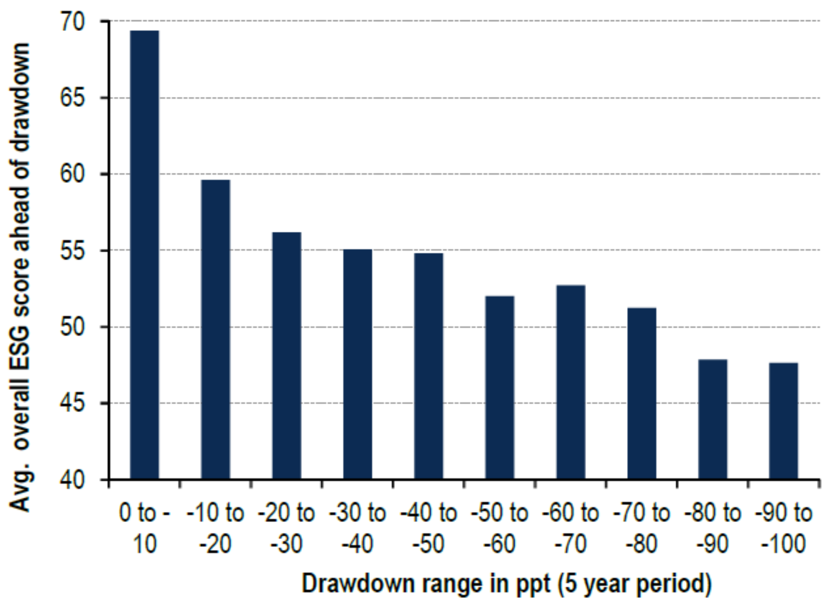
Linking ESG to Drawdown Risk

Portfolios of companies with poor ESG performance may exhibit higher price volatility and have more extreme drawdown (i.e. left-tail) risks than portfolios of companies with better ESG performance.

Morgan Stanley (2015) finds that sustainable mutual funds had equal or lower median volatility for 64% of the periods examined over the last 7 years compared to their traditional counterparts[4] and Eccles, Ioannou, and Serafeim (2012) find that the portfolio of companies that have adopted a substantial number of environmental and social policies for a significant number of years exhibits lower monthly volatility (1.43% and 1.72% on a value-weighted and equal-weighted base) than a non-ESG portfolio (1.72% and 1.79%, respectively). AQR finds stocks with the worst ESG performance have total and stock-specific volatility that is up to 10-15% higher, and betas up to 3% higher, than stocks with the best ESG performance[5].

ESG performance may also provide an effective signal of future price declines. BofA Merrill Lynch Global Research[6] finds stocks with minimal peak to trough declines or drawdowns had an average ESG score of close to the 70th percentile ahead of the period analyzed, whereas those with extreme declines (over 90 percentage points) had an average score in the 47th percentile ahead of the decline (see Exhibit 3). These findings suggest that the weaker the stock's ESG performance, the greater the subsequent price decline.

Exhibit 3: Average ESG score* ahead of price declines, grouped by maximum peak to trough price decline over a 5-yr period (from 2005-2015)



*Average score of ESG-ranked stocks (0-100) in the BofAML US coverage universe using the Thomson Reuters ESG dataset[7].

Source: Thomson Reuters, BofA Merrill Lynch Global Research

These findings are not unique to public equities but are also relevant to corporate bonds. In grouping the bonds in the Bloomberg Barclays US Corporate investment-grade index into buckets of low, medium and high ESG scores (using two different ESG data providers, MSCI[8] and Sustainalytics[9]) Barclays found:

- The average spread of high ESG bonds was 38bp lower than that of the low ESG portfolio;
- Investing in top-tier ESG bonds delivered roughly a one-notch uptick in credit quality; and
- Bonds with high Governance scores (using MSCI data) experienced fewer downgrades than those with low G scores.

With these mixed results Barclays conclude their paper with a note of caution: constructing portfolios based on ESG information alone does not necessarily lead to better investment outcomes.

Linking ESG to Behavioral Risk

As noted above, we view ESG issues as broader financial and economic indicators that can impact long-term value. However, much of the research on investor behavior concludes that investors have certain intrinsic biases such as the tendency to discount future risks more aggressively than near term ones. This type of short-termism, where investors may seek short-term rewards like quarterly earnings at the expense of long-term objectives like sustainable growth, can be considered an intrinsic behavioral risk, which has been shown to destroy value[10]. A 2013 International Monetary Fund paper concluded that behaving in a manner consistent with long-term investing would lead to better long-term, risk-adjusted returns and, importantly, could lessen the potential adverse effects of short-term investment behaviors of institutional investors on global financial stability[11].

While some investors have strengthened their risk management programs since the financial crisis, for example by running scenario analyses on how their portfolios might behave in times of stress, these scenarios have tended to focus on short-term and backward-looking “tail” value-at-risk indicators such as macroeconomic volatility.

As we noted in our 2016 paper, *Climate Change: Evolving Risks and Opportunities for Asset Owners*, climate change and its associated regulatory response have the potential to affect the long term risk and return characteristics of all asset classes. For example, carbon pricing looks likely to become increasingly financially material if prices climb from current low levels to the $100 per ton minimum required to ultimately reduce global greenhouse gas emissions in line with a 2-degree Celsius target. In seeking to understand how corporate cash flows, supply chains and consumer demand might be affected, Schroders has developed a carbon value-at-risk measure finding around 20% of the cash flows global companies generate could be lost if carbon prices rise to expected levels[12].

Section II: An ESG decision-making framework

Regulators, plan beneficiaries, student bodies and donors are becoming increasingly aware of the economic costs of global natural resource scarcity, extreme weather events and corporate governance failures. As a result many are now asking asset owners to be more transparent in documenting the process they have undergone to analyze how these risks and opportunities could impact a fund’s value, not just in a small sleeve but across the total portfolio. For those clients who want to incorporate the “F” in “ESG”, we outline three steps below to help guide this process.

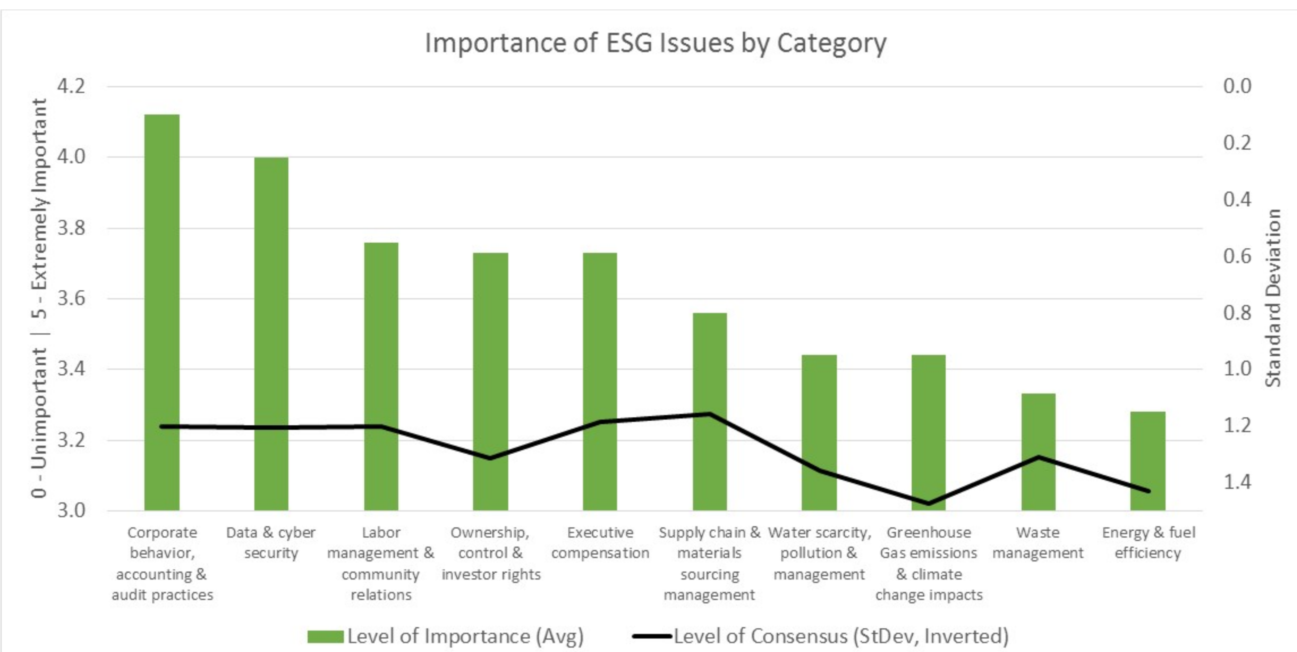
Step 1: Identify what matters

In 2017 Wilshire Consulting conducted a survey of our clients to better understand their level of interest and what actions they have taken to integrate ESG into their investment process. The primary objective for those respondents considering ESG risks and opportunities, particularly public plans, was to contribute to positive environmental or social impacts. As can be seen from Exhibit 4, other ESG motivations include: reputational reasons, demand from participants and to help identify and manage risks.

Exhibit 4: Wilshire 2017 Client Survey Reasons for Considering ESG Risks & Opportunities

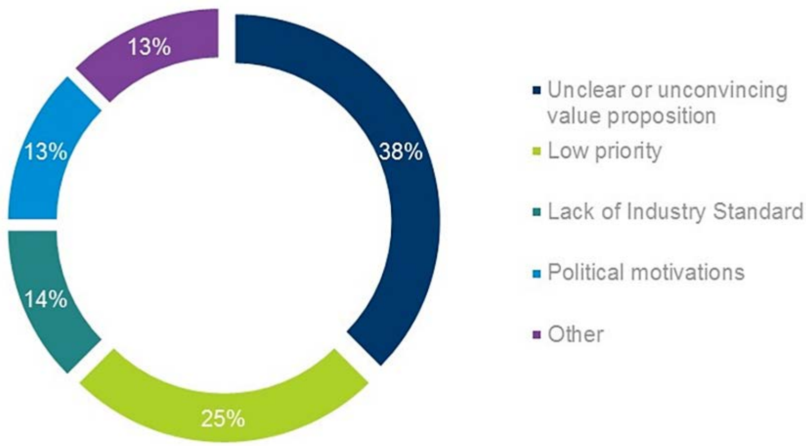
With such a wide range of ESG concerns and interest, it is important that asset owners prioritize which issues are more relevant to their existing portfolio, their broader mission and stakeholders. Our survey revealed the strongest consensus over governance issues including corporate behavior, accounting, and audit practices (see Exhibit 5). Governance risks, such as ownership and control, may be more idiosyncratic in nature insofar as they may be endemic to a particular corporate history and culture. Other risks, such as climate change, may be systemic where the distribution of outcomes is not fully known and impacts may affect the availability of resources, the price of energy, the vulnerability of infrastructure and the valuation of companies[13].

Exhibit 5: Relative importance of different ESG issues



Our survey revealed significant impediments to asset owners undertaking further ESG analysis. From a long list of potential barriers provided, the top three identified barriers were: An unclear or unconvincing value proposition; low priority and lack of industry standard (see Exhibit 6).

Exhibit 6: Impediments to ESG analysis



Additional barriers included: Data quality issues and confusion over terminology. Other similar surveys identified the lack of internal capabilities, internal and external stakeholder misalignment with ESG objectives and concerns over costs[14].

Step 2: Clarify objectives and trade-offs

Over half of our survey respondents have added ESG objectives to their investment policy or investment belief statements. Setting clear ESG objectives requires consideration of a wide range of issues and will depend on an institution's unique set of circumstances such as: funding and liability / spending profile; specific organizational mission; existing constraints; return targets and risk appetite.

For this reason, we caution against simply adopting boiler-plate ESG language into an investment policy statement and against designing ESG objectives without implementation firmly in mind. Wilshire can help guide clients through a comprehensive process of discussion and analysis before settling on ESG policy language. For example, in May 2014 the CalPERS Board of Administration adopted a set of beliefs that articulate the fund's views on public pension design, funding, and administration. These beliefs offer CalPERS views on the importance of retirement security, defined benefit plans, fiduciary duty, and the need to ensure long-term pension sustainability (See Exhibit 7).

In our experience, designing ESG objectives requires a process of extensive consultation and deliberation which may involve:

- setting up a working group made up of investment staff and board members;
- surveying stakeholders' opinions;
- gathering data from peers and considering best practice examples;
- conducting exposure analysis to specific themes;
- appraising advantages and disadvantages of different approaches e.g. divestment vs engagement;
- prioritizing ESG issues by order of potential impact.

Exhibit 7: CalPERS Investment Beliefs (IB) No.4

Long-term value creation requires effective management of three forms of capital: financial, physical and human. Sub belief:

- Governance is the primary tool to align interests between CalPERS and managers of its capital, including investee companies and external managers.
- Strong governance, along with effective management of environmental and human capital factors, increases the likelihood that companies will perform over the long-term and manage risk effectively
- CalPERS may engage investee companies and external managers on their governance and sustainability issues, including: Governance practices, including but not limited to alignment of interests; Risk management practices; Human capital practices, including but not limited to fair labor practices, health and safety, responsible contracting and diversity; Environmental practices, including but not limited to climate change and natural resource availability.

Step 3: Integrate into investment decisions

The "finance-first" alternative to divestment involves the explicit inclusion of ESG issues in investment analysis, decision-making and stewardship activities. Unlike divestment which involves negative exclusions of entire industries, the integration approach involves positive asset and security selection which takes into account the financial materiality of ESG risks. Once identified, ESG risks may be taken if expected to be sufficiently financially compensated, although behavioral biases may cause investors to underestimate those risks.
Asset owners may consider the following ESG integration steps:

a) Analyze financial information alongside ESG data. *Example: Equifax Cyber Security Breach*

There are over 90mn cyberattacks every year with global consumer cybercrime estimated to cost over $100bn annually[15]. In September 2017, Equifax, the global information solutions company, announced a major security breach potentially impacting over 140 million U.S. consumers. As a result, Equifax saw its stock price drop 27% and its market value drop by $5.5bn within 20 days. Three Equifax executives sold $2m worth of shares days after the cyberattack. ESG analysis could have helped identify the warning signs. Over a year before this major security breach MSCI had already downgraded Equifax's ESG rating to CCC—its lowest ranking—following a data breach in 2016 that exposed the salary and tax data of over 400,000 employees of an Equifax client[16].

b) Adjust valuations to reflect the potential financial impact of material ESG issues. *Example: Sustainable Accounting Standards Board Framework (SASB)*

ESG issues can be viewed as proxy for risk that may not be effectively priced into valuations. The emergence of ESG disclosures provides an opportunity to enhance Benjamin Graham and David L. Dodd's "mosaic" theory for pricing companies to include the sustainability of a company's business model and its license to operate. In their seminal work, Security Analysis first published in 1934, Graham and Dodd found a company's book value and its market value were highly related, but today market value is a multiple of book value because it includes intangible assets such as intellectual property and patent libraries which may amount to over 80% of the market value of a company[17]. In-depth analysis of material and broader financial data is becoming more critical to assessing the contribution of intangible assets to core financial drivers and firm valuations (see Exhibit 8).

Exhibit 8: Linking ESG issues to Financial Metrics using the SASB Framework

Financial metrics	REVENUE		COST	ASSETS& LIABILITIES	COST OF CAPITAL
	Demand for Core Products & Services	Intangible Assets & Long-term Growth	Operational Efficiency & Cost Structure	Valuation of Core Assets & Liabilities	Operational Risk & Cost of Capital
	E&S Impact of Products • Product safety • Lifecycle impacts	**Human Capital** • Diversity **Customer Responsibility** • Customer privacy • Labelling & marketing **Ethics & Safety** • Accident & safety • Business ethics	**Environmental Externalities** • GHG emissions **Human Capital** • Labor relations • Health & safety **Resource Constraints** • Materials sourcing	**Impacts from Externalities** • ESG integration in investment • Stranded assets • Climate impacts on agriculture	**License to operate** • Community relations • Systemic risk • Political spending **Resource Constraints** • Materials sourcing **Ethics & Safety** • Accident & safety • Business ethics

Source: Wilshire Consulting, SASB

c) **Source investment managers with best in class ESG integration processes**. *Example: Wilshire’s Manager Research Process*

In addition to including a diverse-owned firm in every public securities manager search we conduct for advisory clients, Wilshire Consulting can provide clients with manager ESG ratings to help them better understand the degree of resources supporting a manager’s ESG integration capabilities and how managers engage with and monitor ESG improvements at portfolio companies.

d) **Act as a long-term steward of portfolio companies.** *Example: ExxonMobil Vote 2017*

The day before the US announced its intention to withdraw from the Paris Climate Accord by the end of 2020, a group of investors including asset owners such as NY State Common Retirement Fund saw their landmark resolution at the US’ largest oil and gas company pass with 62% shareholder support. The proposal requested Exxon:

- Enhance its existing reporting by analyzing impacts on oil and gas reserves of the globally agreed upon two degree target;
- Examine long-term impacts of technological advances;
- Understand the resiliency and financial risks of the company's portfolio through 2040 and beyond

Conclusion

With a growing body of evidence emerging about the financial risks and opportunities from ESG issues Wilshire will continue to provide our clients with educational resources by conducting further research on the link between ESG and risk / return for different asset classes, industries and markets. For some clients, where stakeholder queries are likely to rise up the agenda, it may be prudent to bring forward discussions about ESG risks and opportunities and, where feasible, adopt a proactive and holistic approach. Such an initiative can start with a few simple steps such as **Identify. Clarify. Integrate.** Wilshire can help clients take these steps by providing:

- **Strategic Advice.** By engaging stakeholders, methodically prioritizing issues and building consensus among staff and trustees, we can assist in drafting clear ESG policies and guidelines through a well-defined process;
- **Manager Insights**. By incorporating ESG questions in our manager due diligence process, sourcing diverse-owned managers and picking attractive impact strategies we can assist in constructing portfolios consistent with our clients' broader investment objectives and risk budgets; and
- **Risk & Performance Measurement.** By conducting ESG portfolio analysis and program reviews we can monitor the impact of our client's investment choices.

Endnotes

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