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Strategy and Sustainability

# ESG Screening across Asset Classes: Corporate Debt, ESG Bond, Listed Equity, Private Equity, Real Estate and Infrastructure

ESG & Sustainability Transformation

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12/2023

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# ESG Screening across Asset Classes: Corporate Debt, ESG Bond, Listed Equity, Private Equity, Real Estate and Infrastructure

## Corporate Debt:

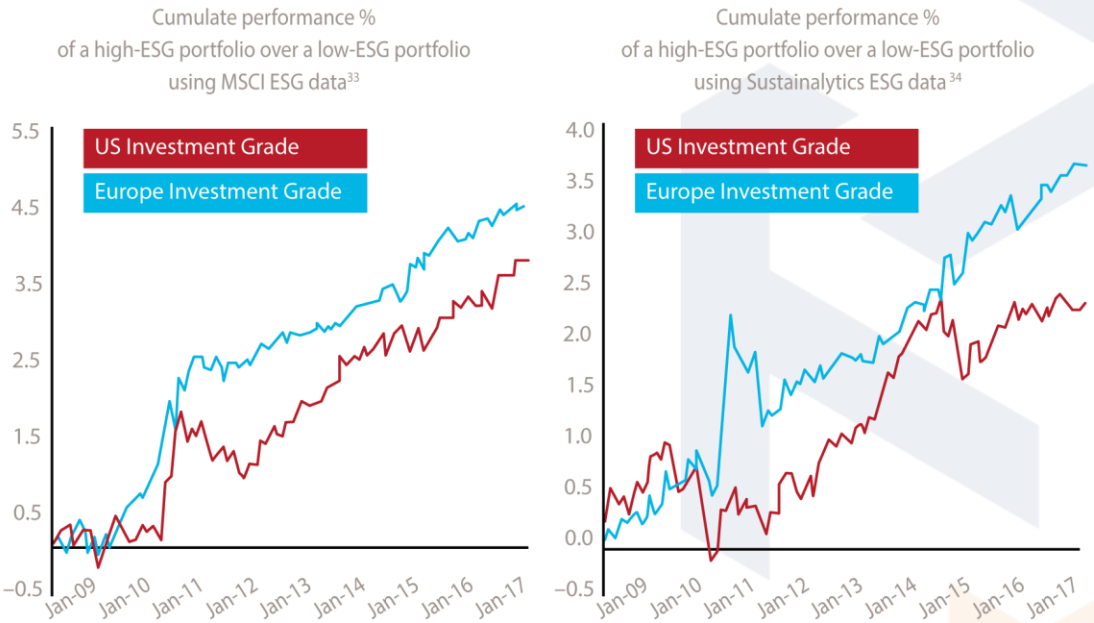
Corporate debt is now enjoying greater levels of ESG integration. In some regards, this should not be surprising. Issuers of equity also tend to issue debt. Indeed, there is growing evidence of ESG-incorporated methodologies yielding meaningful performance differentials.

First, it is worth briefly highlighting why debt is distinct from equities. The debt issued by a single corporation — or sovereign, for that matter — often represents multiple credit risk profiles across bond issuances. These bond issuances represent different maturities, which refer to the payment date of a loan.

In contrast, companies issuing equity generally issue one common share class. The temporal dimension across multiple debt maturities and credit risk profiles arguably lends itself to a more granular comprehension of ESG issues and their materiality. For example, one method available to a credit portfolio manager seeking to manage the long-term climate risk effects of an issuer is to invest in the issuer's shorter-dated maturing debt.

Exhibit 1 illustrates examples of two investment-grade bond portfolios with an ESG tilt applied. Although the short times (August 2009 to April 2016) limit the ability to make a strong performance claim across multiple economic cycles, both bond portfolios suggest that high ESG portfolios outperform low ESG portfolios despite being driven by different ESG methodologies. However, it is important to bear in mind that after the global financial crisis of 2008-09, 'quality' as a factor outperformed while 'value' largely underperformed. Given the strong correlation between high ESG and 'quality' among ESG vendors, it is important to note that the ESG-driven performance returns are not necessarily causal.

**Exhibit 1: Investment-Grade Bond Portfolio Performance (High ESG over Low ESG)**




*Source: Barclays.*

## ESG Bond Types:

New forms of credit issuance have emerged, designed to raise funding to deliver social and environmental objectives alongside a financial return. With the World Bank often playing a leading role in developing these markets and advising bond issuers, ESG-oriented bonds are typically organized around a few sustainable themes. What distinguishes these from conventional bonds is their underlying use of proceeds and the greater transparency they provide towards their use of proceeds. Investors include both asset managers and asset owners who may see these bonds as a way to advance sustainable finance as well as a means to diversify their asset mix.

Despite the development of ESG in fixed income, the absence of a universally recognized standards certification system for sustainable bonds should be acknowledged. A number of standards have emerged, notably the EU's proposal for an EU Green Bond Standard. However, the absence of a universal standard is particularly urgent given the emergence of bond issues geared towards underlying sustainable themes, as shown below. For instance, despite the green bond market emerging little more than a decade ago, labelled green bond issuance has increased by roughly 50% in the first half of 2019 to USD118 bn, of which 19% represented certified climate bonds.

## Types of ESG Investing Bonds:

### Green bonds:

Green bonds, sometimes referred to as climate bonds, are any type of bond instrument that funds projects that provide a clear benefit to the environment, such as renewable energy projects. Originating in 2007 with the issuance of the first green bonds from the European Investment Bank (EIB) and the World Bank, some green bond indexes now track the development of issuance and offer investors a passive means of investing in green bonds. More information can be found on bonds in the International Capital Markets Association's (ICMA) Green Bond Principles.

Benchmark indexes include:

- S&P Green Bond Select Index;
- Bank of America Merrill Lynch Green Bond Index; and
- The Bloomberg Barclays MSCI Green Bond Index.

### Social bonds:

Social bonds fund projects that provide access to essential services, infrastructure, and social programs to underserved people and communities. Examples include projects providing:

- Affordable housing;
- Microfinance lending;
- Healthcare; and
- Education.

The Spanish Instituto de Credito issued the first social bond in 2015. More information can be found on bonds in the ICMA's Social Bond Principles.

### Sustainability bonds:

Sustainability bonds allow issuers to offer more broadly defined bonds that still create a positive social or environmental impact. In 2016, Starbucks issued the first US corporate

sustainability bond of USD500 mn that directly links the company's coffee sourcing supply chain to ESG criteria.

More information can be found on bonds at the ICMA's Sustainability Bond Guidelines.

**Sustainability-linked bonds:**

Not to be confused with sustainability bonds, sustainability-linked bonds (SLBs) provide financing to issuers who commit to specific improvements in sustainability outcomes. These outcomes may be defined as environmental, social, and/or governance-related. More information can be found in the ICMA's Sustainability-Linked Bond Principles.

**Transition bonds:**

Transition bonds provide financing to 'brown' industries with high GHG emissions (such as mining, utilities, and heavy industry). Because of this fossil fuel exposure, these sectors are generally excluded from raising capital in sustainable finance markets. Transition bonds allow companies in these sectors to raise capital designated to the transition towards greener industries.

**SDG-linked bonds:**

Though there is a common overlap with green and social bonds, SDG-linked bonds enable issuers to raise capital by specifically committing and advancing to SDG-related targets. Issuers are generally required to provide evidence and assurance for business alignment to the targeted SDGs.

**Blue bonds:**

Blue bonds fund projects with clear marine and ocean-based benefits, such as sustainable fishing projects. The Seychelles and the World Bank jointly issued the first blue bond in 2018.

**Listed Equity:**

Listed equities represent the most developed asset class in terms of ESG integration. Equities have various advantages relative to other asset classes - notably, the greatest amount of transparency owing to its capital structure where creditors and shareholders coexist, albeit in a relationship that subordinates shareholders. The listed nature of equities and their ownership structure provide shareholders with the ability to exercise their view through their voting rights on many aspects of operational and strategic direction of the company, including its board of directors. Shareholder rights and voting are one of the most prominent manifestations of stewardship, where investors increasingly address non-financial objectives alongside financial issues.

Because of the enhanced nature of ESG disclosure among listed equities, all of the responsible investment strategies discussed lend themselves to the asset class. This ranges not only from passive to active investment strategies, but from long-only to hedge funds as well.

That said, hedge fund or long–short strategies are increasingly embedding ESG into portfolio construction and management. Hedge funds are alternative investment vehicles that employ leverage to enhance returns and hedging strategies to manage net risk and produce alpha. Shorting or short selling involves borrowing a security generally on margin, hence the leverage component in hedge funds, and then selling it into the market to be bought later. A successful short sale means that the investor is able to cover or buy back the security at a lower price than that which they initially paid to borrow it.

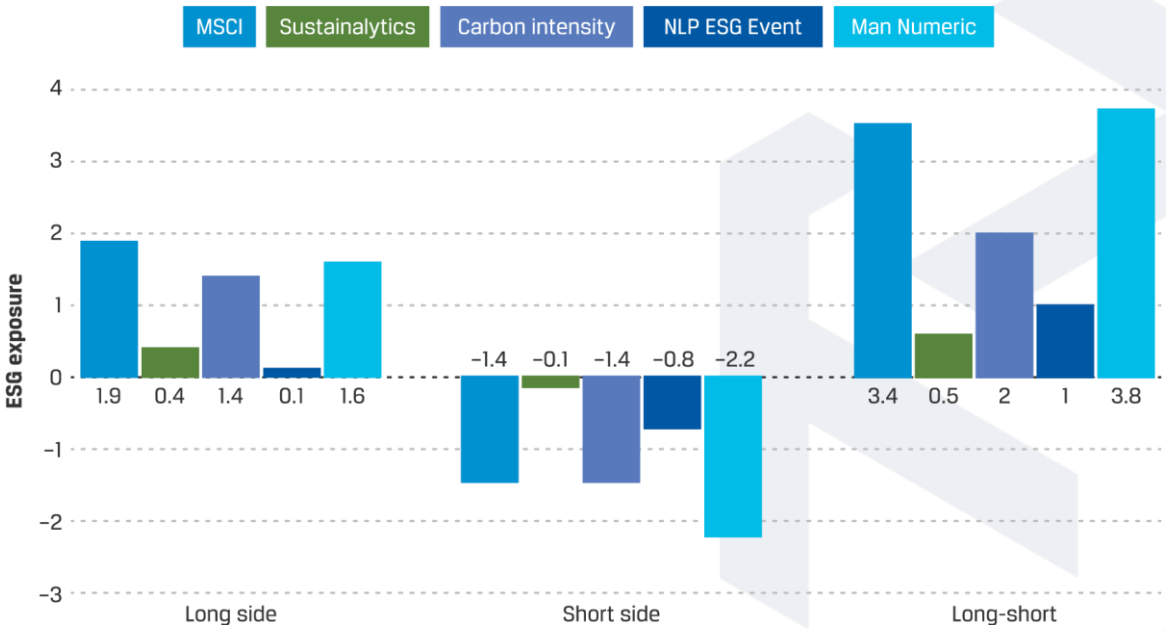
Indeed, the PRI now provides resources and formally includes a hedge fund module within its Reporting Framework. In addition, organizations representing the interests of the hedge fund community (which include the Alternative Investment Managers Association [AIMA], the Managed Funds Association [MFA], and the Standards Board for Alternative Investments [SBAI], not to mention the PRI itself) now all convene working groups focused on ESG and regularly produce research, surveys, policy papers, and recommendations on practices.

Exhibit 2 and Exhibit 3 provide examples of an approach that a quantitative ESG long–short equity strategy might assume. As a sector-neutral portfolio, the long exposure represents the top or best decile of ESG-rated companies, while the short exposure represents the bottom or worst decile of ESG-rated stocks. It operates across a number of data provider scores that include a proprietary, factor neutral one (Man Numeric), carbon intensity metrics, and even an event-driven sentiment strategy operating on ESG news using natural language processing (NLP).

Although exposure and returns vary across data and metrics, the long–short example provides empirical support for the logic that better-scoring ESG and carbon-efficient companies are capable of not only enhancing ESG exposure but also of potentially outperforming their poorer-scoring peers. In effect, the simulation finds betting against poorly-rated companies has the potential to reduce risk exposure and add resilience through lower drawdown.

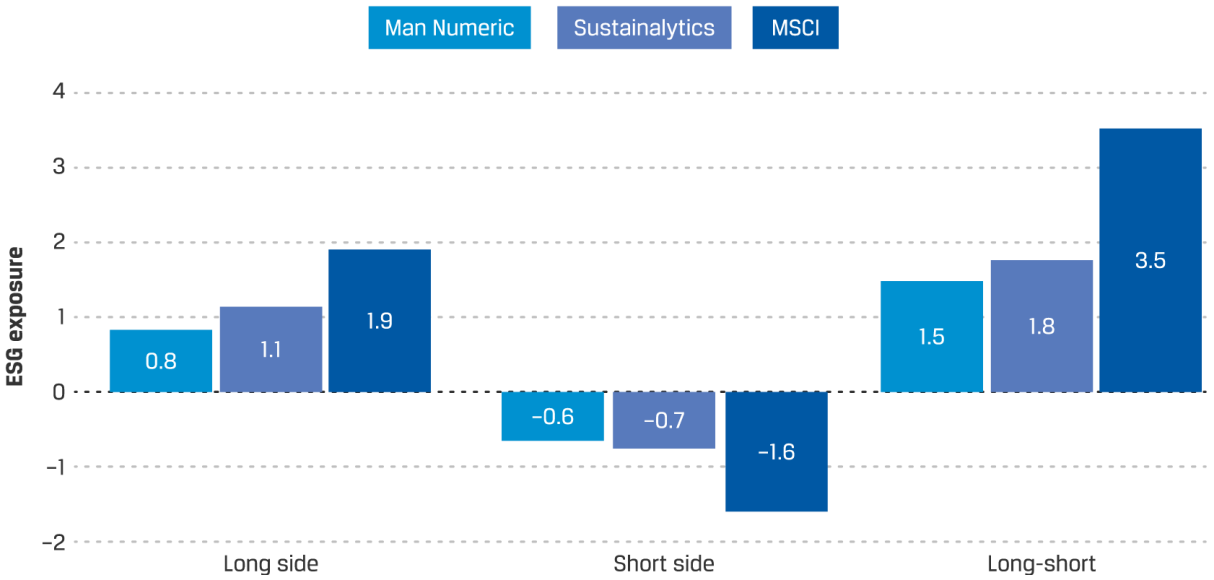
Note, though, that in Exhibit 2 and Exhibit 3, all models spread performance shown is gross-of-fees and does not represent the performance of any portfolio or product. To calculate long-only model spreads, Man Numeric invests long in the top 10% ranked names within each sector and displays the gross of fees return. To calculate long–short model spreads, Man Numeric invests long in the top 10% ranked names within each sector and short the bottom 10% ranked names within each sector and displays the gross of fees return. These spread returns are instantaneously rebalanced and do not reflect transaction costs. Rankings are based on Man Numeric's internal Alpha model scores.

**Exhibit 2: Simulative Implications of Shorting Poor ESG Companies to Performance Exposure and Performance — Shorting Doubles Portfolio's ESG Exposure**




*Sources: MSCI ESG score; Sustainalytics ESG score; and Man Numeric proprietary ESG score as of 31 December 2019.*

**Exhibit 3: Simulative Implications of Shorting Poor ESG Companies to Performance Exposure and Performance — Poor ESG Companies Have Underperformed**




*Sources: MSCI ESG score, Sustainalytics ESG score, Trucost carbon data, and Man Numeric proprietary ESG score as of 31 December 2019.*

**Private Equity:**

Like unlisted credit and real asset private markets, ESG integration in private equity faces several challenges, foremost being the lack of public transparency, established reporting standards, regulatory oversight, and public market expectations around ESG. The lack of compulsory non-financial reporting regulations like the EU's Non-Financial Reporting Directive (NFRD) for large European companies severely limits a private equity portfolio manager's ability to leverage ESG data for relative ranking and scoring comparability.

In addition, smaller private companies are often capacity-challenged by ESG reporting requirements. The quality, consistency, and continuity of strong integrated reports published by many public companies represent a high hurdle to achieve for smaller companies. Early-stage companies also tend to operate with a much greater degree of freedom than more mature, listed companies. As a consequence, the portfolio manager will have to weigh the company's ESG trajectory (it may have established, but not yet met, ESG objectives) against the trajectories of more mature companies. This extends not only to the way the business or asset operates but also to the board level-devised strategy.

In some cases, private equity investors must negotiate against a strong founder or founder team, which, while a powerful internal motivator, may present long-term governance concerns. At the same time, early investors and significant shareholders are often strategic and long-term oriented, creating a powerful incentive to establish a strong set of ESG key performance indicators (KPIs) early in the company's life cycle. It may be in the interest of the general partners (GPs), investment professionals charged with investing and managing the fund's committed capital in companies, to establish specific, portfolio-wide metrics (obviously recognizing geographic and sectoral differences) as a means to support the overall portfolio strategy and communicate portfolio alignment to the fund's limited partner (LP) investors who invested in the overall private equity fund.

Like other investor types, private equity investors may certainly impose exclusionary screening on any number of criteria to restrict investment in certain sectors, either normatively or ethically defined. However, private equity investors do not have the benefit

of the breadth and diversity of indexes and benchmarks of the listed equities space, limiting opportunities for peer comparability analysis or portfolio optimization efforts around ESG criteria. However, portfolio managers can benchmark segments of the portfolio against smaller investment universes, even including public companies, if data comparability exists.

Hence, it is more likely that the GPs may apply some form of positive screening or thematic focus within their respective investment charter. In fact, because of the non-public nature of the private equity industry, LPs are increasing their expectations for GPs to integrate ESG analysis beyond screening in more robust forms. In addition, portfolio managers may establish minimum threshold ESG scoring for portfolio inclusion. Portfolio managers may address these challenges by formally establishing an ESG program that institutes in-depth, pre-deal ESG due diligence and ESG review for portfolio companies. Since ESG data for private equity firms may be more localized or regional, quantitative and systematic capabilities applied within the listed equities space will be of much less use.

**Real Assets - Real Estate and Infrastructure:**

Real assets like real estate and infrastructure carry certain advantages and challenges compared to the equities and corporate fixed-income investment universe. In many cases, investors are majority owners or own the asset outright. Majority or full ownership stakes offer investors much greater control over the definition, application, and reporting of ESG data alongside or outside existing reporting standards like that of the Global Reporting Initiative (GRI).

Much like corporate unlisted fixed income, managing a portfolio of real assets requires building a picture of what the aggregate risk looks like as well as the correlation risk among all the underlying assets. GRESB's full benchmark report provides a composite of:

- Peer group information;
- Overall portfolio KPI performance;
- Aggregate environmental data in terms of usage and efficiency gains;
- A GRESB score that weights management, policy, and disclosure;
- Risks and opportunities, monitoring, and environmental management system (EMS);
- Environmental impact reduction targets; and
- Data validation and assurance.

Nonetheless, this report depends heavily on companies, funds, and assets participating in the GRESB reporting assessment process. For portfolios where a significant percentage of the fund's holdings do not participate in the GRESB assessment, portfolio managers will need to supplement with their own ESG scoring.

As reporting data and standards improve for real assets, investors should work towards a stronger link between ESG considerations and their financial implications. One of the counterparts to the idea of an ESG risk premium for the real asset investment is the potential for the existence of a green risk premium in real estate.

Traditional residential housing model delivery had little regard for ESG factors. The primary model of delivery was concrete based, with inefficiencies among other building materials. Not surprisingly, the sector had a significant carbon footprint focused primarily on environmental criteria on a short-term, new build, and construction basis. ESG and impact-oriented residential strategies now focus on much broader criteria, actively integrating all components — particularly social considerations — within their portfolio.

Besides reducing the carbon footprint of their housing stock through more efficient building materials, community housing strategies now make efforts to deliver affordable mixed-

tenure housing solutions that provide greater social segmentation to meet the needs of the community - young people, first-time buyers, key workers, and seniors.

Investors with significant real estate exposure are increasingly leveraging the analytical modelling capabilities and historical datasets of insurance companies to understand weather risk generally and climate risk more specifically. Munich Re, one of the world's largest reinsurers, produces climate risk assessments that model potential property impact scenarios based on a broader set of twelve natural hazard types, including:

- Earthquakes;
- Volcanic eruptions,
- Tsunamis;
- Tropical cyclones;
- Extratropical storms;
- Hail;
- Tornadoes;
- Lightning;
- Wildfires;
- River floods;
- Flash floods; and
- Storm surges.

A joint study by Munich Re and PGGM (the Dutch pension fund) applies these analytics on PGGM's private real estate portfolio.

A climate risk profile based on over 100 years of meteorological, weather, and hazardous-event data is capable of examining the climate risk of a diversified, global property portfolio across different dimensions — from overall hazard risk factor exposure to country and city to individual property level risk. Capabilities now enable an extremely nuanced understanding of exact longitudinal and latitudinal data.

With growing evidence of sea-level rises capable of impacting population-dense coastal areas and communities, investors may also enhance the climate rate analysis of their portfolios by profiling a portfolio's exposure to elevation and coastline proximity. The effects of coastal erosion and flooding ultimately leading to managed retreats could carry meaningful consequences to property values and insurance premiums. Indeed, a study already indicates that residential properties in the United States located in areas exposed to sea level rises already reflect a 7% discount relative to unexposed nearby homes.

To learn more about ESG and sustainability-related models, don't hesitate to contact **YTT Consulting**!