



ESG Screening for Corporate Debt, ESG Bonds, Listed Equity, Private Equity, Real Estate and Infrastructure

ESG & Sustainability Transformation

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ESG Transformation



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ESG Screening for Corporate Debt:

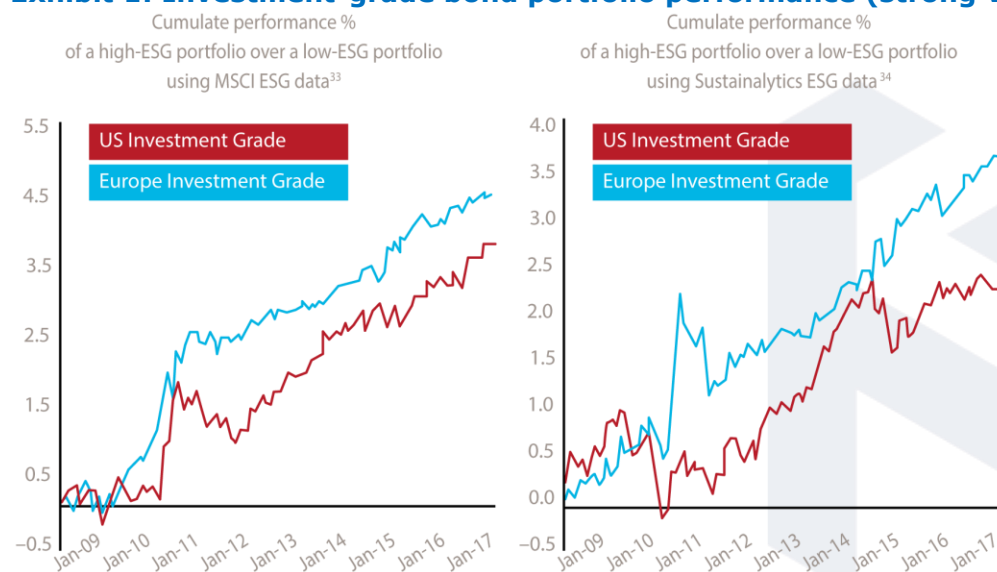
Corporate debt is currently enjoying a higher level of ESG integration. In some ways, this is not surprising. Equity issuers tend to issue debt as well. There is growing evidence that ESG integration approaches make a significant difference in investment performance.

First, it is important to highlight why debt differs from equity. Debt issued by a single company – or a government – typically presents multiple credit risk profiles across bond issues. These bond issues represent different maturities, referring to the date the loan is due.

In contrast, equity issuers typically issue a single class of common stock. The temporal aspect of multiple debt maturities and credit risk profiles is arguably more important in understanding ESG issues and their materiality. For example, one approach for a credit portfolio manager seeking to manage the long-term impacts of an issuer’s climate risk is to invest in the issuer’s short-term maturing debt.

Figure 1 illustrates examples of two investment-grade bond portfolios that adopt an ESG tilt. While the short time period (August 2009 to April 2016) limits the ability to make robust claims about performance across multiple economic cycles, both bond portfolios demonstrate that the strong ESG portfolio outperforms the weak ESG portfolio, despite being driven by different ESG metrics. However, it is important to remember that following the 2008–09 global financial crisis, the ‘quality’ factor outperformed while the ‘value’ factor underperformed. Given the strong correlation between strong ESG and ‘quality’ across ESG rating agencies, it is important to note that ESG-based return performance is not necessarily causal.

Exhibit 1: Investment-grade bond portfolio performance (strong vs weak ESG)



Source: Barclays.

ESG Screening for ESG Bonds:

New forms of credit issuance have emerged, designed to raise capital to pursue social and environmental objectives in addition to financial returns. With the World Bank often playing a leading role in developing these markets and advising bond issuers, ESG-oriented bonds are often structured around a number of sustainability themes. What differentiates them from conventional bonds is the underlying use of proceeds and the greater transparency they provide around the use of proceeds. Investors include both asset managers and asset owners, who may see these bonds as a way to leverage sustainable finance as well as a means to diversify their assets. Despite the growth of ESG in fixed income investing, it is important to acknowledge the lack of a widely recognized standard certification system for sustainable bonds. Several standards have emerged, notably the EU's proposal for an EU Green Bond Standard. However, the need for a common standard is particularly urgent given the emergence of bond issuances with underlying sustainability themes, as outlined below. For example, although the green bond market emerged just over a decade ago, green-labeled bond issuance grew by around 50% in the first half of 2019 to \$118 billion, of which 19% represented certified climate bonds.

Types of ESG Bonds:

Green Bonds:

A green bond, sometimes referred to as a climate bond, is any type of bond instrument that finances projects that have a clear environmental benefit, 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, a number of green bond indices now track issuances and provide investors with a means of passively investing in green bonds. You can find more information about bonds in the International Capital Markets Association (ICMA) Green Bond Principles. Benchmark indices include:

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

Social Bonds:

Social bond financing projects provide access to essential social services, infrastructure, and programs for underserved people and communities. Examples include projects that provide:

- Affordable housing;
- Microfinance;
- Health care; and
- Education.

The Spanish Instituto de Credito issued its first social bond in 2015.

Sustainability-linked bonds:

Not to be confused with sustainability bonds, sustainability-linked bonds (SLBs) provide financing to issuers that commit to improving specific sustainability outcomes. These outcomes can be defined as environmental, social and/or governance related.

Transition bonds:

Convertible bonds finance 'brown' industries with high greenhouse gas emissions (such as mining, utilities and heavy industry). Because of their exposure to fossil fuels, these sectors are often excluded from raising capital in sustainable finance markets. Convertible bonds



allow companies in these sectors to raise capital specifically for their transition to greener industries.

SDG-linked bonds:

While there is some overlap with green bonds and social bonds, SDG-linked bonds allow issuers to raise capital by making specific commitments and progress towards targets related to the 17 United Nations Sustainable Development Goals (SDGs). Issuers are typically required to provide evidence and assurance of alignment with one or more of the 17 SDGs.

Blue bonds:

Blue bonds finance projects that have a clear benefit to the seas and oceans, such as sustainable fishing projects. Seychelles and the World Bank jointly issued the first blue bond in 2018.

You can find more information about bonds in ICMA's Social Bonds, Sustainability Bonds, and Sustainability-Linked Bonds Principles.

ESG Screening for Listed Equity:

Equities on a public market represent the most developed asset class in terms of ESG integration. Equity has various advantages over other asset classes – notably the greatest degree of transparency due to a capital structure where debt and equity holders coexist, albeit in a subordinate relationship to equity holders. The listed nature of shares and their ownership structure gives shareholders the ability to express their views through voting rights on many aspects of a company's direction and strategy, including the board of directors. Shareholder rights and voting rights are among the most prominent manifestations of asset management, where investors increasingly address non-financial objectives alongside financial ones.

Given the advanced nature of ESG disclosure among listed stocks, all of the responsible investment strategies discussed are appropriate for this asset class. This includes everything from passive to active investment strategies to long-term funds to hedge funds.

That said, hedge funds or long-short strategies are increasingly incorporating ESG into their portfolio construction and management. Hedge funds are alternative investment vehicles that use leverage to enhance returns and hedging strategies to manage net risk and generate alpha. Short selling involves borrowing a security generally on margin, hence the leverage component in hedge funds, and then selling it on the market to buy it back later. A successful short sale means that the investor is able to cover or buy back the security at a lower price than they originally paid to borrow it.

Indeed, PRI now provides resources and formally incorporates the hedge fund module into its Reporting Framework. Additionally, organizations representing the interests of the hedge fund community (including 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 ESG-focused working groups and regularly produce research, surveys, policy papers, and recommendations on practices.

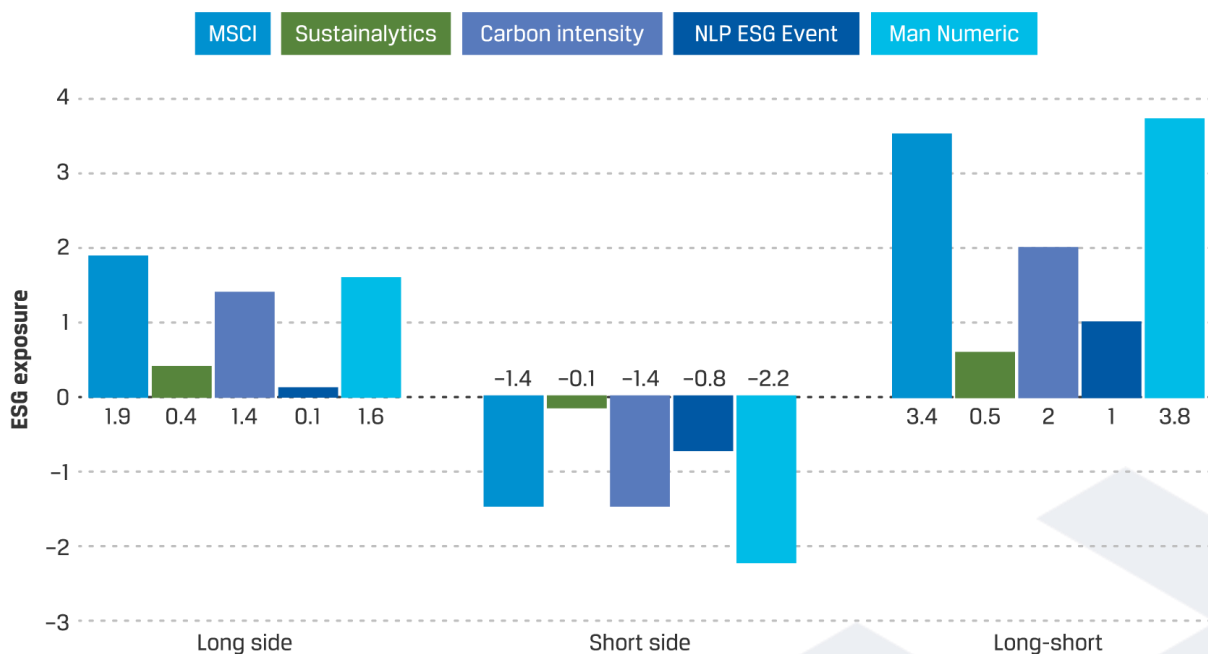
Figures 2 and 3 provide examples of the approach that a quantitative ESG equity long-short strategy might take. As a sector-neutral portfolio, the long exposure represents the highest or best decile of ESG-rated companies, while the short exposure represents the lowest or worst decile of ESG-rated stocks. It works on a number of data provider scores including proprietary, factor-neutral (Man Numeric) scores, carbon intensity metrics, and even an event-driven sentiment strategy that acts on ESG news using natural language processing (NLP).



While exposure and returns vary across data and metrics, the short-only example provides empirical support for the logic that companies with higher ESG scores and carbon performance are not only more likely to increase their ESG exposure, but also more likely to outperform companies with lower scores. In fact, simulations show that betting on poorly rated companies is more likely to reduce risk and increase resilience through lower drawdowns.

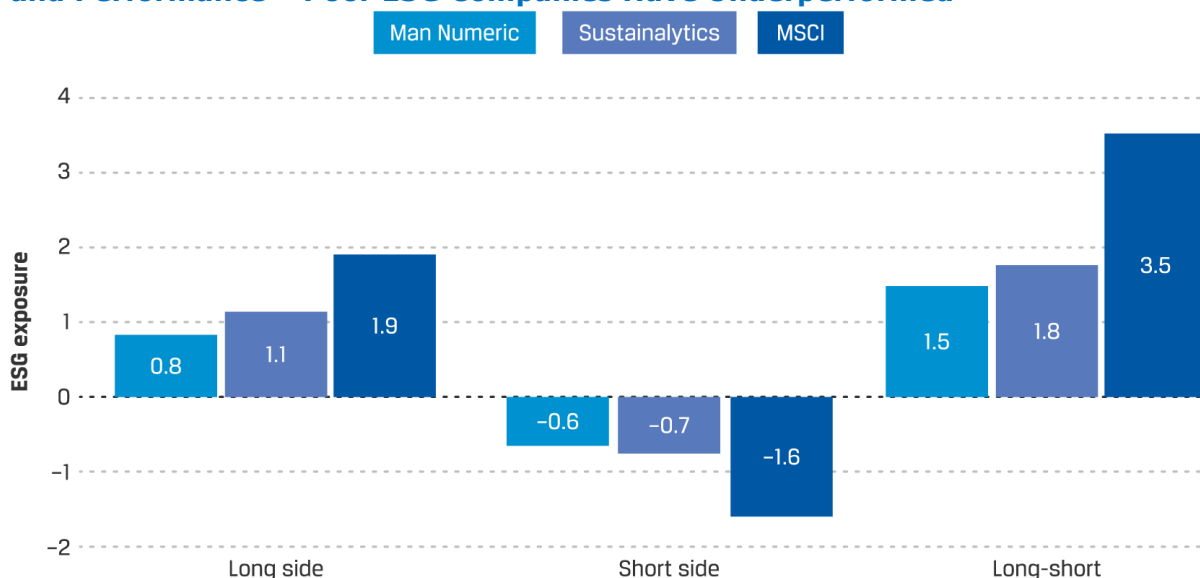
Note, however, that in Figures 2 and 3, all model spreads shown are total-fee and do not represent the performance of any portfolio or product. To calculate the short-only model spread, Man Numeric invests short in the top 10% of rated names in each sector and displays total-fee returns. To calculate the short-sell model spread, Man Numeric invests longs in the top 10% ranked stocks in each sector and shorts in the bottom 10% ranked stocks in each sector and displays the total premium profits. These spread profits are rebalanced immediately and do not reflect trading costs. The rankings are based on Man Numeric's internal Alpha model score.

Figure 2: Simulated implications of shorting poor ESG companies for exposure and performance – Shorting doubles the portfolio's ESG exposure



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

Figure 3: Simulated Implications of Shorting Poor ESG Companies for Exposure and Performance – Poor ESG Companies Have Underperformed



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

ESG Screening for Private Equity:

Like the unlisted credit and real asset markets, integrating ESG into private equity faces a number of challenges, primarily a lack of transparency, established reporting standards, regulatory oversight, and market expectations for ESG. The lack of mandatory non-financial reporting regulations such as the EU Non-Financial Reporting Directive (NFRD) for large European companies severely limits the ability of private equity portfolio managers to leverage ESG data for comparative ratings and scoring.

In addition, smaller private companies often struggle with the capacity to meet ESG reporting requirements. The quality, consistency, and continuity of the robust integrated reports published by many public companies is a major hurdle for smaller companies to achieve. Early stage companies also tend to operate with a much greater degree of freedom than more mature, publicly traded companies. As a result, a portfolio manager will need to consider the ESG trajectory of a company (which may have established but not yet met ESG goals) versus that of more mature companies. This will impact not only how the business or assets are run, but also the strategy set by the board.

In some cases, private equity investors are dealing with a strong founder or founding team, which, while a strong internal incentive, can raise long-term governance concerns. Early investors and key shareholders are often strategic and long-term oriented, creating a strong incentive to establish a strong set of ESG key performance indicators (KPIs) early in a company's lifecycle. It may be in the interest of general partners (GPs), the investment professionals responsible for investing and managing the fund's committed capital in companies, to establish specific metrics for the entire portfolio (explicitly acknowledging geographic and industry differences) as a means to support the overall portfolio strategy and communicate portfolio alignment to the fund's limited partners (LPs) who have invested in the overall private equity fund.

Like other types of investors, private equity investors can certainly apply exclusionary screening to any criteria to limit investment in certain sectors, as determined by norms or ethics. However, private equity investors do not benefit from the diversity and breadth of indexes and benchmarks of listed stocks, limiting the opportunities for comparative analysis

by sector or efforts to optimize portfolios around ESG criteria. However, portfolio managers can evaluate segments of their portfolios against smaller groups of investments, even including public companies, if data comparisons are possible.

Therefore, it is likely that GPs can apply some form of active or thematically focused screening in their respective investment charters. In fact, given the unlisted nature of the private equity industry, LPs are increasingly expecting GPs to incorporate ESG analysis in more robust forms beyond screening. Additionally, portfolio managers can set minimum ESG score thresholds for inclusion in their portfolios. Portfolio managers can address these challenges by formally establishing an ESG program that conducts pre-transaction ESG due diligence and ESG assessments of portfolio companies. Since ESG data for private equity companies may be more local or regional, the quantitative capabilities and systems that are

ESG Screening for Real Assets - Real Estate and Infrastructure:

Real assets such as real estate and infrastructure present certain advantages and challenges compared to equities and corporate fixed income investments. In many cases, the investor is a majority or full owner of the asset. The majority or full ownership nature gives investors much greater control over the definition, application and reporting of ESG data alongside or in parallel with existing reporting standards such as those of the Global Reporting Initiative (GRI). As with corporate unlisted fixed income, managing a real asset portfolio requires building a picture of the aggregate risk as well as the relative risk across all underlying assets. GRESB's comprehensive benchmark report provides a summary of:

- Sector group information;
- Overall portfolio KPIs;
- Environmental data compilation on usage and performance;
- GRESB scores on governance, policy and disclosure;
- Risks and opportunities, monitoring and environmental management systems (EMS);
- Environmental impact reduction targets; and
- Data validation and assurance.

However, this report is highly dependent on the companies, funds and assets that participate in the GRESB reporting process. For portfolios with significant holdings that do not participate in the GRESB assessment, portfolio managers will need to supplement their own ESG scores.

As data and reporting standards improve for real assets, investors should strive to create a closer link between ESG considerations and their financial implications. One idea that is similar to the idea of an ESG Risk Premium for real asset investments is the possibility of a Green Risk Premium in real estate.

Traditional models of housing supply have paid little attention to ESG factors. The main supply model is based on concrete houses, which are inefficient compared to other construction materials. It is no surprise that the sector has a significant carbon footprint, with a focus on environmental criteria on a construction, short-term and new build basis. ESG and impact-oriented housing strategies are now focusing on much broader criteria, actively integrating all components – particularly social considerations – into their portfolios.

In addition to reducing the carbon footprint of the housing stock through the use of more efficient building materials, community housing strategies are now working to provide affordable mixed-use housing solutions to cater for a wider segment of society – young people, first-time homebuyers, essential workers and older people.

Investors with significant exposure to real estate are increasingly leveraging the capabilities of insurers' analytical modeling and historical data sets to better understand weather risk in general and climate risk specifically. Munich Re, one of the world's largest reinsurers, offers climate risk assessments that model potential impact scenarios for assets across a broad set of 12 natural hazards, including:



- Earthquakes;
- Volcanic eruptions;
- Tsunamis;
- Tropical storms;
- 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) applied these analyses to PGGM's private real estate portfolio. Climate risk profiling, based on over 100 years of meteorological, weather and hazard event data, has the potential to examine the climate risk of a diverse global asset portfolio across multiple dimensions – from overall risk factor exposure for countries and cities to individual asset-level risk. The capabilities now enable deep, accurate insights across both vertical and horizontal data.

With growing evidence that sea level rise is likely to impact densely populated coastal communities and areas, investors can also enhance their portfolio climate analysis by profiling their portfolio's exposure to elevation and proximity to the coast. The impacts of coastal erosion and flooding ultimately have significant consequences for asset values and insurance premiums. That's right, research has shown that residential properties in the United States located in areas affected by rising sea levels have reflected a 7% price drop compared to nearby homes that are not affected.

To learn more about ESG and sustainability-related models, please contact [YTT Consulting!](#)

