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ESG's North Star: A guide to financial materiality for multi-asset investing

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Executive summary

When we focus on the substance of specific, investment-relevant environmental, social, and governance issues, we find a common ground of common sense. The concept of financial materiality is increasingly a “North Star” that can guide activity across all asset classes. At the same time, differences in security types, investment universes, and portfolio designs indicate that tailored implementation of ESG analysis across asset classes is appropriate, and perhaps even essential. Especially for multi-asset investors, we believe it is important to consider and incorporate these ideas into process development and decision-making.

We identify several areas of philosophical alignment across asset classes:

- Investors are universally interested in generating strong risk-adjusted returns with appropriate levels of risk.
- To pursue this goal, investors incorporate analytical frameworks that reflect investment relevance and material financial considerations.
- Research that aims to improve risk-adjusted returns is typically context-specific and forward-looking.

We identify several areas of strategic difference across asset classes:

Differences in the nature of the individual security.

Specifically, security structure, time horizon, and data availability all vary by asset class. Additionally, there are important differences within individual asset classes. All of these factors imply that a tailored, context-specific, and forward-looking approach to ESG analysis is warranted.

Differences in the composition of the investment universe.

The number of issues and issuers, total market value, pace of new issues, and trading volumes all vary by asset class. These differences highlight the need for research and analytical processes that are designed to account for the characteristics of varied investment universes.

Differences in the goals, style, and methods of the investment portfolio.

Investment portfolios have varied purposes and client requirements that are reflected in processes like security selection, trading strategy, and benchmarking. Again, this variety requires environmental, social, and governance considerations that are attuned to the specific investment setting and portfolio goals.

Understanding the commonalities and distinctions among asset classes can inform and improve consideration of financially material ESG issues. Across all these dimensions, the merits of tailored, context-specific analysis and process design are clear.

Introduction

While there is plenty of heated discussion around ESG metrics and practices lately, there is little debate about the practical importance of certain environmental, social, and governance issues in business and investment settings. Companies that can attract and retain employees have the chance to benefit from a more stable and productive team. Organizations with more efficient resource use might be less impacted by swings in commodity prices. Well-governed entities, from corporations to nations, could be able to maintain access to capital even in tumultuous circumstances. When we move from the jargon of ESG analysis to the substance of strategic issues, the rhetoric at both extremes tends to recede.

Early in my tenure as a brand-new Head of Sustainable Investing, our team met with the CFO of a health care company. We discussed strategy around the team development that was needed to support their growth, and patient outcomes that benefited from use of the company's products. At the end, we asked whether there were other sustainability or ESG-related topics he wanted to discuss. The CFO rolled his eyes, saying, "Oh, that ESG stuff, I can't stand it." When we pointed out that this investment meeting had indeed been our ESG discussion, he noted with surprise, "But that was all about our business!" This exchange summarizes the increasing distinction between ESG information that is used for reporting or compliance purposes and ESG analysis that is used for investment purposes. Both are important, but they represent very different functions.

Some sustainable investing approaches start with an assumption that there is a single universal standard by which environmental, social, and governance issues should be analyzed and assessed. We believe this is a flawed assumption for several reasons. For any analysis to be valuable, it needs to be relevant to the context at hand. This includes considering the variety that exists within the nature of the security, investment universe, and portfolio management. Security types vary both in structure and in function. Investment universes differ in scope, concentration, and turnover. Portfolio objectives reflect a range of client needs and expectations.

For these reasons, it is helpful to assess areas where standardization is most useful, and those where a tailored approach has the potential to bring greater benefits. In both settings, the goal is to identify ways in which environmental, social, and governance analysis can be additive to investment processes, by generating insights that could mitigate risk and/or generate alpha.

In general, standardization is extremely helpful at a foundational level, such as when defining the methodology for data collection that informs investor analysis. Just as investors expect standardized approaches to revenue recognition or operating expense categorizations, we can encourage clear and consistent disclosures on relevant metrics like employee safety data, executive compensation structures, or water use. Just like financial accounting treatments, when the methodology is clearly disclosed and consistently applied, it is easier for investors to use the information in an appropriate way.

The North Star concept of financial materiality is increasingly important across all asset classes, and the focus on high-integrity information is also consistent across different investment settings. However, given differences in security types, investment universes, and portfolio objectives, tailored implementation of ESG analysis across asset classes is often appropriate, and perhaps even essential.

Many commentaries focus on broad-brush assessments of ESG investing as a single category, despite the variety of issues and approaches that are included under this increasingly wide umbrella. For example, within the field of practice, some approaches to ESG incorporation rely primarily on exclusionary screens, incorporation of non-financial objectives, or decision-making that is unrelated to financial materiality.

Also, there are important differences in investment process between passive and active managers. Passive investment products are often designed to closely mimic a market index, with a typical goal of minimizing dispersion of performance and risk versus that index. Passive investment products are rarely focused on alpha creation through security selection and, instead, are generally more reliant on rules-based approaches to portfolio construction, trading strategy, and risk management. For these reasons, appropriate approaches to ESG-related analysis for passive managers differ significantly from those of active managers. While passively managed products account for approximately 41% of sustainable investing products in the United States,¹ the tools of fundamental analysis and active management have particular relevance for materiality-based approaches to ESG consideration.

To complement existing commentary that is broad-based or focused on passive investing, **this analysis offers a specific focus.** Here we will explore the similarities and differences between public market asset classes that arise from approaches to ESG incorporation based on financial materiality. We will concentrate particularly on descriptions and examples from the United States and on actively managed, fundamentally focused investment processes. For multi-asset investors, we believe it is important to consider and incorporate these ideas into process development and decision-making.

Observations

We identify several areas of philosophical alignment across asset classes:

- Investors are interested in generating strong and appropriate levels of risk-adjusted returns.
- To pursue this goal, investors incorporate analytical frameworks that reflect investment relevance and material financial considerations.
- Research that aims to improve risk-adjusted returns is typically context-specific and forward-looking.

In an era when some headlines seem intent on fueling division, it can be useful to recenter on the unifying elements that inform an entire profession. Medical professionals are interested in healing, chefs are interested in producing great dishes, and financial professionals are interested in delivering returns for clients. Specifically, as investors, we are focused on generating strong and appropriate levels of risk-adjusted returns on behalf of those who have entrusted us with this responsibility.

In order to pursue clients' goals, investment professionals rely on a range of analytical frameworks that vary according to the nature of the investments they are making. For example, the tools of quantitative investors differ from those of fundamental investors, and the tools of private equity investors differ from those of municipal bond investors. What unites these different analytical approaches is that they aim to focus on issues that are most relevant for investing within each area.

Furthermore, in most settings, these analytical tools aim to use historical data to inform a forward-looking view of investment opportunities and risks, since these are the main determinants of results. Identifying issues and information that are important but not yet well understood is at the heart of this type of analysis. As the old saying goes, "There's a reason the windshield is bigger than the rearview mirror."

These three unifying elements — a focus on risk-adjusted returns, relevant analytics, and a forward-looking orientation — form a strong common foundation across a wide range of investment settings. Together, they are also the foundation for investment-relevant and decision-useful environmental, social, and governance analysis. Specifically, the concept of financial materiality can be a unifying North Star to guide ESG analysis and related investment practices.

Financial materiality in the context of ESG analysis refers to information that is reasonably likely to be important to investors in making investment decisions. Related tools called materiality maps aim to identify issues that are reasonably likely to impact the enterprise value of a company or investment value of a security and, thereby, are most important to investors. General considerations that help to characterize financial materiality for any given issue include prevalence of the issue, intensity or level of impact, and time horizon. The most well-recognized materiality maps have been developed by the Sustainability Accounting Standards Board (SASB) and are now incorporated into the International Sustainability Standards Board (ISSB) framework, which informs the overarching work of the IFRS (International Financial Reporting Standards) Foundation in this area.²

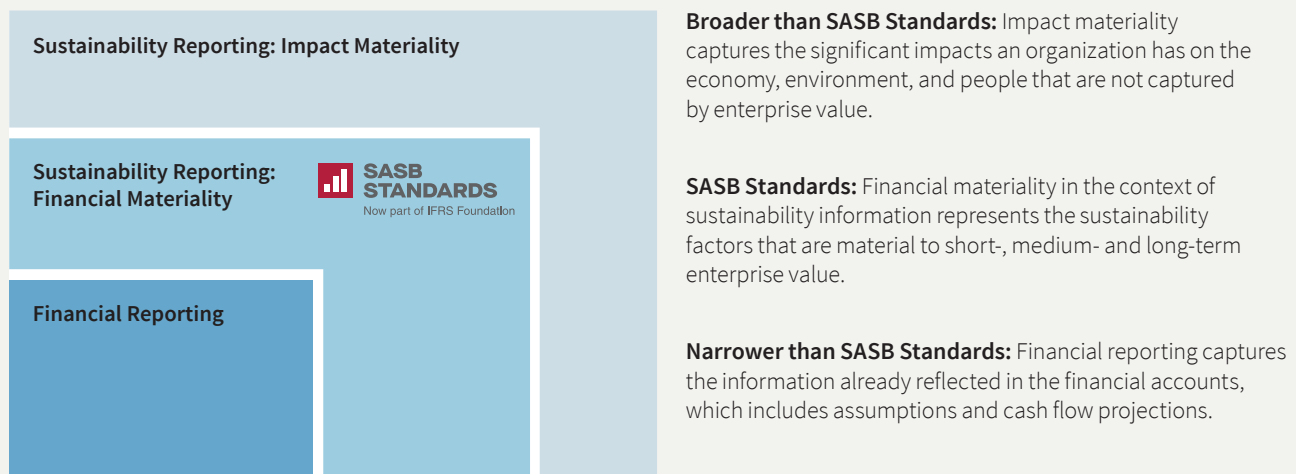
Acronyms aside, it is fair to say the focus on financial materiality is well-recognized common ground for issuers and investors on a global basis. About 80% of S&P 500 companies already reference the SASB Standards in their reporting,³ and the approach is aligned with the widely used Task Force on Climate-Related Financial Disclosures (TCFD) framework, adding coherence to the landscape of investment-relevant ESG information. Though focused on defining industry-specific financial relevance for corporate debt and equity issuers, the philosophy that informs the SASB standards can be extended to support definitions of financial materiality for other issuers and security types as well.

It is important to note that there is a second form of materiality, often called “impact materiality,” that describes information that may be useful to decision-making for all types of stakeholders (not only investors). This kind of information often references the reporting entity’s impact on the surrounding economy, environment, and communities. When financial materiality and impact materiality are combined, they form the concept of “double materiality.”⁴⁴ This expanded definition is important to certain investors and other constituents. However, this publication is focused on the common foundation of financial materiality, given its relevance to all investors and clients.

While the concept of financial materiality provides a powerful unifying concept, the specific details of creating and implementing an ESG integration approach based on financial materiality can — and should — vary across different investment settings.

FIGURE 1

Financially material ESG reporting complements other types of corporate reporting



Source: SASB.

We identify several areas of strategic difference across asset classes:

- Differences in the nature of the individual security
- Differences in the composition of the investment universe
- Differences in the goals, style, and methods of the investment portfolio

Differences in the nature of the individual security

First, let's review the basic structural differences in security types. Though sometimes left unexamined, different types of investment securities serve different functions, both for investors and for the issuing entities. These variations have important implications for determining investment relevance and optimal use of environmental, social, and governance data.

Common equity securities reflect ownership in an ongoing business entity, and the value of a share reflects the proportional value of all future discounted cash flows of that business. As the expectations for these future cash flows and/or the discount rates applied to them shift, security prices and values vary over time. The time frame for analysis is open ended.

Because all equity securities share a common driver of value — cash flows of the related corporate entity — the focus of equity analysis is typically on assessing the fundamental prospects for the company's business and then comparing how those prospects relate to current security valuation. The concept of net present value (NPV) analysis is helpful for summarizing the fundamental view of cash flows for equity investors. It is also more broadly relevant for all security types.

In contrast to the ownership position of equity securities, fixed income securities represent debt obligations. They are contracts that include repayment terms with set timing of expected cash flow streams. The time frame for analysis is fixed, with particular focus on downside risk assessment. Again, security value is NPV determined, but in this case, the time horizon for analysis is finite.

A brief review of NPV calculations can help to illustrate this concept more precisely.

FIGURE 2

Net present value

$$NPV = \sum_{t=0}^n \frac{Rt}{(1+i)^t}$$

In the equation above, *NPV* represents the sum of cash flows across time, from the start of a period $t=0$ until the end of the analysis n . The numerator, Rt , represents the net cash flow received at a specific time t . In the denominator, i represents the discount rate, and the time of the cash flow is again noted by t . The time horizon, n , is open ended for an equity security, but it is finite for a fixed income security.

That the number of time periods (n) is different between equity and debt securities lies at the heart of many analytical differences, including ESG-related analytics. For certain environmental, social, and governance issues, time horizon is a key consideration. For example, a company investing in energy-efficient equipment might bear the up-front cost today but reap the rewards over a multidecade period. The initial capital outlay is important for all investors to consider, but the extended time frame for returns on that spending means there are important and different implications for equity and debt investors. If the capital expenditures are sound, producing improved cash flows for the company over time, equity valuation would be directly impacted by those enhanced prospects. If the debt instrument is shorter term in nature, its valuation might not directly be impacted by those future improvements. However, if the equity value rises, with all else equal, the credit profile could benefit in turn from a lower ratio of debt to enterprise value, even though the benefits of the capital spending lie beyond the maturity of the debt. In short, there is often a mix of direct and indirect impacts for investors to consider.

Within the broader fixed income landscape, security types vary significantly, and so do the related investment analytics.

As noted above, corporate credits relate to a single issuer, many of which also have public equity outstanding. Analysis focuses on the financial health of that issuer, with particular emphasis on bondholder rights and hierarchy within the capital structure, and on the company's financial prospects for the time frame that is relevant for the individual security.

Municipal and sovereign debt securities also relate to single issuers, but in these cases the issuer is a governmental entity where more holistic analysis of regional and systemic health is required to assess creditworthiness, again with a specific time horizon in mind.

Structured credit investments are collections of credits, with cash flows and valuation supported by a mix of underlying assets. Analysis is therefore focused on understanding the composition and creditworthiness of those underlying assets. Other analytical considerations involve building an understanding of originators, servicers, counterparties, and the complexities of market structures. Here too we can see the value of context-specific analysis. For example, analysis of commercial real estate assets might focus on energy efficiency as a potential driver of asset value and credit risk, while analysis of residential mortgage-backed assets might focus more on affordability.

Implications of security-level differences for analysis and incorporation of ESG considerations

As explored above, one essential difference between equity and fixed income analysis is **time horizon**. A simplification of this point would note that equity owners are typically focused on open-ended upside and the probability of achieving it, while fixed income investors are focused on time-bound risks and the likelihood of principal being repaid. This generalized distinction between equity and fixed income securities has clear and important implications for analysis of environmental, social, and governance issues.

For example, an equity analyst might focus on multiyear trends of a company's investments in employees, and how they could improve long-term productivity for the company, while a corporate credit analyst might focus on how those same investments could mitigate risks of more immediate operational disruptions. An equity analyst might focus on safety processes and procedures that ensure operations can run smoothly, in compliance with legal requirements, and in a way that creates attractive opportunities for employees — all qualities that could enhance the company's ability to operate and expand in the future. A credit analyst might focus on that same safety information, but with a somewhat greater emphasis on assessing the potential tail risk of accidents or breaches.

A second set of differences between equity and fixed income analysis relates to **capital structures and voting rights**. Debt securities are senior to equity securities within capital structures, which means they have higher claims on cash flows (or, if under duress, on liquidation value) and, therefore, different risk characteristics. Equity securities, however, have voting rights that give holders some direct say in board composition, executive compensation, and other important governance issues. While the G of ESG typically refers to governance of the organization issuing securities, the rights of different security holders are another form of governance worth noting.

Another important difference across asset classes is the nature and availability of **data**. For public companies, data on material ESG issues is still incomplete but increasingly available and consistent. However, for private companies, data is often more limited. Private companies account for 38% of the corporate bond market, and they are not required to comply with the same disclosure requirements as public companies.⁵

FIGURE 3

ESG analysis for corporate issuers: Stocks vs. bonds



Source: Putnam.

There is also variation in data quality and availability beyond corporate issuers. For example, in some areas of structured credit, data availability is especially challenging, so finding high-quality inputs and planning for ongoing evolution and improvement are also essential design elements for investors to consider.

Beyond availability, standardized ESG data and disclosures are typically backward-looking in nature, as is the case with most financial disclosures. In a dynamic operating environment, relying solely on historical information can be a serious limitation. For active managers, understanding historical data is essential, but a key analytical focus is to put that data in proper context and to identify potential direction, magnitude of change, and related investment implications.

For example, a company's reported emissions might drop because it has made an engineering breakthrough that will improve efficiency for many years to come, or because it has divested a profitable part of the business in a way that compromises returns. Another organization might have board members whose long tenure appears to present a risk of entrenchment, but an analyst who knows the individuals could recognize them as pioneers in the field who add independent expertise to key governance decisions. This kind of tailored, strategic, forward-looking analysis is an essential ingredient for investors who aim to transform ESG data into investment-relevant insight.

In all cases, data integrity is of paramount importance, as it is in all research endeavors. For analysts focused on assessing financially material ESG issues, it typically is more valuable to focus on primary metrics as opposed to abstracted scoring or ranking mechanisms. For example, assessing actual water use of a corporate entity and comparing it to the level of water stress in its geographic region is likely to provide more valuable insights than incorporating a more universal ranking of water use on a high-to-low scale. Similarly, assessing details about the nature of political stability and rule of law on a country-by-country basis is often more useful than an abstracted scoring system of relative strength.

A final distinction is that debt securities are linked to specific uses of proceeds in a way that is more pronounced than for equity securities. This attribute has allowed for the creation of green bonds and other sustainability-linked fixed income securities, which are described in more detail below. In some cases, uses of proceeds connect directly to the credit outlook for an entity. However, investment risk/reward is typically more influenced by prospects for an organization's overall fundamental prospects, including ESG-related risks and opportunities.

Differences in security analysis within each asset class

In addition to differences in security types, for equities and corporate credit, materiality of specific ESG issues varies significantly by the issuer's sector. For example, a thoughtful analysis of a professional services business might focus on how the company attracts, supports, and retains employees, since the strength of the company's team is a main determinant of its business success. An industrial analyst might focus more on the energy or materials intensity of the company's products, seeing potential for efficiencies in these areas to contribute to long-term profits and related investment returns. Across all corporate sectors, analysts can examine issues like capital deployment and incentive compensation structures to determine whether these governance functions are aligned with investors' interests. An excerpted view of SASB materiality mapping illustrates some of these governance distinctions across business sectors (see Figure 4).

FIGURE 4

The SASB Standards show differences in ESG materiality across sectors

		CONSUMER GOODS	FINANCIALS	FOOD AND BEVERAGE	HEALTH CARE	INFRA-STRUCTURE
ENVIRONMENT	GHG emissions	Less likely	Less likely	Most likely	Potential	Potential
	Air quality	Less likely	Less likely	Less likely	Less likely	Potential
	Energy management	Potential	Less likely	Most likely	Potential	Potential
	Water and wastewater management	Potential	Less likely	Most likely	Less likely	Potential
	Waste and hazardous materials management	Less likely	Less likely	Potential	Potential	Potential
	Ecological impacts	Less likely	Less likely	Potential	Less likely	Potential
SOCIAL CAPITAL	Human rights and community relations	Less likely	Less likely	Less likely	Potential	Less likely
	Customer privacy	Potential	Potential	Less likely	Less likely	Less likely
	Data security	Potential	Potential	Potential	Most likely	Less likely
	Access and affordability	Less likely	Potential	Less likely	Most likely	Potential
	Product quality and safety	Most likely	Less likely	Most likely	Most likely	Potential
	Customer welfare	Less likely	Less likely	Most likely	Most likely	Less likely
	Selling practices and product labeling	Less likely	Most likely	Most likely	Most likely	Less likely
HUMAN CAPITAL	Labor practices	Potential	Less likely	Potential	Less likely	Potential
	Employee health and safety	Less likely	Less likely	Potential	Potential	Most likely
	Employee engagement, diversity, and inclusion	Potential	Potential	Less likely	Potential	Less likely
BUSINESS MODEL AND INNOVATION	Product design and lifecycle management	Most likely	Most likely	Most likely	Potential	Most likely
	Business model resilience	Less likely	Less likely	Less likely	Less likely	Most likely
	Supply chain management	Most likely	Less likely	Most likely	Potential	Less likely
	Materials sourcing and efficiency	Potential	Less likely	Most likely	Less likely	Potential
	Physical impacts of climate change	Less likely	Potential	Less likely	Potential	Potential
LEADERSHIP AND GOVERNANCE	Business ethics	Less likely	Most likely	Less likely	Most likely	Potential
	Competitive behavior	Less likely	Less likely	Less likely	Less likely	Less likely
	Management of the legal and regulatory environment	Less likely	Less likely	Less likely	Less likely	Less likely
	Critical incident risk management	Less likely	Less likely	Less likely	Less likely	Potential
	Systemic risk management	Less likely	Most likely	Less likely	Less likely	Potential

■ Most likely to impact enterprise value ■ Potential to impact enterprise value ■ Less likely to impact enterprise value

Source: sasb.org/standards/materiality-map/ © 2023. Reproduced with permission of IFRS Foundation. All rights reserved.

Similar sector-specific variety exists within the structured credit market, where asset types include mortgage-backed securities for commercial and residential mortgages, along with asset-backed securities for auto loans and student loans. Related analysis varies accordingly. For example, ESG-related analysis for residential mortgages might focus on affordability as a financially material issue, while auto loans might focus on emissions profiles that could influence residual asset values and/or valuation of the related securities.

Differences in the composition of the investment universe

In addition to differences in individual security types, there are also differences in the nature and composition of investment universes. It can be said that a stock is often an only child, but a bond can have many siblings. For example, a corporation typically has just one form of public equity that is traded but might have a dozen or more bond issues outstanding. Consider the example below, which highlights different securities associated with General Motors (GM).⁶

The table in Figure 5 illustrates two key concepts: first, that the sheer number of fixed income securities dwarfs the number of equity securities; second, that total market value for a single equity security is usually meaningfully higher than for a single fixed income security, which implies that liquidity and trading volume for that security are also typically higher. These attributes signal the methods employed for analytical processes, including ESG analysis, might vary in some dimensions, as explored below.

When we aggregate single company examples like this one to examine the broader investment universes for each asset class, we see the same patterns reflected. As of year-end 2022, the U.S. equity market included approximately 4,770 listed companies with total market capitalization of approximately \$40 trillion, with the 10 largest stocks comprising a whopping 25% of the total value. Average daily trading volume in U.S. equities during 2022 was about \$200 billion per day, roughly 0.5% of total market value.⁷

The U.S. investment-grade and high-yield corporate credit market has outstanding debt with a total value of over \$10 trillion and an average daily trading volume of \$38 billion. This universe includes nearly 60,000 individual securities, with just over 47,000 bonds and 12,500 loans outstanding. The ICE BofA U.S. Corporate and U.S. High Yield Indices, proxies for more commonly traded securities, include a more manageable 11,652 unique bonds from 2,145 different issuers.⁸

A growing subcategory of the corporate credit market involves specific links to environmental and/or social goals. Debt that is raised with the use of proceeds for environmentally positive projects, like energy efficiency or pollution prevention, is termed a green bond. A second type of security, social bonds, ties financing to socially beneficial projects in a similar way. Sustainable bonds combine the environmental and social aspects of types one and two. Another variation, sustainability-linked debt, does not designate a sustainability-focused use of proceeds, but rather includes covenants that link corporate sustainability goals to the interest rate of the debt.

FIGURE 5

GM illustrates the differences between equity and credit issuance

	Number of securities	Total value (\$B)	Average value/security	Duration
Common equity	1	55.0	55.0	Open ended
Corporate credit (operating company)	17	16.3	1.0	2–15 years
GM financial co. (auto loans)	128	50.0	0.4	6 months–10 years

Source: Bloomberg; GM securities outstanding as of March 2023.

For illustrative purposes only. Mentions of securities are intended to help illustrate differences in individual security types and should not be considered a recommendation or solicitation to purchase or sell the securities. It should not be assumed that investment in the securities mentioned was or will be profitable.

The issuance of ESG-labeled debt has existed for only about 15 years, and during the three years ended 2022, these categories represented approximately 13% of the gross corporate bond issuance market.⁹ For some investors, sustainability-designated bonds represent a way to support a particular use of proceeds that could be aligned with their goals. However, for investors focused on financial materiality, the environmental, social, and governance issues that drive the credit quality of the issuer and the valuation of the security are typically more important considerations than security labeling. Additionally, there is ongoing development required to refine tracking, reporting, and audit mechanisms for green bonds, social bonds, and sustainability-linked debt, so that investors can better assess compliance, progress, and effectiveness against original goals.

The U.S. structured credit markets of agency and non-agency mortgage-backed and asset-backed securities include on the order of 40,000 individual securities, with total value outstanding of \$14 trillion and average daily trading volume of \$244 billion in 2022. The U.S. portion of the Bloomberg Global Securitized Index incorporated just over 4,000 individual securities, representing the more frequently traded securities. These figures do not include U.S. CLO liabilities, which are also a significant component of the structured credit markets.¹⁰

The sovereign debt market, both developed and emerging markets, includes \$63 trillion USD-equivalent of total long-term global general government debt outstanding.¹¹ Data on emerging market debt is fairly opaque; however, average daily trading volume for 2022 was approximately \$22 billion. Compared with the average daily trading volume of the U.S. Treasury market of \$614 billion, the largest government debt market in the world, emerging market volume is a fraction of developed market transactions. The number of individual sovereign securities tops 87,000, though the Bloomberg Global Aggregate Index, a measure of commonly transacted securities, is composed of 2,400 sovereign bonds.¹²

We can see from the range of statistics above that the investment universe for each asset class has its own characteristics of breath, concentration, and liquidity that need to be incorporated into investment processes, including ESG-related considerations.

In addition to the differences in **composition, trading volumes, and total size** of different markets, there are meaningful differences in the **flow of new issues**. Over the 10-year period through 2022, even during the strongest markets for new equity issuance, the value of new issuance was just over 1% of total equity market capitalization already outstanding. In contrast, the annual proportion of total fixed income issuance to total securities outstanding ranges from approximately 16% to 28%. This is an intuitive and obvious difference given the time-bound nature of fixed income securities, and it reflects the more dynamic and less concentrated nature of fixed income markets when compared with equity markets.¹³

These clear differences across investment universes imply that approaches to individual security analysis can and should vary between equity and fixed income investors, even in cases where the issuer is the same corporate entity.

Implications of investment universe differences for analysis and incorporation of ESG considerations

The composition of investment universes has important implications for related research processes and for how relevant ESG considerations could be incorporated. For example, in settings with large numbers of issuers or a high rate of new issues, like corporate credit or securitized markets, a framework that allows for efficient analysis of ESG considerations is essential. Design principles for analysis in these conditions might include standardization of high-quality data inputs and an analytical framework that can easily and accurately extend across multiple securities or issuers.

In contrast, for slower-changing or more highly concentrated universes, like large-cap equities, the analysis might be more bespoke and tailored to individual companies and securities, accounting for the strategic differences between similar businesses that could impact financial results over the long term. A similar approach might make sense in sovereign debt, where the number of issuers is by definition relatively small and not very rapidly evolving.

The varied nature of investment universes also has direct implications for portfolio construction, which we explore in the next section.

Differences in the goals, style, and methods of the investment portfolio

The third layer of distinction across asset classes is at the individual portfolio or product level. Portfolio construction uses inputs from security analysis and works within the setting of the investment universe, and also has its own distinct considerations. For example, most portfolio managers assess portfolio composition against a standard benchmark, and most consider portfolio-level risk exposures that are different from assessments of individual security risk.

Investment portfolios serve a range of functions and feature a range of attributes. For example, an investor might expect a short-duration bond portfolio to deliver a fairly predictable range of returns and risk, while they may expect a wider range of outcomes for a growth equity portfolio.

Both client preferences and regulatory requirements can vary across different settings. Client needs typically include a mix of considerations like risk appetite, return expectations, and liquidity requirements. Portfolio construction considerations can include concentration, duration, composition, and trading strategy.

Though sometimes portfolio characteristics are expressed in static terms, the actual process of portfolio management is a dynamic one, constantly aligning goals of a portfolio with the investment environment and specific opportunities available at any given time.

Despite this variety and dynamism, all portfolio construction processes include some form of security selection (both inclusionary and exclusionary), trading strategy, and benchmarking. Each of these elements is explored below.

As we compared results of our early materiality mapping exercises, one of our corporate credit portfolio managers noted, “We wake up in the morning thinking about all of the regular things — liquidity, duration, and risk.” Though we had just been comparing views of the exact same corporations, this remark showed how distinctive our two settings can be. As a large-cap equity manager, I wake up in the morning thinking about growth, valuation, and both upside potential and downside risk — a very different list!

Implications of differences in investment goals, styles, and methods for analysis and incorporation of ESG considerations

Given the range of portfolio goals and dynamic environment in which portfolio management occurs, there are natural differences in how environmental, social, and governance analysis influences portfolio construction. To bring this idea to life, consider the past few years of operating conditions, which have included a global pandemic, labor shortages, disruptions in supply networks, the Russian invasion of Ukraine, rising interest rates, inflation, and the collapse of several well-established financial firms.

Under this series of extreme circumstances, different ESG issues had impact on performance at different times. For example, portfolio managers who focused on the “S” issue of worker well-being during the pandemic had the chance to identify issuers who would be less disrupted — or even advantaged — by those difficult circumstances. Investors who focused on companies with efficient resource management might have found them less impacted by commodity price spikes. Valuations of securities tagged as “green” have seen both valuation premiums and discounts in recent years, with indications that ultimate results are likely more linked to financial fundamentals than to security labeling.

This recent period illustrates how materiality can be dynamically linked to operating conditions, with implications for portfolio construction that vary across time and also across investment setting.

More generally, tailored ESG analysis and its impact on **security selection** at the portfolio level is directly linked to the differences in securities and investment universes previously discussed. An investor in student loan-backed securities might spend time focusing on customer welfare or affordability. A quantitative portfolio management process could make use of materiality-driven ESG signals to complement other inputs to their models, with a goal of risk mitigation or alpha generation. An equity investor could craft a portfolio focused on stocks where valuation could be enhanced by mitigation of different long-term environmental or social business risks.

Generally speaking, investors are interested in issues that are financially material, and so ESG analysis centered on material topics would naturally be relevant across many different portfolio types. However, for products with an explicit sustainability or ESG focus, there is an expectation that these considerations be consistently and deliberately reflected in investment processes. In many ways, this is just the same as expecting a small-cap equity portfolio to focus mainly on small-cap investments or an emerging market portfolio to focus on specific geographies.

In some settings, an investment process with appropriate and explicit focus on ESG integration might result in a portfolio with meaningfully different composition from a “non-ESG” portfolio, while in other cases these two could be quite similar. There are occasions when ESG-focused inputs, alongside other financially material considerations, lead to similar investment decisions. For example, the strong governance practices of a corporate issuer might contribute to effective capital allocation over time, which would also be reflected in analysis of long-term financial results. In this instance, the investment conclusion could be the same whether or not governance analysis were specifically incorporated, even though assessing the more complete information is likely a more robust research process. In short, sometimes analysis of material ESG issues illuminates different risks and opportunities than other tools, but sometimes these differences are modest in scope or magnitude. And, even if meaningful,

sometimes these differentiated insights can lead to similar decisions at a particular moment in time within the context of a specific strategy.

Somewhat related to security selection, the role of ESG-related **exclusionary approaches** can also vary according to portfolio type, with important differences in purpose and implementation mechanisms. For some portfolios, *a priori* exclusions based on involvement in particular businesses are considered part of the “ESG-ness” of the product. This can be appropriate so long as the exclusions are clearly defined, consistently communicated, and aligned with client goals. For example, certain portfolios exclude companies engaged in weaponry, tobacco, or fossil fuels. However, this type of exclusion typically does not directly link to a materiality-based research approach or inherently align with the investment goal of risk mitigation or alpha generation.

A second form of *a priori* exclusionary processes focuses on risk-related criteria, with a goal of mitigating portfolio-level exposures to certain risks. For portfolios that are managed with quantitative models, for example, setting exclusions based on certain ESG-related risk parameters might be considered complementary to other parts of the portfolio management processes. Here there is potentially a risk-related link to financial materiality, as the goal is to identify potential investment risks that might not otherwise be revealed or incorporated into portfolio construction.

A third approach to exclusions is not *a priori* but rather imbedded in the heart of research and investment processes. For actively managed portfolios that are informed by fundamental research processes, the investment process is already designed with a goal of identifying the most compelling opportunities from within a broader investment universe. In these cases, the more relevant question is how investment processes determine what is *included*, not what is excluded. An inclusionary-focused portfolio can employ financial materiality to serve as the guiding principle across all investment processes.

In addition to security selection and the related exclusionary considerations, **trading strategy** is a key component of portfolio management across all investment settings. As with security selection, some level of decision-making is determined by market conditions, including liquidity and new issues, and the related investment risks and opportunities that these create at any point in time.

Beyond these circumstances, portfolio management approaches that hold securities for longer periods of time might have the chance to consider financially material ESG elements in a more comprehensive way, since a longer holding period is more obviously aligned with the time frame over which certain ESG issues might impact performance. For example, poor governance practices like unwise capital allocation are sometimes apparent immediately, but often it can take years to determine whether corporate investments will generate decent returns. Similarly, brewing social risks that relate to inequity or lack of opportunity might slowly develop over decades before they impact sovereign bond performance in a visible way.

Another trading approach might consider certain financially material ESG inputs as direct catalysts for buy/sell decisions. Within a broader research mosaic, it is rare that any one data point is cause for an investment decision, and this is true for most material ESG inputs as well. However, sometimes acute issues arise: Safety breaches reveal operational risk, natural disasters reveal asset risk, or an abrupt change of corporate leadership reveals governance risk. Additionally, some portfolio management processes are more rules-based and might rely on certain thresholds to inform trading decisions, including those related to financially material ESG elements.

Importantly, there is a distinction between the time horizon for investment analysis and the holding period for a given investment (which accumulates to determine aggregate turnover at a portfolio level). Sometimes observers conclude that a portfolio with high turnover must also have a short analytical time horizon, but this ignores the fact that security prices are constantly being updated to reflect shifting views of the NPV calculations noted in our earlier discussion. In a dynamic market

environment, an analytical process that incorporates a long-term time horizon can still result in high portfolio turnover. For example, say that an investor's research shows upside of 30% based on the NPV analysis. In the two months following purchase, the security price rises by 40%, while a comparable investment opportunity has a price that is unchanged. A portfolio manager would have a sensible basis to swap the first investment for the second, creating portfolio turnover even though the analysis informing both decisions is long term in nature.

The last major component of portfolio construction across all asset classes is **benchmarking**. Considerations in this area often are intertwined with the nature of the securities and of the investment universe, as discussed earlier.

For investors whose clients require extensive business involvement exclusions or ESG-related customization that is driven by non-financial considerations, a more tailored benchmark might be relevant. For example, if a client requests a portfolio with low emissions intensity (typically measured as a ratio of emissions to revenues), and the investment universe has a high proportion of emissions-heavy companies, such as within the high-yield market, there is a natural and important mismatch. Benchmarking this kind of client-driven preference versus the standard market index would result in chronically high risk exposures and tracking error, which could result in either large headwinds or tailwinds to portfolio performance in any given period. Since the goal of benchmarking is to give a relevant frame of reference for assessing both risk and performance, a closer match of benchmark with client restrictions could be useful in this case.

However, for investors that are focused primarily on financial materiality, aiming to use ESG integration as a way to generate alpha and/or mitigate risk across a broad investment universe, it is not clear that a customized ESG-centric benchmark should be necessary.

Through the above examination, we can see that portfolio construction is a kind of cumulative process. It incorporates aspects of security analysis, considerations related to the investment universe, and additional awareness of portfolio-specific goals. Investors have the opportunity to weave materiality-focused ESG analysis through each of these layers in consistent and complementary ways.

The key considerations for security, universe, and portfolio considerations described in this review are summarized in the following matrix.

FIGURE 6

Why ESG considerations vary across asset classes: Nature of the security, universe, and investment relevance

	NATURE OF THE SECURITY			NATURE OF THE INVESTMENT UNIVERSE		
	Structure	Time horizon	Scope of issuer	Concentration <i>(market value/ number of invest- ible securities)</i>	Liquidity <i>(at security level)</i>	Pace of new issues <i>(new issues/ outstanding issues)</i>
Public equity	Ownership	Perpetual	Narrow — single corporate issuer	Higher	Higher	Lower
Corporate credit	Obligation	Finite	Narrow — single corporate issuer	Lower	Lower	Higher
Sovereign debt	Obligation	Finite	Narrow — single issuer (though broader context than a single corporation)	Lower	Lower	Higher
Structured credit	Collection of credits	Finite	Multiple credits + multiple assets	Lower	Lower	Higher

INVESTMENT RELEVANCE OF ESG ANALYSIS			
	Description of financial materiality	Links to fundamentals, risk, and valuation	Likely frequency
Public equity	Can be acute or compounding over time; both risks and benefits can accrue to equity value	Direct links to long-term fundamentals and security valuation; potential to identify tail risk and/or mispricing	High, due to fundamental relevance and extended time horizon
Corporate credit	Can be acute or compounding over time (with fixed time horizon); most relevant for risk mitigation	Direct links to fundamentals (time bound); possible links to valuation; potential to identify tail risk and/or mispricing	Medium-high, due to fundamental relevance and fixed time horizon
Sovereign debt	Can be acute or compounding over time (with fixed time horizon); most relevant for risk mitigation	Direct links to fundamentals (time bound); possible links to valuation; potential to identify tail risk and/or mispricing. Scope of issuer makes any one topic somewhat less likely to impact the whole	Medium, due to fundamental relevance, fixed time horizon, and broad context for issuer
Structured credit	Can be collective (across credits) or compounding over time (with fixed time horizon); most relevant for risk mitigation	Muted impact for any one topic, due to multiple credits and assets within each security; however, cumulative impact to both risks and valuation could be significant	Medium, due to dispersed exposures within each security structure

Application and conclusion

Understanding commonalities and distinctions across asset classes can inform and improve investment approaches to ESG analysis and consideration.

Investors share certain common priorities across a wide range of settings, including a focus on generating strong and appropriate levels of risk-adjusted returns, the use of investment-relevant analytical frameworks, and the creation of context-specific and forward-looking research insights.

Some approaches to sustainable investing combine financial and non-financial goals. However, this discussion has focused on investors who aim to identify, analyze, and appropriately utilize financially material environmental, social, and governance information. In doing so, these investors reflect the common goals noted above.

Beyond the wonky jargon of environmental, social, and governance analysis, all types of investors aim to gather information that is as complete and relevant as possible. Active managers, in particular, seek to generate insights that are forward-looking and useful to decisions for security selection and portfolio management. Great potential value can be found in identifying gaps between the real-world circumstances of a company, country, or asset and its security price. Tailored ESG analysis is one way to help bridge the gap between the real world and the world on our screens, with possible benefits for clients.

It is hard to imagine a case for the potential investment merit of ESG incorporation that is not rooted in financial materiality. We believe a consistent philosophy combined with context-specific analysis and execution offers the best opportunity to generate financially relevant sustainability insights, with potential to improve returns and mitigate risks over time. When we more closely examine the differences in security characteristics, investment universe, and portfolio construction across asset classes, we can see that tailored approaches to ESG integration are sensible, and perhaps even essential, ingredients in the pursuit of strong long-term performance.

Endnotes

- 1 Morningstar, “Sustainable Funds U.S. Landscape Report, 2023.” February 21, 2023.
- 2 IFRS, “International applicability of the SASB Standards,” March 2023, and “Seven key takeaways from the IFRS Sustainability Symposium,” March 6, 2023.
- 3 Putnam analysis based on SASB data (<https://www.sasb.org/company-use/sasb-reporters/>).
- 4 Global Reporting Initiative, “The Materiality Madness: Why Definitions Matter,” February 2022.
- 5 Data from Bloomberg, Barclays, and Putnam.
- 6 Data from Bloomberg.
- 7 Data from S&P Global, SIFMA US Research Quarterly, October 2022.
- 8 Data from ICE, Bloomberg. These totals include debt maturing in less than one year.
- 9 Data from Barclays, Bloomberg, J.P. Morgan, and Putnam.
- 10 Data from Bloomberg, Conduit, and SIFMA.
- 11 Data from Bank for International Settlements.
- 12 Data from Emerging Markets Trade Association survey, 2022; SIFMA; and Bloomberg.
- 13 Putnam calculations based on market data from Bloomberg, SIFMA, and Sibilis Research.

The views expressed are those of the authors at the time of writing. In the context of an investment strategy, consideration of financially material ESG issues can be an important part of an asset manager’s investment process. Asset managers that consider financially material ESG issues believe that ESG integration can inform better long-term investment decision-making by supporting risk mitigation or identifying opportunities in an investment portfolio. At Putnam, we believe that certain ESG issues are relevant and material to long-term business fundamentals and security values, and important to all investors. We integrate ESG considerations in our research across asset classes, noting that investment-relevant issues vary by sector, geography, asset class, and issuer context. Research that is tailored to these different settings has potential to add meaningful value. In making investment decisions, investment managers may rely on information and data that could be incomplete or erroneous, which could cause an investment manager to incorrectly assess a company’s ESG characteristics. The third-party data providers may differ in the data they provide for a given security or between industries or may only take into account one of many ESG-related components of a company. Furthermore, data availability and reporting with respect to ESG issues may not always be available or may become unreliable. The relevance and materiality of other ESG issues in making investment decisions will differ from strategy to strategy, from sector to sector, and from portfolio manager to portfolio manager, and for some strategies, most notably those where there is a lack of relevant ESG data, ESG considerations are not a material part of the investment process. Unless stated otherwise in a financial product’s documentation, and included within its investment objective and investment policy, consideration of financially material ESG issues does not change a product’s investment objective or constrain an investment manager’s investable universe. ESG determinations may not be conclusive, and securities of companies/issuers may be purchased and retained, without limit, regardless of potential ESG impact. The impact of the consideration of financially material ESG issues on performance is not specifically measurable as investment decisions are discretionary regardless of ESG considerations.

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