Sustainable Finance Disclosures

Article 3:

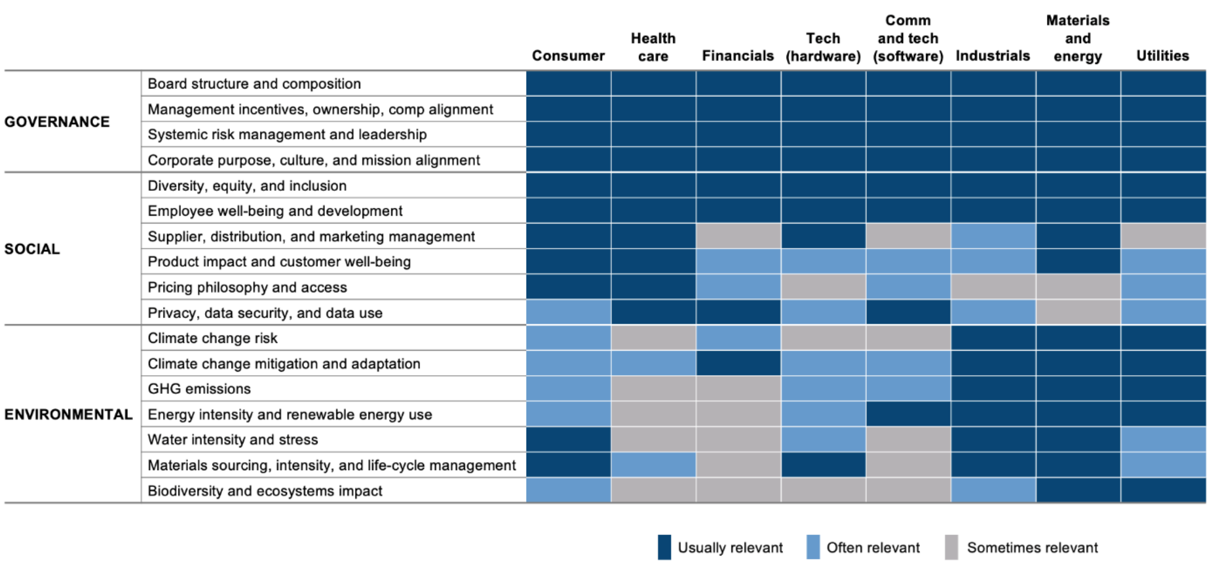
Putnam integrates consideration of material sustainability elements, including risks, in our investment research and decision-making process. Putnam focuses on understanding how sustainability considerations may influence performance, alpha, and risk in client portfolios, including how relevant sustainability risks might have a material negative impact on the financial return of an investment. We consider sustainability analysis as additive and complementary to the fundamental understanding that is at the center of our investment philosophy.

Our approach to integration does not mean that we exclude any company, industry, or country from the Funds' portfolios based solely on sustainability criteria. Rather, we expect sustainability-related insights to be components of the research processes that are used to arrive at investment decisions. Both the mix of relevant sustainability issues and the level of their fundamental importance will vary depending on issuer context and the investment strategy of a particular portfolio. Our belief is that certain sustainability elements are relevant and material to long-term business fundamentals, and thus important to investors. Relevant issues vary by sector, geography, asset class, and company context. Therefore, fundamental research that is tailored to different settings has potential to add meaningful value. It is through this type of integrated research that we expect to continue to provide value for our investors.

For more information, please see the Funds' Investment Advisor's ESG Policy, outlining Putnam's views and procedures for ESG integration across the asset classes we manage. We believe that transparency and reliability of information regarding all types of material investment topics benefit investors, and that consideration of relevant sustainability information can help contribute to our investment process and performance.

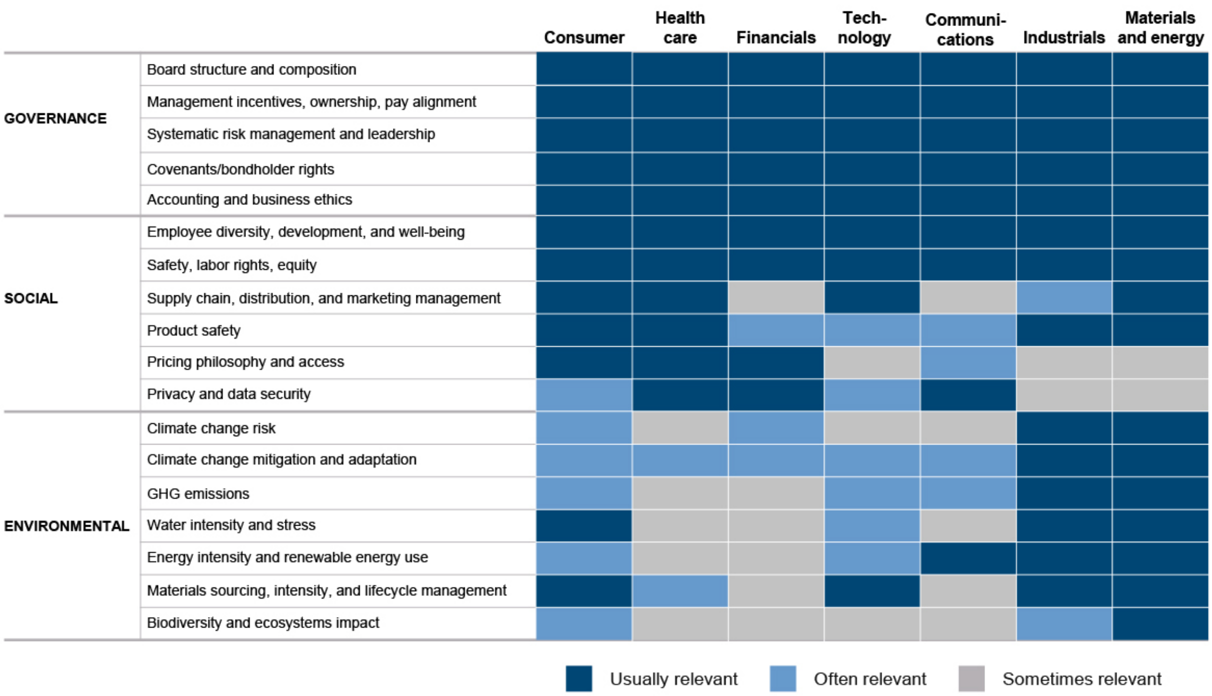
Equity Funds (such as Putnam U.S. Large Cap Growth Fund)

Equity ESG research is guided by our internally developed "materiality map," which was inspired and guided by the materiality mapping of the Sustainable Accounting Standards Board (SASB). We also utilize data from several third-party resources, including MSCI and Sustainalytics, as part of our broader research process. Our belief in the power of context-specific analysis can be seen in the map below, which shows that we have different and complementary frameworks for various sectors and issues in equity research.



Fixed Income Corporate Credit Funds (such as Putnam European High Yield Fund and Putnam Global High Yield Bond Fund, as well as (for the corporate credit portion of their assets) Putnam Fixed Income Global Alpha Fund and Putnam Ultra Short Duration Income Fund)

The fixed income group integrates ESG into the corporate credit research process, depending on applicability and data availability, using a materiality map similar to that of the equity group. The primary difference is the addition of a category within governance focused on covenants and bondholder rights. Additionally, several categories have varying degrees of relevance between equity and fixed income.



Putnam's ESG corporate research philosophy combines fundamental analysis with relevant ESG insight, understanding that application of ESG factors vary by industry. In the same way our fundamental analysis is forward looking, our evaluation of relevant ESG considerations must also be forward looking. This has applications in sector and issuer selection, as well as portfolio construction. ESG considerations help build a more nuanced assessment of an issuer's credit portfolio, which can potentially limit ratings volatility, and more importantly, tail risk in credit portfolios.

Other investment disciplines (such as Putnam Fixed Income Global Alpha Fund, Putnam Multi-Asset Absolute Return Fund, Putnam Securitised Credit Fund, Putnam Total Return Fund, and Putnam Ultra Short Duration Income Fund)

Integration of ESG issues into fixed income analysis is an emerging area that currently has more limited applicability within certain areas, such as securitised assets (e.g., mortgages) and government securities. As a result, for fixed income investments managed outside our corporate credit team — for example, within our multi-sector fixed income portfolios, like Putnam Fixed Income Global Alpha Fund — our ESG process differs as it pertains to corporate credit holdings (as described above), versus other fixed-income sectors.

Similarly, the Putnam Ultra Short Duration Income Fund includes both corporate credit and securitised investments, and different approaches apply to each sector.

In the securitised space, for example, securitised products present a unique set of challenges when considering ESG issues. Broadly, the origination and securitisation of loans and other obligations involve multiple parties and various assets, which may be dynamic over the life of an investment. Additional complications in the application of ESG considerations within the asset class include both the lack of data available for the parties involved in the securitisation process (privately held entities), as well as the current lack of third-party providers of ESG scores for securitised assets. When considering ESG issues in our analysis, we seek to focus predominantly on the underlying assets rather than on the various parties involved in the transaction. Putnam has historically taken certain environmental, social and governance factors into consideration when examining potential investment opportunities. Strong oversight governance and "above board" lending practices are integral to our research processes. Environmental issues are also integrated into our research process, particularly the potential impact of weather on cash flows. As third-party data and industry approaches in this highly specialised asset class evolve, Putnam continues to explore additional angles for consideration of sustainability risks within securitised assets.

Our Global Asset Allocation (GAA) team, which manages the Putnam Multi-Asset Absolute Return Fund and Putnam Total Return Fund, is also currently exploring the role of ESG analysis within the context of their process. The GAA team's strategies combine equity, fixed income, and other asset classes, using proprietary quantitative modeling, and have pursued investment themes such as strong corporate governance practices. We expect that our integration of ESG issues in additional asset classes and investment disciplines will continue to evolve over time as available data increases.

Article 4:

As described above, Putnam approaches sustainability risks and factors from an investment-centric perspective, consistent with the return-focused investment goals of each of the Funds and our investors' expectations. Our process seeks to focus on material "inputs" to performance and risk from sustainability risks and other financial risks in a context-specific way. In contrast, Putnam does not currently consider adverse impacts of investment decisions on sustainability factors – i.e., the sustainability "outputs" of our investment decisions – for their own sake as part of our investment process, because these elements are not part of the Funds' stated goals and strategies, and a focus on impacts, rather than material risks and returns, could be inconsistent with our duty to seek superior financial performance.

It is important to note, however, that where we believe adverse sustainability impacts will have a material negative long-term consequence to an issuer's financial performance, we will seek to consider these impacts as a component of our investment process. In other words, depending on the issuer-specific process, asset class, and Fund in question, Putnam may consider principal adverse impacts, but as factors impacting investment performance, not as outputs of the investment process. Examples of relevant and material factors that we research might include carbon intensity, water use, or plans to reduce waste; employee well-being or commitments to workplace equality and diversity; and board independence or alignment of management incentives with the company's strategic sustainability objectives. Both the mix of relevant sustainability issues and the level of their fundamental importance will vary depending on issuer context and the investment strategy of a particular portfolio.

Our investment process is forward looking, and we incorporate consideration of sustainability factors in our investment research process where those factors are considered to be financially material. Our aim in incorporating sustainability factors into the investment research and decision-making process is to mitigate risk and augment returns; however, this focus on sustainability in the investment process may, in some cases, reduce principal adverse impacts.

In addition, our review of both sustainability risks and sustainability factors is constrained by continuing limitations on the availability and quality of data on these risks and factors and by a lack of standardization. ESG issues, data, and analysis are all actively evolving, and likewise we expect our research and investment approaches to continue to develop in ways that are attuned to the contexts of various issuers, asset classes, and investment strategies. We also continue to work with investors, on an agreed-upon basis, to measure and monitor our performance against various sustainability criteria.

Our investment engagement is an integral component of our fundamental research process and helps us to assess risk and to identify opportunities, including around sustainability risks. Our engagement with companies and issuers spans a wide range of topics, including long-term strategy, capital allocation, and financially material sustainability issues. This type of engagement is an integral part of our fundamental research process and reflects our belief that the value we provide for clients is linked to thorough research and understanding of long-term business fundamentals. For more information on our engagement approach, including interactions with issuers, proxy voting, and other matters, please review our Shareholder Engagement Policy and our most recent Proxy Voting / Engagement Report.