

Sustainability-Related Disclosures

SFDR Article 3:

The Funds' Investment Advisor ("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.

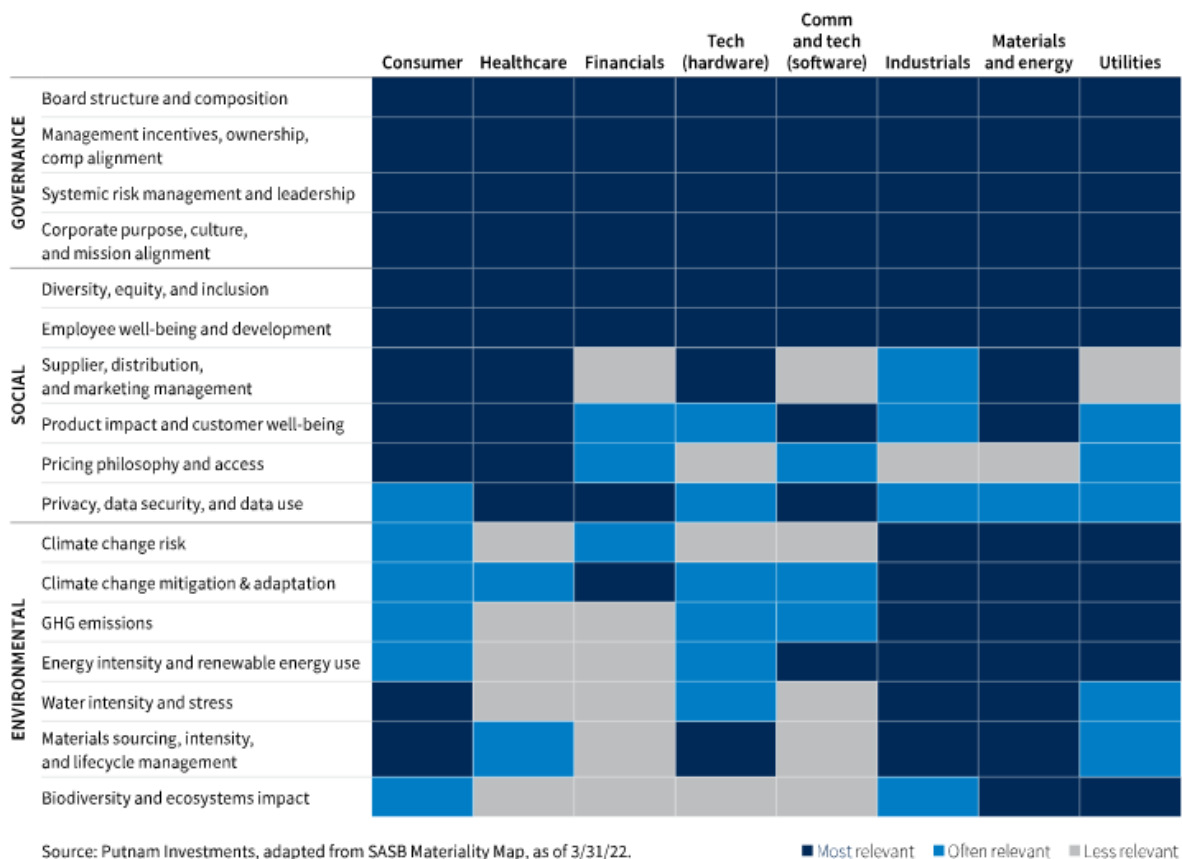
We expect sustainability-related insights to be components of the research processes that are used to arrive at investment decisions. Both the mix of relevant sustainability issues and the level of their fundamental importance will vary depending on issuer context and the investment strategy of a particular 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.

For more information, please see Putnam's [ESG Investment Policy](#), outlining our 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.

The Equity materiality map provides a research framework specific to each sector



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 its assets) 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.

		Consumer	Health care	Financials	Technology	Communications	Industrials	Materials and energy
GOVERNANCE	Board structure and composition							
	Management incentives, ownership, pay alignment							
	Systematic risk management and leadership							
	Covenants/bondholder rights							
	Accounting and business ethics							
SOCIAL	Employee diversity, development, and well-being							
	Safety, labor rights, equity							
	Supply chain, distribution, and marketing management							
	Product safety							
	Pricing philosophy and access							
	Privacy and data security							
ENVIRONMENTAL	Climate change risk							
	Climate change mitigation and adaptation							
	GHG emissions							
	Water intensity and stress							
	Energy intensity and renewable energy use							
	Materials sourcing, intensity, and lifecycle management							
	Biodiversity and ecosystems impact							

Usually relevant
 Often relevant
 Sometimes relevant

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 Securitised Credit Fund, and Putnam Ultra Short Duration Income Fund)

Because fixed income investments generally represent a promise to pay principal and interest by an issuer, and not an ownership interest, and may involve complex structures, ESG-related investment considerations may have a more limited impact on risk and return (or may have an impact over a different investment time horizon) relative to other asset classes. With respect to certain asset classes, such as securitised investments, data on material ESG considerations may be limited. As a result, for fixed income investments managed outside our corporate credit team our ESG process differs from that for other fixed-income sectors. For example, 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 believe that ESG considerations are best analyzed in combination with traditional fundamental considerations, including the fundamentals of a securitised product and its underlying assets. We may also evaluate ESG considerations related to the originator, servicers and other relevant parties. Historically,

Putnam has 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.

SFDR 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. Any exceptions to this are outlined below in the section entitled “SFDR Article 10.”

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. Not every portfolio manager, strategy, or portfolio has the same approach, and specific considerations of ESG elements will vary. For some portfolios ESG analysis is less important than for others, whether as a matter of investment approach, the asset class, or limitations on data.

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](#).

SFDR Article 10:

Putnam Global Technology Fund (LEI: 549300420WJ77RDMUS62) – as of 1 December 2022

Putnam U.S. Large Cap Growth Fund (LEI: 549300CX62VZT0SCBR11) – as of 1 December 2022

Each a “Fund”, and together “Funds” for this SFDR Article 10 section. Each Fund is disclosing and reporting pursuant to Article 8 of the EU Sustainable Finance Disclosure Regulation (Regulation (EU) 2019/2088) (“SFDR”).

Summary

In accordance with Article 10 of the SFDR, the following sections provide information on the environmental and/or social characteristics promoted by Putnam's Article 8 Funds and the methodologies that are used to assess, measure and monitor these characteristics. Defined terms are as set out in the Funds' Prospectus or are references to equivalent terms noted therein.

No Sustainable Investment Objective

Each Fund promotes environmental and/or social characteristics but does not have as its objective sustainable investment.

Environmental or Social Characteristics of the Financial Product

Putnam aims to have a lower carbon intensity for each Fund's portfolio when compared its benchmark, the MSCI World Information Technology 10/40 Index and Russell 1000 Growth Index, respectively. The benchmarks were not designated for the purpose of attaining the environmental or social characteristics promoted by each Fund. Carbon Intensity is calculated for each Fund by dividing the total carbon emissions – the aggregate of Scope 1 (all direct emissions from the activities of an issuer or under their control), Scope 2 (indirect emissions from electricity purchased and used by the issuer), and Scope 3 (all other indirect emissions from the activities of the issuer occurring from sources that they do not own or control) – of the issuers in the portfolio (apportioned by the Fund's ownership share, *i.e.*, owned emissions) by the total revenues of the issuers in the portfolio over that same period of time (also apportioned by the Fund's ownership share, *i.e.*, owned revenues).

Environmental, Social, and Governance (ESG) elements are considered in the investment research processes. We consider ESG analysis as additive and complementary to the fundamental understanding that is at the center of our investment philosophy. Relevant issues for investments made are considered within the operating context of an issuer. Our ESG and sustainability research is guided by its internally developed materiality map which was inspired and guided by the materiality mapping of the Sustainable Accounting Standards Board (SASB) / the International Sustainability Standards Board (ISSB). We also use third-party data to augment the investment process in terms of measuring and reporting. While we do not rely solely on third-party scoring, we use these inputs as part of the overall research mosaic (for example, the ESG risk rating described in the following paragraph: this rating is provided by a third party, which calculates them based on aggregate scoring across various E, S, and G considerations that may have material financial impacts on an issuer).

Issuers considered for each Fund's portfolio are given an ESG risk rating: Negligible/Low; Medium; High; or Severe. Putnam has committed to investing at least 60% of each Fund's portfolio in issuers with an ESG

risk rating of Medium or Negligible/Low. All issuers must follow good governance practices in accordance with Article 8 of SFDR, as further outlined below in the “*Investment Strategy*” section.

Putnam also applies two exclusionary screens to the potential universe of issuers for each Fund:

1. Issuers that derive 10% or more of their revenues from:
 - a. Controversial weapons;
 - b. Adult entertainment; or
 - c. Tobacco products and related products.
2. Issuers that are not compliant with the 10 principles of the UN Global Compact.

All of the characteristics described above are complemented by Putnam’s engagement approach, which includes active engagement with senior management of issuers as well as voting on nearly all proxies of issuers held by each Fund. This engagement focuses on issues that are material and financially relevant to issuers, which may include sustainability and ESG considerations and/or other business issues.

Investment Strategy – Both Funds

The binding elements of the investment strategy used to select the investments to attain each of the environmental or social characteristics promoted by each Fund are:

- The Fund will maintain a lower carbon intensity (the aggregate of GHG scopes 1, 2 & 3) score than that of the benchmark.
- 60% or more of the Fund’s investments will have an ESG risk rating of Medium or Negligible/Low.
- The Fund will not hold issuers that derive 10% or more of their revenues from controversial weapons, adult entertainment, and/or tobacco and tobacco-related products.
- The Fund will exclude issuers not compliant with the 10 Principles of the UN Global Compact. These include two principles on human rights (*i.e.*, Principles 1 and 2), four principles on labour rights (*i.e.*, Principles 3-6), three environmental principles (*i.e.*, Principles 7-9) and an anti-corruption principle (*i.e.*, Principle 10).

SFDR also requires that products seeking to promote environmental and/or social characteristics must also take into account good governance practices. Putnam considers good governance as part of the investment decision making process. Good governance practices are taken into account qualitatively and quantitatively in the process. Putnam believes that strong transparency and accountability mechanisms should lead to improved management of ESG risks and opportunities. Key items taken into consideration include board structure and composition, management incentives and ownership, systemic risk management and leadership, and accounting and business ethics.

Investment Strategy – Putnam Global Technology Fund

In addition to the binding elements of the investment strategy used to select the investments to attain each of the environmental and social characteristics promoted by the Fund as described above, the Fund's general investment strategy is as follows.

The Fund aims to provide capital appreciation. The Fund seeks to achieve its objective by investing at least two-thirds of its total assets in equity securities and equity-related securities such as warrants, convertible bonds or preferred stocks issued by large and midsize capitalisation companies worldwide, with a focus on technology industries. The Fund is actively managed in reference to the MSCI World Information Technology 10/40 Index.

Under normal market conditions, the Fund intends to invest in at least five different countries and at least 40% of its net assets in securities of non-U.S. companies (or, if less, at least the percentage of net assets that is ten percentage points less than the percentage of the benchmark represented by non-U.S. companies). Under normal market conditions, the Fund intends to invest 15-35% of its net assets in issuers located in emerging market countries.

The Fund may invest up to one-third of its net assets in equity and equity-related securities of smaller capitalisation companies. The Fund may hold cash or other short-term instruments. The Fund may also invest in debt securities for defensive purposes.

The Fund may use derivatives, including futures, swaps, options, forward contracts, warrants and contracts for difference and they may be used for hedging, for investment purposes and/or for efficient portfolio management. The Fund may also use forward foreign exchange contracts or other currency derivatives for managing and hedging the Fund's exposure to changes in currency exchange rates.

Investment Strategy – Putnam U.S. Large Cap Growth Fund

In addition to the binding elements of the investment strategy used to select the investments to attain each of the environmental and social characteristics promoted by the Fund as described above, the Fund's general investment strategy is as follows.

The Fund aims to provide capital appreciation. The Fund invests in stocks and equity-related securities such as depositary receipts, warrants, convertible stocks or preferred stocks issued by large capitalisation U.S. companies, with a focus on growth stocks. Growth stocks are issued by companies whose earnings are expected to grow faster than those of similar firms, and whose business growth and other characteristics may lead to an increase in stock price. The Fund is actively managed in reference to the Russell 1000 Growth Index.

The Fund may invest up to one-third of its assets in non-U.S. equity and equity-related securities, and/or in securities of smaller capitalisation companies. The Fund may hold cash or other short-term instruments. The Fund may also invest in debt securities for defensive purposes.

The Fund may use derivatives, including futures, forwards, options, swaps, and mortgage-related derivatives, for investment purposes or to hedge against risk. The Fund may also use forward foreign exchange contracts or other currency derivatives for managing and hedging the Fund's exposure to changes in currency exchange rates.

Proportion of Investments

Each Fund invests at least two-thirds of its net assets in U.S. equity and equity-related securities, and at least two-thirds of its net assets in securities of mid- to large-capitalisation companies. Each Fund invests at least 60% of its net assets in issuers that have an ESG risk rating of Medium or Negligible/Low. Aside

from cash, cash equivalents, and derivatives, each Fund invests 100% of its remaining net assets in issuers that (a) derive less than 10% of their revenues from controversial weapons, adult entertainment, and/or tobacco and tobacco-related products, and (b) are compliant with the 10 Principles of the UN Global Compact. Cash is used for liquidity and defensive purposes; derivatives may be used for hedging, for investment purposes, and/or for efficient portfolio management.

Monitoring of Environmental or Social Characteristics

Putnam has automated pre- and post-trade compliance systems to assist with monitoring the relevant Funds' portfolios with respect to ESG characteristics (*i.e.*, the characteristics outlined above in the section entitled "*Investment Strategy – Both Funds*"). Manual and periodic monitoring may also be employed. Ongoing ESG reporting from third-party data providers may also be used as part of monitoring.

Methodologies for Environmental or Social Characteristics

The methodology used to measure the attainment of the ESG characteristics promoted by each Fund is to apply the binding elements as described in earlier sections and to monitor them as described in the preceding section.

Data Sources and Processing

Putnam's ESG and sustainability research is guided by its internally developed materiality maps, which were inspired and guided by the materiality mapping of the Sustainable Accounting Standards Board, and its forward-looking thematic map, "Investing for a thriving world", which aligns with the United Nations Sustainable Development Goals. These maps provide different and complementary frameworks for various sectors and issues within equity research.

While Putnam utilizes third-party ESG scoring mechanisms, it does not rely solely on these assessments. Its fundamental research process incorporates multiple sources of information, including meetings and discussions with management teams and industry experts. Given that third-party ratings are typically backward looking and often incomplete, Putnam expects to regularly identify opportunities where an external scoring system does not accurately reflect the current or future state of an individual company. This is especially true for small- and mid-cap companies, companies in certain geographies, and for newly public companies. In these scenarios, data may be estimated, but it is not expected that a material portion of the data will be estimated.

For ESG data, Putnam currently subscribes to Sustainalytics and MSCI ESG data sets. Analysts also make use of Bloomberg's ESG information, which is increasingly informed by the material standards of the Sustainability Accounting Standards Board (SASB) / International Sustainability Standards Board (ISSB), and data that is released by government sources, NGOs, and directly by companies. Additionally, Putnam has access to CDP's climate-related data. Putnam has developed data visualization tools that allow portfolio managers to evaluate ESG metrics for their holdings, which allows Putnam to assess portfolios and to identify risks and opportunities. These overviews are included as part of Putnam's formal quarterly portfolio reviews with its risk oversight team.

Limitations to Methodologies and Data

Though ESG-related corporate disclosures have been improving quickly in scope and quality, in many instances information is not yet easily accessible, comparable, complete, or verifiable.

Limitations may be caused by the following factors:

- Lack of regulatory standards on data collection and transformation;
- Lack of corporate reporting standards on ESG;
- Limited accuracy of ESG data due to self-reporting by firms with limited audits;
- Faulty estimates by data providers if companies do not report ESG data;
- Large-cap issuers and other biases in data reporting;
- Different views of data providers on material ESG key issues; and
- Rater biases.

ESG issues, data, and analyses are all actively evolving. Putnam expects its research and investment approaches to continue to develop in ways that are attuned to the contexts of various issuers, asset classes, and investment strategies. Putnam does not expect that these limitations will materially affect the Funds' attainment of the environmental or social characteristics promoted by the Funds.

Due Diligence

Third-party ESG data, supplemented by internal research, guides due diligence that helps to establish that the Funds' investments are serving to attain the environmental and/or social characteristics that each Fund is seeking to promote.

Engagement Policies

The Investment Adviser's engagement agenda is based around materiality. It engages on governance, environmental, and social issues that are material and financially relevant for the specific company and industry. Engagement is investment led and takes several forms, including activity that is part of our investment process, proxy voting, and collaboration with other organizations. All engagement activity is undertaken with the goal of benefiting clients and shareholders through long-term financial performance.

As an active manager, the Investment Adviser proactively decides to own the securities that are held in portfolios. Engagement with companies is typically viewed as a collaborative process. The Investment Adviser is able to bring a long-term investment perspective and an understanding of specific business context to discussions with corporate leadership teams, including C-suite executives, corporate sustainability leaders, and board members.

As an active manager, the Investment Adviser's engagement agenda is rooted in ongoing assessment of financially material environmental, social, and governance issues on a sector, industry, and company-specific basis. Engagement themes for each company owned in Putnam's portfolios are assessed annually, though the major themes are consistent over time.

Because we are active managers and proactively select securities for inclusion in our portfolios, we have ongoing direct access to company management. The vast majority of our engagement is done privately and directly with company management and boards of directors. We believe that engaging directly and privately leads to the most effective and candid communication, is most additive to our research process and mosaic of information gathering and offers the highest benefit to our clients.

When engagement does not lead to constructive dialogue or progress, options may include further outreach, including to board members, appropriate collaboration with other investors or organizations, consideration of proxy voting issues like board composition, as well as the potential sale of the security.

Designated Reference Benchmark

Although each Fund uses a benchmark index, it is not being used to determine whether the Fund is aligned with the environmental and/or social characteristics that it promotes.