



Putnam Investments' California Privacy Notice

Effective January 1, 2020

This California Privacy Notice ("CA Notice") is provided by Putnam Investments, LLC to give California residents additional information about the categories of personal information we collect and the purposes for which we collect and for which the information will be used, as required by California privacy laws, including the California Consumer Privacy Act ("CCPA") (collectively, the "CA Privacy Laws"). For purposes of this CA Notice, "Putnam", "we", "us", "our" means Putnam Investments, LLC and its subsidiaries. For California residents, this CA Notice supplements other Putnam notices regarding privacy practices.

Putnam is committed to protecting your privacy and for ensuring that your personal information is collected and used properly, lawfully and transparently. This CA Notice explains how we collect, use, and disclose personal information about you. The CA Notice also explains certain rights that you may have under the CCPA, and how you can exercise those rights to request that we: (i) provide certain personal information that we have collected about you during the past 12 months, along with related information described below, or (ii) delete certain personal information that we have collected from you.

What is personal information?

Under the CCPA, "personal information" is information that identifies, relates to, or could reasonably be linked with a particular California resident or household. For purposes of this CA Notice, personal information does not include:

- Publicly available information.
- De-identified, aggregated or anonymized information that is maintained in a form that cannot be associated with or linked to you.
- Information excluded or otherwise currently exempted under the CCPA, such as: (1) information covered by certain privacy laws, including the Gramm-Leach-Bliley Act ("GLBA") (e.g., information relating to shareholders of the Putnam Funds); (2) information about an individual who is a current or former employee or job applicant, where we use that information within the context of that individual's role as a current or former employee or job applicant; or (3) certain personal information we collect in the course of providing a product or service to another business, or in the course of receiving a product or service from another business.

Information we collect

We may collect and process personal information about you if you are (i) a shareholder in one of our funds, including a beneficial owner or control person of a legal entity customer; (ii) an individual associated with one of our institutional clients; or (iii) a consumer inquiring about Putnam's products or services including: legal representatives, signatories, authorized personnel, directors, beneficial owners, trustees, or other employees, and any other person duly authorized to act on behalf of our customers, as well as service providers, visitors to our premises and information collated through our website.

The types of personal information we collect about you depends on the nature of your interactions with us. In the last 12 months, we may have collected the following categories of personal information:

- **Identifiers**, such as your name, address, e-mail address, Social Security Number (SSN), driver's license number, passport number, or similar identifiers.
- **Customer Records** (as defined in Cal. Civ. Code § 1798.80(e)), which may include a telephone number, physical address, SSN, other government-issued identification number, employment information or employment history, and payment information, etc.
- **Protected Classification Characteristics**, such as age, race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy, or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information etc.
- **Commercial Information**, such as products or services purchased, order information etc.
- **Biometric Information**, such as behavioral and biological characteristics, or activity patterns used to extract a template or other identifier or identifying information, such as fingerprints, faceprints and voiceprints.
- **Internet/Network Information**, such as username, password, device information and website interaction etc.
- **Geolocation Data**, such as location information from your device or generated based on IP (internet protocol) address.
- **Sensory Data**, such as recordings of phone calls with us, where permitted by law.
- **Professional or Employment-related Information**, such as contact information, current or past job history or performance evaluations.

Sources of information

We collect information about you from a variety of sources, including directly from you and/or directly from third parties, and through your use of our website.

We collect information about you directly when you provide it to us in correspondence, and conversations (including via e-mail and telephone), and through forms and contracts we may

enter with you. For instance, information may come from applications, requests for forms or literature, and transactions with us. On occasion, such information may come from consumer reporting agencies and those providing services to us. Please note that in certain instances we are required to record telephone conversations.

In addition, we may receive information about you from third parties such as third-party service providers to our funds, your advisors or consultants, our vendors, and publicly available sources such as LinkedIn or company websites.

We also collect personal information about visitors through our website and webpages on social media sites such as Twitter and LinkedIn, including:

- Information users provide when they voluntarily input such information on our website, such as names and e-mail addresses.
- Information users provide when they register for online service (e.g., Putnam secure sites) or to gain access to material on restricted sections of our website. The decision to provide this information is optional. However, if the user decides not to provide such information, they may not be able to access certain content or features on or through our website.
- Information users provide when they register for webcasts, such as name and e-mail address.
- Information applicants may provide when applying for a role at Putnam.
- Information visitors send us via e-mail through our website, which will contain the user's name and e-mail address, as well as additional information the user may want or need to include.
- Information collected about your use of our website and the devices you use such as device information, unique identification numbers (e.g., IP address), and browser information. We may also collect and process information about your use of our website (e.g., the pages you visit and how long you have navigated through our website) using cookies and other similar technologies. We also use this information to analyze how our website users interact with our websites.
- Cookies on our website to provide customized information for users and to improve their online experience. We may process your personal information through cookie technology, in accordance with our [Cookie Policy](#). You may decline, remove or block Putnam cookies in your browser settings, although as a result, you may not be able to use certain features on the website. Most browsers support cookies, but you can set your browser to decline them and can delete them whenever you wish.

We may monitor or record incoming and outgoing telephone calls (including mobile) in order to comply with regulatory requirements in certain jurisdictions. We may be required to keep copies of electronic communications including telephone conversations for a period of at least five years (or up to seven years at the request of a regulator). We also make use of CCTV at certain of our locations and retain recordings for the safety of our clients and employees and to protect against theft, property damage and fraud.

General use of information

The information that we collect and what we use will depend on the nature of our business relationship with you. We may use your information:

- To provide you with services that you have requested or to fulfill our contractual obligations towards you;
- To fulfill our contractual obligations to third parties to whom you have provided your information;
- For our internal business administration and recordkeeping purposes, including to create and maintain back-up copies of files for business continuity and disaster recovery purposes;
- To respond to your inquiries submitted through our website and/or other media;
- To customize our site features and provide information about our products and services;
- For legal and regulatory compliance purposes, including as necessary to respond to governmental, regulatory, or law enforcement agency requests;
- For fraud detection and prevention;
- To protect the security and integrity of systems, networks, applications, and data.
- To de-identify personal information or create aggregated datasets, such as for consolidating reporting, research, or analytics;
- For corporate governance related activities, including mergers acquisitions, divestitures, and corporate reorganization; and
- For recruitment purposes.

Putnam operates on a global basis and we may share your personal information among Putnam entities, for example for servicing your account, for legal and regulatory purposes, to manage risk, to perform analytics, and for hosting of data. Our employees will access records in order to use your information for the uses mentioned above. However, only those employees who need access to particular information are given it and we regularly check who has access to our systems.

Putnam does not sell your personal information. We may share your personal information with third parties where required by law, where it is necessary to satisfy our obligations to you, or where we have another legitimate interest in doing so. We expect all third parties to respect the confidentiality and security of your personal information and to treat it in accordance with applicable law.

Sharing of information

We may share personal information with third-party service providers, agents, sub-contractors and other associated organizations that provide services to Putnam and other service providers engaged to assist Putnam in carrying out business activities, including for example, print and mail vendors, offsite storage companies, waste disposal companies, and information technology (IT) companies that provide services to or otherwise support our technology.

We may provide your information to third parties engaged by us to provide services to us, such as accountants, auditors, lawyers, compliance consultants, tax advisers, marketing companies and other professional advisors.

If you use an Advisor (as indicated on your application form, investment management agreement and/or other contract or have provided consent) then your personal information and details of your investments may also be provided to such advisor(s).

We may also be required to share your personal information with a regulator or government agency in order to comply with applicable law or judicial process.

We may share your personal information with applicable third parties in the event of a proposed or actual reorganization, merger, sale acquisition, assignment or other disposition of all or a portion of our business, assets or shares.

Your rights under the CCPA

As a California resident, you have certain rights under the CCPA, including the right to be free from unlawful discrimination for exercising your rights under the CCPA.

You may request that we disclose to you the following information covering the 12 months preceding your request:

- The categories of personal information we collected about you and the categories and sources from which we collected such personal information;
- The business or commercial purpose for collecting personal information about you;
- The categories of personal information about you that we disclosed to third parties for a business purpose and the categories of third parties to whom we disclosed such personal information (if applicable); and
- The specific pieces of personal information we collected about you.

You may also request that we delete personal information we have collected about you. However, as noted previously, other privacy and data protection laws apply to much of the personal information that we collect, use, and disclose. When these laws apply, we may decline all or part of an access request or deletion request. In addition, we may decline to honor your request where the disclosure of personal information would adversely affect the rights and freedoms of another consumer.

How to make requests

If you are a California resident, you may make a request for the disclosures described above or make a request to delete personal information we collected about you, by:

- Contacting us at 1-800-662-0019; or
- Submitting your request at: [California Privacy Rights Request](#)