PRIVACY NOTICE
For residents of the European Economic Area (“EEA”)

Introduction

Putnam Investments, LLC operates in a number of jurisdictions including having legal entities located in the United Kingdom and the European Economic Area. Putnam Investments, LLC is committed to protecting your privacy and to ensure that your personal information is collected and used properly, lawfully and transparently. For purposes of this Privacy Notice, “Putnam”, “we”, “us”, “our” means Putnam Investments, LLC and its subsidiaries, each a joint controller in respect of your personal information.

This Privacy Notice sets out:

1. Who we are
2. What is personal information and sensitive personal information
3. Collection of personal information
4. How we use the information we collect about you
5. Our bases for collecting and using your personal information
6. Sharing your personal information
7. Transfers abroad
8. Protecting your personal information
9. Data retention
10. Your GDPR data protection rights
11. Contact us
12. Right to lodge a complaint to a supervisory authority
13. Links to other websites
14. Changes to our Privacy Notice

1. Who we are

Generally, Putnam is the data controller of the personal information we collect and use in connection with this Privacy Notice. This means that we are responsible for deciding how we hold and use personal data about you. This notice explains to you what decisions we have taken in relation to that information.

2. What is personal information and sensitive personal information

The General Data Protection Regulation (697/2016/EU) (the “GDPR”) applies to personal information and data that can be used to identify a natural person. Personal information means any information relating to an identified or identifiable natural person (“data subject”). It does not include information where the identity has been removed (anonymous data).

There are also special categories of personal data (“sensitive data”) such as religious belief, sexual orientation, race, ethnic origin, political opinion, health and trade union membership that trigger further data protection requirements.

3. Collection of personal information

We may collect and process personal information about individuals invested in one of our funds, as well as individuals associated with our institutional customers, including: legal representatives,
signatories, authorised personnel, directors, beneficial owners, trustees, other employees, and any other person duly authorised to act on behalf of our customers, as well as representatives of 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 interaction with us. The types of personal information we collect can fall within one of the below categories:

- **Contact details** - Basic contact information about you, e.g., phone number, email address, postal address, mobile number.
- **Identification data including unique descriptors** - Government issued identifiers, other unique identifiers such as date of birth, and personal descriptors that might identify you.
- **Financial and transactional** - Financial information about you, transactional information and credit information, account authentication details.
- **Contractual details** - Information collected as part of the products and services we provide to you.
- **Socio-demographic** - Includes details about your work or profession, nationality, education.
- **Technical information** - Details about your devices and technology that you use to access our services, including IP address.
- **Behavioural** - Information about how you use our products and services.
- **Location** - Data we receive about where you are.
- **Communications** - Information we capture through your communications with us, e.g., telephone conversations, emails and instant messaging.
- **Publicly-available data** - Details about you that are in public records and information about you that is openly available on the internet.
- **Special categories of personal data (Sensitive personal data)** - The law and other regulations treat some types of personal information, including personal information relating to health or criminal convictions and offences as special and affords them additional protections. We will only collect and use these types of data if the law allows us to do so.

We collect personal data about you from a variety of sources, as set out in this Privacy Notice. We collect information directly from you and/or directly from third parties, and through your use of our website.

### 3.1 Information we collect from you

We collect information about you directly when you provide it to us in correspondence and conversations (including via email 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 your transactions and account positions 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 (both mobile and landline) conversations.

### 3.2 Information we collect from other sources

We will 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 may collect the following information from third parties:

- basic personal details (e.g., name, date of birth, address, email address, telephone number and other contact details)
- Contact details (e.g., phone number, email address, postal address, mobile number)
- Customer-related details (e.g., relationship with the Customer or Related Parties, business information, information about any shareholdings, business contact details)
• Transactional details (e.g., information about services, requests, queries or complaints)
• Financial details (e.g., information about business accounts, financial history, information from credit reference agencies and fraud prevention and other law enforcement agencies)
• Data received from due diligence activities (such as anti-money laundering, politically exposed persons and sanctions checks)
• Employment and education history (where we are sent this information by an employment agency)

3.3 Information we collect about users of our website and social media sites

Putnam’s website (putnam.com) is hosted in the U.S.A. and owned by Putnam Investments, LLC. We 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 email addresses.
• Information users provide when they register for an 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 such as email address when they register for webcasts.
• Information applicants may provide when applying for a role at Putnam through our website.
• Information visitors send us via email through our website, which will contain user’s name and email address, as well as any additional information the user may wish 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 you have navigated through our websites) using cookies and other similar technologies. We also use this information to analyse how our website users interact with our websites.
• Cookies on our website to provide customised information for users and to improve their online experience. We may process your personal data 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 browsers to decline them and can delete them whenever you wish.

Our website may contain links to other websites. Putnam is not responsible for the privacy practices or the content of such third-party websites. Please see our Terms of Use for more information about our online terms and policies.

3.4 Telephone Recording and CCTV

We may monitor or record incoming and outgoing telephone calls (including mobile) in order to comply with regulatory requirements in certain jurisdictions, which we may do without a warning. 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 premises and retain recordings for the safety of our clients and employees and to protect against theft, property damage and fraud.
4. **How we use the information we collect about you**

4.1 **General uses 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 and to fulfil our contractual obligations towards you;
- to fulfil our contractual obligations to third parties to whom you have provided your information;
- for our internal business administration and record-keeping purposes;
- to respond to your enquiries submitted through our website and or other media;
- for legal and regulatory compliance purposes, including as necessary to respond to governmental, regulatory, or law enforcement agency requests;
- where required or considered appropriate, carrying out ‘Know Your Customer’ checks and other procedures that we undertake prior to you becoming a client of ours and in the course of our ongoing business relationship; and
- for recruitment.

4.2 **Information for marketing purposes**

We may use your information to identify products and services that we think may be of interest to you. We will only send marketing communication where you have consented to such contact, or in the case of products and services, where these are similar to those that we have already provided to you.

You have the right to ask us not to send you marketing messages by post, telephone, or e-mail or any combination of these at any time. You can also let us know at any time that you wish to change your mind and start receiving such messages.

You can do this:

- By replying directly to the marketing message;
- In case you wish to withdraw from all marketing communications, you can also unsubscribe from all marketing by clicking the appropriate link in any email you receive;
- At any time by contacting your local client service representative; or

At any time by contacting us (See ‘Contact us’ section below)

5. **Our bases for collecting and using your personal information**

Data privacy laws say that we are allowed to collect and use personal information (including sharing such information with third parties) where we have a proper reason to do so. Accordingly, we must have one or more of the following reasons:

- To fulfil a contract we have with you for the provision of our products and/or services or to take steps at your request prior to entering into such a contract;
- When we have legal obligations that we have to discharge;
- When it is in our legitimate interests; or
- When you consent to it.

We may process your sensitive and special categories of information (this may include data concerning your health, racial or ethnic origin, political opinions, religious beliefs, or sexual orientation) where we
have asked your explicit consent or otherwise where this is necessary for the establishment, exercise or defence of legal claims.

Personal information you provide us or we otherwise collect will be used for one or more of the following purposes:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Legal Basis</th>
<th>What We Use Your Information For</th>
</tr>
</thead>
<tbody>
<tr>
<td>To manage your relationship with Putnam</td>
<td>Lawful Basis</td>
<td>- To manage our relationship with you or your business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To develop new ways to meet our clients’ needs and to grow our business, for example by seeking client feedback</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To develop and carry out marketing activities in order to keep our clients informed about our products and services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To develop and manage our brand</td>
</tr>
<tr>
<td></td>
<td>Our Legitimate Interests</td>
<td>- Legitimate interests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consent (where required by law)</td>
</tr>
<tr>
<td>Provision and administer of the products and services we deliver</td>
<td>Lawful Basis</td>
<td>- Contractual Obligation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Legitimate interests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Consent (where required by law)</td>
</tr>
<tr>
<td>To develop, deliver and support our products and services</td>
<td>Our Legitimate Interests</td>
<td>- Ensuring we are able to effectively and efficiently meet our legal and contractual obligations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Complying with regulatory requirements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To deliver our products and services to clients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To provide guidance, for example to support your use of our products and services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To understand how our clients use products and services from us</td>
</tr>
</tbody>
</table>
To manage how we work with other companies that provide services to us and our clients, for example our relationships with vendors and suppliers

**Lawful Basis**
- Contractual Obligation
- Legal obligation
- Legitimate interests
- Consent (where required by law)

**Our Legitimate Interests**
- Enabling the development of our products and services
- Defining relevant clients for new products and services
- Providing excellent client service
- Building our relationship with you
- Ensuring we are able to effectively and efficiently meet our legal and contractual obligations
- Complying with regulatory requirements

<table>
<thead>
<tr>
<th>Crime prevention and detection</th>
<th><strong>What We Use Your Information For</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- To detect, investigate, report, and seek to prevent fraud, financial crime and anti-money laundering, for example through know-your-customer checks, AML screenings and other identity checks</td>
</tr>
<tr>
<td></td>
<td>- To comply with other laws and regulations that apply to us, for example country-specific legislation</td>
</tr>
</tbody>
</table>

**Lawful Basis**
- Contractual obligation
- Legal obligation
- Legitimate interests

**Our Legitimate Interests**
- Ensuring that we are able to effectively and efficiently meet our contractual obligations
- Complying with regulatory requirements

<table>
<thead>
<tr>
<th>To protect our brand, our business and our clients’ interests</th>
<th><strong>What We Use Your Information For</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- To manage risk for us and our clients</td>
</tr>
<tr>
<td></td>
<td>- To respond to complaints and seek to resolve them</td>
</tr>
<tr>
<td></td>
<td>- To comply with foreign laws, law enforcement and regulatory requirements that may affect us as a global institution</td>
</tr>
<tr>
<td></td>
<td>- To protect our IT systems, network and infrastructure</td>
</tr>
<tr>
<td></td>
<td>- To run our business in an efficient and proper way</td>
</tr>
</tbody>
</table>

**Lawful Basis**
- Contractual Obligation
- Legal obligation
- Legitimate interests

**Our Legitimate Interests**

- Ensuring we are able to effectively and efficiently meet our legal and contractual obligations
- Complying with regulatory requirements

5.1 Failure to provide personal information

If you fail to provide certain information when requested, we may not be able to perform the contract we have entered into with you or we may be prevented from complying with our legal, regulatory, and tax requirements.

5.2 Change of Purpose

We will only use your personal information for the purposes for which we collected it, unless we reasonably consider that we need to use it for another reason and that reason is compatible with the original purpose. If we need to use your personal information for an unrelated purpose, we will notify you and we will explain the legal basis that allows us to do so. We may process your personal information without your knowledge or consent where this is required and or permitted by law.

6. Sharing your personal information

Putnam operates on a global basis and we may share your personal information among Putnam entities, including locations outside of the European Economic Area where we do business, for example for marketing purposes, for servicing your account, for legal and regulatory purposes, to manage risk, to perform analytics, and for hosting of data. Our employees will access your 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. We regularly check who has access to our systems.

We may share your personal data with third parties where this is required by law, where it is necessary to perform our contract with you, or where we have another legitimate interest in doing so. We expect all third parties and other group entities to respect the security of your personal data and to treat it in accordance with applicable law.

- **Third-parties, sub-contractors and agents:** Third-party service providers, agents, sub-contractors and other associated organisations that provide services to Putnam and other service providers engaged to assist Putnam in carrying out business activities for example transfer agents, mailing houses for printing, offsite storage companies, confidential waste disposal and IT companies that support our technology.

- **Our Professional Advisors:** 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 and other professional advisors.

- **Your Financial Advisor, Consultant, authorised representative or other Advisor (“Advisors”):** If you use an Advisor (as indicated on your application form, investment
management agreement and or other contract and or have provided consent) then details of your investments may also be provided to such Advisor.

- **Law enforcement, government authority or regulator:** We may also need to share your personal data with a regulator or to otherwise comply with applicable law or judicial process.
- **Business sale or reorganisation:** We may share your personal information with applicable third parties in the event of a reorganization, merger, sale, acquisition, assignment or other disposition of all or a portion of our business, assets or shares.

7. **Transfers abroad**

Personal data collected from you or provided by you or on your behalf may be transferred outside of the country in which the information was originally collected, including to companies situated in countries outside of the EEA, which may not have the same data protection laws. These countries include the United States.

Where data transfers outside of the EEA takes place, we have taken the necessary steps to ensure that appropriate safeguards have been put in place to protect the privacy and integrity of such personal data, in particular the implementation of GDPR model contract clauses by the service providers and their affiliates.

8. **Protecting your personal information**

Putnam uses a variety of physical, technical and procedural security measures to help protect your personal information from accidental loss, access, misuse, damage, disclosure, alteration, modification, or destruction. We have put in place procedures to deal with any suspected data security breach and will notify you and any applicable supervisory authority of a suspected breach where we are legally required to do so.

No data transmission over the internet or a mobile phone network connection can be guaranteed to be secure from intrusion. However, we maintain commercially reasonable physical, electronic, and procedural safeguards to protect your personal information. All information you provide us is stored on our secure servers and accessed and used subject to our security policies and standards. Where we have given you (or you have chosen) a password that enables you access to certain parts of our website, you are responsible for keeping this password confidential, and for complying with any other security procedures we notify you of. The transmission to us of information via the internet or a mobile phone network connection may not be completely secure and any transmission is at your own risk.

Please refer to Putnam’s [Security Policy](#) for further details.

9. **Data retention**

We will keep your personal information only as long as is necessary to conclude the purpose for which it was collected, or to meet legislative requirements. In certain circumstances, data may need to be retained for a longer period of time, for example, where it is in connection with a legal action or an investigation involving Putnam. The data retention obligations will differ across the Putnam group of entities, subject to local law.
10. Your GDPR data protection rights

To the extent that you reside in the EEA, or EU data privacy legislation applies to you, you as a data subject have the following rights as an individual, which you can exercise in relation to the information we hold about you. In each case, the exercise of these rights is subject to the provisions of the GDPR.

You may be entitled to:

i. Request access to your personal data (commonly known as a “data subject access request”) and request certain information in relation to its processing;

ii. Request rectification of your personal data;

iii. Request the erasure of your personal data;

iv. Request the restriction of processing of your personal data;

v. Object to the processing of your personal data;

vi. Request the transfer of your personal data to another party.

Where you wish to exercise any of your data protection rights and controls, please refer to the Contact us Section below.

We will respond to your request to exercise any of your rights under the GDPR in writing, as soon as practicable and in any event within one month of receipt of your request, subject to the provisions of the GDPR. In some cases we may not be able to fulfill your request to exercise your right before this date, and may need to request more time. Where we cannot provide a full response to you for any reason, we will let you know about this in our initial reply to your request.

10.1 What we may need from you

We may ask you for additional information to confirm your identity and for security purposes, before disclosing the personal information requested by you. We may not always be able to fully address your request, for example if it would impact the duty of confidentiality we owe to others, or if we are legally entitled to deal with the request in a different way.

10.2 Fees

You will not usually have to pay a fee to access your personal data (or to exercise any of the other rights). However, we may charge a reasonable fee if your request for access is clearly unfounded or excessive. Alternatively, we may refuse to comply with the request in such circumstances.

10.3 Your duty to inform us of changes

We are committed to keeping your personal information accurate, complete and up-to-date. Please let us know if your personal data changes during your relationship with us.

11. Contact us

If you reside in the EEA, or EU data privacy legislation applies to you, and you have any questions about our use of your personal information, or would like to exercise any of your rights including your right to complain with regards to how your personal information has been processed by Putnam, you can do so by contacting Data Protection at:

By Email: EMEA-privacy@putnam.com
Post: Data Protection, Putnam Investments Limited, 16 St. James’s Street, London, SW1A 1ER United Kingdom
By Telephone: 00 44 20 7907 8200
12. Right to lodge a complaint with a supervisory authority

You have a right to lodge a complaint with your local data protection supervisory authority, in particular in the Member State of your habitual residence, place of work or place of the alleged infringement if you consider that the processing of personal data relating to you carried out by Putnam infringes the GDPR.

13. Links to other websites

We may provide links to other Internet sites (“third-party sites”) or mobile applications that are not owned, controlled or maintained by Putnam. This Privacy Notice does not apply to those third-party sites or mobile applications. We are not responsible for any linked third-party sites. If you choose to use those third-party sites or mobile applications, we urge you to read their legal and privacy statements to understand their privacy and security practices.

14. Changes to our Privacy Notice

The information in this Privacy Notice is current as of the date below. Putnam reserves the right, at our discretion, to change, modify, add to, or remove portions from, and or update this Privacy Notice. We will notify you of any changes where we are required to do so. Any such notifications may be made by way of our website.

Last updated May 2018