

IRA Beneficiary distribution form



Return by mail:
Putnam Investor Services, Inc.
P. O. Box 8383
Boston, MA 02266-8383

Return by express delivery:
Putnam Investor Services, Inc.
30 Dan Road
Canton, MA 02021-2809

For more information:
Putnam Investments
1-800-662-0019
www.putnam.com



Please keep the following points in mind as you complete the appropriate sections of the form. If you have any questions; please contact your financial advisor or Putnam Investor Services:

- You may want to seek tax advice regarding your distribution options. It is the beneficiary's responsibility to follow IRS distribution requirements; otherwise, penalties may apply.
- Prior to making any distributions to a beneficiary, the assets will be transferred to an IRA or Beneficiary IRA in the name of the beneficiary.
- Each designated beneficiary must complete and return a separate form. A certified copy of the account owner's death certificate must be provided or already on file at Putnam before any transaction can be completed.
- If you are signing this form in a legal capacity for a beneficiary, you must include the appropriate certified legal documents of appointment as guardian, conservator, attorney-in-fact, etc. **Note:** A legal representative generally cannot designate beneficiaries.

Request	Required Sections
Transfer to an IRA or Beneficiary IRA account	1, 2, 8, 11
• For minor beneficiaries a parent/guardian of the minor must also complete	3
• Spouse beneficiaries must also complete	4
<i>Complete all additional sections relevant to your request</i>	
• To name designated recipients/beneficiaries	5
• To designate a financial advisor	6
• To designate bank information	7
• To initiate a one-time distribution	8A, 9, 10
• To establish a systematic required minimum distribution (RMD)	8B, 9, 10
Process an immediate 100% distribution	1, 2, 8A, 9, 10, 11
• For minor beneficiaries a parent/guardian of the minor must also complete	3
• To receive the distribution proceeds by wire; complete	7

Important RMD information

For all transfer requests in which the **decedent had attained the age of 70½ or would have attained the age of 70½ during the calendar year in which the death occurred**, you must review Section 8 and provide applicable instructions related to the decedent's Required Minimum Distribution (RMD).

Guidelines for a surviving spouse as beneficiary of the IRA:

A spouse beneficiary has the option to transfer the decedent's assets into an IRA account held in their own name. A spouse beneficiary may establish their own Putnam IRA which will be subject to the provisions of the IRA plans and disclosure statements.

- The Uniform Lifetime calculation method will be used for future RMD calculations based on the new owner's life expectancy. RMD payments are not required from spouse beneficiaries until the new owner's required beginning date is attained.
- For spouse beneficiaries who transfer the assets into an **existing** IRA in their own name, the frequency, tax withholding, and payment information provided on this form will **override** any prior RMD instructions on the existing account.

Funds which are not transferred into the spouse's own IRA will be subject to the Beneficiary IRA Guidelines below.

Guidelines for Beneficiary IRA plans

If the decedent passed away prior to the required commencement of his/her RMD, or when the owner of a Roth IRA dies at any point, all assets remaining in the decedent's account generally must be distributed by the end of the fifth year following the decedent's death except as follows:

- A spouse beneficiary may elect to take required distributions beginning no later than December 31st of the year in which the decedent would have attained age 70½.
- A non-spouse beneficiary may elect to take required distributions beginning the year following the decedent's death. The calculation will be based on the longer of the beneficiary's or the decedent's single life expectancy.
- A qualified trust beneficiary as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a) may elect to take required distributions made over the life expectancy of the eldest beneficiary named in the trust beginning the year following the decedent's death.

Note: If the decedent passed away prior to the required commencement of his/her RMD, any trusts not considered to be qualified as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a) and all entities must be distributed by the end of the fifth year.

If the decedent passed away after the required commencement of his/her RMD, all assets remaining in the account generally must be distributed based on the longer of the beneficiary's single life expectancy or the decedent's remaining single life expectancy at death (whichever is longer) except as follows:

- In the case of a qualified trust beneficiary as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a), distributions will be based on the single life expectancy of the eldest beneficiary named in the trust.
- In the case of an estate, an entity, or a trust not considered to be qualified as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a), distributions will be based on the decedent's remaining single life expectancy at death.
- In situations where multiple beneficiaries have an interest in the decedent's assets, those assets generally must be segregated prior to December 31st of the year following the death of the account owner. If segregation takes place after that deadline the required distributions will be made over the single life expectancy of the eldest beneficiary.

IRA Beneficiary distribution form



Return by mail:
Putnam Investor Services, Inc.
P. O. Box 8383
Boston, MA 02266-8383

Return by express delivery:
Putnam Investor Services, Inc.
30 Dan Road
Canton, MA 02021-2809

For more information:
Putnam Investments
1-800-662-0019
www.putnam.com



Use this form to request a transfer and/or distribution from a Putnam IRA due to the death of the account owner. This form is not intended for IRAs where Putnam Fiduciary Trust Company (PFTC) is not the trustee of the plan. For IRAs in the Putnam funds that are held by other trustees or custodians, please contact the trustee/custodian of your plan for more information.

Section 1 Decedent information (required)

Name of decedent (required)									
First	MI	Last	Suffix	Social Security number (required)					
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Date of birth (mm/dd/yyyy; required)		Date of death (mm/dd/yyyy; required)							
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Section 2 Beneficiary information (required)

2A: Beneficiary information (beneficiary of the decedent named in Section 1)

Name of beneficiary (Individual, Trust, or Entity; required)	Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Name of Trustee / Executor / Authorized Signer (if applicable)	Social Security number (required)	Date of birth (mm/dd/yyyy; required)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Name of Co-Trustee / Co-Executor / Co-Authorized Signer (if applicable)	Social Security number (required)	Date of birth (mm/dd/yyyy; required)
<input type="text"/>	<input type="text"/>	<input type="text"/>
Contact phone number	<input type="text"/>	
E-mail address	<input type="text"/>	

Note: Providing an e-mail address and/or phone number above will replace the current contact information on file with Putnam (if applicable). No changes will be made for fields that are left blank. If you are enrolled in electronic delivery, all notifications will be sent to the e-mail address listed above.

Electronic delivery of account documents

I want to **"GO GREEN"** and reduce paper, printing and mailing by receiving documents electronically.

By checking the "GO GREEN" box above, an e-mail will be sent to the e-mail address provided above with a link to Putnam's secure Investor Website, which will allow you to choose your eDelivery options. Documents available for eDelivery include transaction confirmations, quarterly statements, prospectuses, annual/semi-annual fund reports, proxy statements, and tax forms. When a new document is available, instead of sending the document to you by U.S. mail, Putnam Investor Services will send you an e-mail notification that the document is available via Putnam's Website. Terms and Conditions related to eDelivery will be provided to you prior to confirmation of your elections.

Mailing address (required)

Street		
<input type="text"/>		
City	State	ZIP code
<input type="text"/>	<input type="text"/>	<input type="text"/>

Residential address (required if mailing address is a P.O. Box or c/o address)

Street		
<input type="text"/>		
City	State	ZIP code
<input type="text"/>	<input type="text"/>	<input type="text"/>

Section 2 Beneficiary information (required)(continued)

2B: Relationship (to the decedent named in Section 1)

Please indicate the beneficiary/decedent relationship. **Assets will be transferred in kind to a new Beneficiary IRA for all non-spouse beneficiaries.** For any spouse beneficiary who does not complete Section 4, assets will be transferred in kind to a new Beneficiary IRA.

- The beneficiary is an individual that is not the surviving spouse of the decedent (complete Section 3 if the individual is a minor)
- The beneficiary is the surviving spouse of the decedent (proceed to Section 4)
- The beneficiary is the estate of the decedent and the estate is not probated (proceed to Section 5)
 - Attach the settlement of small estate; rules vary by state and depend upon the dollar amount*.

Note: Each heir named in the settlement of small estate must complete a separate form.
- The beneficiary is the estate of the decedent and the estate is probated (proceed to Section 6)
 - Attach letters of administration or letters testamentary; the document must bear the original certification from the clerk of the issuing court within 120 days of Putnam's receipt*.
- The beneficiary is a trust not considered to be qualified as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a) (proceed to Section 6)
 - Attach a copy of the trust agreement (It must include at least the first page, the signature page and the page naming the trustees or successor trustees). The trust must have an original certification dated within 120 days of Putnam's receipt).

Note: For some states, Putnam will accept a self-certification affidavit/declaration in place of the trust agreement*.
- The beneficiary is a qualified trust beneficiary as defined within Treasury regulation 1.401(a)(9)-4, Q&A-5(a) (proceed to Section 6)
 - Attach a copy of the trust agreement (It must include at least the first page, the signature page and the page naming the trustees or successor trustees). The trust must have an original certification dated within 120 days of Putnam's receipt.

Note: For some states, Putnam will accept a self-certification affidavit/declaration in place of the trust agreement*.
- The beneficiary is an entity/organization (proceed to Section 6)
 - Attach a document proving authority to act on behalf of the organization such as a corporate resolution or resolution of governing body; documents must be original and certified within 90 days of Putnam's receipt.

*Please contact Putnam for specific certification requirements.

Section 3 Parent/guardian information for a minor

Complete this section if the beneficiary is currently a minor. This information is required as a parent/guardian must be listed in order for a minor beneficiary to have a Beneficiary retirement account established in their name.

Note: It is not possible for the parent/guardian to designate recipients/beneficiaries on the minor's behalf.

Name of parent/guardian (required only if you are opening a beneficiary account for a minor)

First	MI	Last	Suffix	Social Security number (required)	Date of birth (mm/dd/yyyy; required)

Relationship to minor:

- Parent (the minor's birth certificate is required to verify the relationship)
- Court appointed guardian (attach the letter of appointment; the document must bear the original certification from the clerk of the issuing court within 120 days of Putnam's receipt)

Section 4 Instructions from a surviving spouse

Select one of the following. Assets will be transferred in kind unless otherwise indicated on this form, a separate letter of instruction, or a new account application. If no selection is made or if the specific selection is not allowed, the assets will be transferred to a new Beneficiary IRA. When assets are held in multiple IRA registration types for the decedent, the money will be moved into corresponding registration types for the beneficiary.

Important: Beneficiary designations made in Section 5 of this form will override any beneficiary designations currently on file for the Putnam IRA registration(s) to which the money is transferred.

- Transfer from the decedent's IRA to a new/existing Putnam IRA in my name
- Transfer from the decedent's IRA to a new Putnam Beneficiary IRA in my name

Note: Distributions made by a surviving spouse under the age of 59½ will be coded as premature when taken from their own IRA and early distribution penalties may apply.

Section 5 Name your designated recipients/beneficiaries

Complete Sections 5A and 5B to designate primary and contingent recipients/beneficiaries respectively for assets payable from the Plan in the event of your death. For each recipient/beneficiary, PFTC requires the full name, tax identification number, and date of birth (if applicable). If you name multiple primary or contingent recipients/beneficiaries, please specify the percentage each is to receive. If no percentage is specified, your account will be divided among your surviving primary recipients/beneficiaries in substantially equal amounts. If no primary recipients/beneficiaries survive you, your account will be divided among your surviving contingent recipients/beneficiaries. If you do not designate recipients/beneficiaries, or if none of your designated recipients/beneficiaries survive you, your account will be distributed as follows:

- For Beneficiary IRA registrations your account will be distributed to your estate
- For all other IRA registrations, your account will be distributed according to the provisions of the IRA plans and disclosure statements

Important: PFTC does not accept customized recipient/beneficiary designations (for example, designations which involve multiple contingencies within a primary or contingent recipient/beneficiary category) or "per stirpes" designations. All recipients/beneficiaries must be designated as either primary or contingent and must include all identifying information referenced above. PFTC generally cannot accept beneficiary designations from attorneys-in-fact, conservators, or guardians. Entities such as trusts or estates cannot designate recipients/beneficiaries.

5A: Primary recipients/beneficiaries: Percentages for primary recipients/beneficiaries **must equal 100%**. For any additional **primary** recipient/beneficiary designations, attach a separate page which contains all required information for each recipient/beneficiary.

Name of individual (First, MI, Last)/Full name of entity/trust (required)

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Name of individual (First, MI, Last)/Full name of entity/trust (required)

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Name of individual (First, MI, Last)/Full name of entity/trust (required)

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Name of individual (First, MI, Last)/Full name of entity/trust (required)

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Section 5 Name your designated recipients/beneficiaries (continued)

5B: Contingent recipients/beneficiary(ies): Percentages for **contingent** recipients/beneficiaries **must equal 100%**. For any additional contingent recipient/beneficiary designations, attach a separate page which contains all required information for each recipient/beneficiary.

Name of individual (First, MI, Last)/Full name of entity/trust

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Name of individual (First, MI, Last)/Full name of entity/trust

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

Name of individual (First, MI, Last)/Full name of entity/trust

Social Security/Tax ID number (required)

Date of birth (mm/dd/yyyy; required)

Residential address (Street, City, State, ZIP Code)

Relationship

Spouse Non-spouse Entity/Trust

Percentage

5C: Additional plan designations:

Please select any additional applicable plan types for which you are designating recipients/beneficiaries. If you do not make any selections below the designations will only apply to the registration to which the money is transferred as a result of this paperwork.

Option 1: Designate recipients/beneficiaries on all retirement plan types

Update the designated recipient/beneficiary information on all Putnam retirement plans associated with the Social Security / Tax ID number in Section 2

Option 2: Designate recipients/beneficiaries on only the specific retirement plan types indicated below

- | | | |
|---|-------------------------------------|---|
| <input type="checkbox"/> Traditional IRA / Rollover IRA | <input type="checkbox"/> SIMPLE IRA | <input type="checkbox"/> Beneficiary IRA |
| <input type="checkbox"/> Roth IRA / Roth Conversion | <input type="checkbox"/> SEP IRA | <input type="checkbox"/> Beneficiary Roth IRA |
| <input type="checkbox"/> 403(b) | <input type="checkbox"/> SARSEP IRA | <input type="checkbox"/> Beneficiary 403(b) |

5D: Signature of beneficiary's spouse (if applicable):

If you are married to the beneficiary receiving the assets and he or she has named a designated recipient/beneficiary other than you, please consult your tax/financial advisor about the state law and tax law implications of this designation, including the need for your consent. By signing below you indicate that you are the spouse of the individual named in Section 2A and that you consent to the designated recipient(s)/beneficiary(ies). PFTC is not responsible to determining whether an account owner is married and is a resident of a jurisdiction in which community property rules apply.

Signature of spouse

Date (mm/dd/yyyy)

Print name of signature above

Section 6 Provide information about your financial advisor (if applicable)

If you have a financial advisor, please select from the options below to designate / update your Putnam account(s). To update the financial advisor on any registrations with multiple authorized signers, the Change of financial advisor form must be completed.

- Carry over the advisor's information from the account(s) of the decedent named in Section 1
- Apply the information below **only** to the account(s) to which the money is transferred (default option)
- Apply the information below to all accounts for which I am the sole authorized signer

<i>Dealer number</i>	<i>Branch office number</i>	<i>Financial advisor number</i>	<i>CRD number</i>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Financial advisor name(s) exactly as it appears on firm's registration

<i>Financial advisor's firm</i>	<i>Financial advisor's contact phone number</i>
<input type="text"/>	<input type="text"/>

Branch office street address

<i>City</i>	<i>State</i>	<i>Zip code</i>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Note: If you do not designate a financial advisor or if the broker-dealer firm you designate does not have a selling agreement with the distributor, Putnam Retail Management Limited Partnership (PRM) will be designated as the default broker-dealer firm of record on your account and PRM will retain all applicable sales charges. You may designate another broker-dealer firm at any time by returning a signed Change of financial advisor form to Putnam Investor Services.

Section 7 Bank instructions (if applicable)

Bank account information (You must provide a voided check or deposit slip; Please do not staple)

Note: Starter checks, brokerage checks, and checkwriting checks will not be accepted.

Provide bank information to allow redemptions to be sent to a bank account. By completing this section and providing one of the acceptable pre-printed documents indicated below, the account will be eligible for ACH redemption and permanent bank wire privileges. Spouse beneficiaries who transfer the assets into their own IRA plan will also be eligible for ACH on-demand purchasing via phone or web if their name is listed on the bank account registration.

Attach a preprinted or web-generated voided check/deposit slip or a signed letter from the bank on bank letterhead below. Each of these documents must include: bank name, name(s) as registered on the bank account, routing number and account number.

Check the bank account you would like to use: Checking account Savings account

tape your document here

VOID

Name _____ DATE _____
 Address _____
 City, State, ZIP _____

PAY TO THE ORDER OF _____ \$
 _____ DOLLARS

memo: _____

|: 123456789 |: 000123456789 |: 101

<i>ABA routing number of financial institution</i>	<i>Bank account number</i>
<input type="text"/>	<input type="text"/>

Section 9 Distribution payment/coding instructions

9A: Payment instructions

Select your payment instructions below; if no selection is provided, payment will be made to the beneficiary as registered at the mailing address listed in Section 2.

Note: If a request is made to satisfy the RMD for the current year and distribute the remaining funds to a new custodian as a transfer of assets / direct rollover, the RMD amount will be made payable to the beneficiary as registered at the mailing address listed in Section 2 and the transfer of assets / rollover will be made payable as indicated below.

Reinvest

Proceeds must be reinvested into the same share class. Unless otherwise indicated on this form, a separate letter of instruction or a new account application, proceeds will also be reinvested into the same fund(s) for non-retirement accounts. Investment options must be provided for proceeds reinvested into 529 for America accounts

- Into a **new** Putnam non-retirement account or 529 for America account. Please attach the applicable completed account application.

Name(s) of the new registration's owner(s), custodian/minor, trust, organization or business entity (required)

- Into an **existing** Putnam non-retirement account or 529 for America account. Please provide the information below:

Account number

Name(s) of registered owner(s)

Note: Assets cannot be systematically distributed into a 529 for America account.

Electronically deposit

- Into the bank account indicated in Section 7. A preprinted or web-generated voided check/deposit slip or a signed letter from the bank on bank letterhead must be attached. Each of these documents must include: bank name, name(s) as registered on the bank account, routing number and account number. Brokerage checks and checkwriting checks are not acceptable forms of bank instructions; contact your investment company to obtain proper wire instructions. Starter checks will not be accepted.

Note: One-time distributions will be sent via Federal bank wire; systematic redemptions will be sent via Automated Clearing House (ACH). Putnam does not assess a fee for electronic transactions; however some banks/credit unions may assess a fee upon receipt. Please check with your financial institution for information regarding eligibility, fees, and applicable routing number(s) for Federal bank wire and/or ACH transactions.

Send check

- To the beneficiary as registered at the mailing address listed in Section 2A
- To the alternate payee/alternate address listed below:

Alternate payee

Alternate mailing address (including apartment or box number)

City

State

ZIP code

Select one of the following delivery options for check requests; if no selection is provided, the check(s) will be delivered by the U.S. Postal Service.

- Mail check(s) via **U.S. Postal Service** (standard delivery) Mail check(s) via **overnight/express delivery** (not available for systematic distributions)

If overnight/express delivery is requested, Putnam will default to taking the \$20 service charge from the lowest fund-account involved in the transaction unless an acceptable alternative fund-account is specified below. The fee will be taken from the balance of the account.

Indicate the \$20 overnight/express fee source: **Fund number** **Account number**

9B: Distribution Coding

Please indicate the proper coding of the distribution by selecting from the options below; if no indication is made the distribution will be coded as taxable.

- Taxable distribution
- Transfer of assets to an existing Beneficiary IRA with a new custodian or trustee (a letter of acceptance is **required**)
- Transfer of assets to an existing IRA with a new custodian or trustee (only available for **spouse beneficiaries**; a letter of acceptance is **required**)
- Rollover to your employer sponsored retirement plan (only available for **spouse beneficiaries**)

Section 10 Income tax withholding

Federal Income Taxes

Putnam will not withhold federal income taxes when you elect to transfer the assets to an IRA/Beneficiary IRA or to rollover the assets to an employer sponsored plan (see Section 9B for distribution coding instructions). For all other distributions, federal income taxes will be withheld at a rate of 10% (except for Roth IRA/Beneficiary Roth IRA plans) unless you elect not to have taxes withheld or provide a different rate below. Please see below for the situations in which Putnam withholds state taxes.

If you have elected systematic distributions, the election you make below will apply to all your distributions.

IRA federal withholding (except for Roth IRA/Beneficiary Roth IRA plans)

- Do not withhold federal income tax from my total distribution.
- Withhold federal income tax at a rate of _____ %
- Withhold my taxes from the distribution proceeds, **gross** (this will be the default withholding option if no choice is made)
 - Withhold my taxes from the remaining account balance, **net** (only allowed for one time distributions)

Roth federal withholding (Putnam will default to no federal withholding for Roth IRA/Beneficiary Roth IRA distributions unless specified below)

- Withhold federal income tax at a rate of _____ %
- Withhold my taxes from the distribution proceeds, **gross** (this will be the default withholding option if no choice is made)
 - Withhold my taxes from the remaining account balance, **net** (only allowed for one time distributions)

State income taxes

Putnam will withhold state income taxes if your address of record is in one of the following states: AR, CA, DE, IA, KS, MA, ME, MI*, NC, OK, OR, VT or the District of Columbia (DC)** and federal income tax is being withheld. State tax withholding requirements vary by state.

*Residents of MI will have state income taxes withheld regardless of federal income tax withholding. To opt out of MI state income taxes, a Form MI W-4P must be submitted with this distribution request or already on file with Putnam.

**Residents of DC will have state income taxes withheld on 100% distributions regardless of federal income tax withholding.

Note: Whether or not you elect to have federal and, if applicable, state tax withholding apply, you are responsible for the full payment of federal income tax, any state or local taxes, and any penalties that may apply to your distribution. You may be responsible for estimated tax payments and could incur penalties if your estimated tax payments are not sufficient.

Section 11 Agreement and authorization

11A: Agreement

- I do not authorize telephone redemptions. Accept only written instructions signed by me.**

Unless I have checked the box above, Putnam Investor Services, Inc. is authorized to act upon redemption instructions received by telephone from me or any other person claiming to act as my representative who can provide Putnam with my account registration and address as it appears on Putnam's records. Redemption proceeds of up to \$100,000 will be sent to me at an address on record with Putnam for at least 15 days. Putnam will not be liable for unauthorized transactions if it employs reasonable procedures to confirm that instructions received by telephone are genuine. I agree to indemnify and hold harmless Putnam Investor Services, Inc. and any Putnam funds that may be involved in transactions authorized by telephone against any claim or loss in connection with any telephone transaction effected on my account.

- I do not authorize the mailing of only one shareholder report, one prospectus, or one set of proxy materials if there are multiple accounts in a Putnam fund at my address. Send a separate copy for every account.**

Unless I have checked the box above, Putnam Investor Services, Inc. is authorized to send only one shareholder report, one prospectus, or one set of proxy materials for **all** accounts in any Putnam fund at my address.

Important notice regarding Putnam's privacy policy: By signing this application, I acknowledge that Putnam's privacy policy is available for viewing and printing via Putnam's website at <https://www.putnam.com/policies/>

If I have completed the bank account information in Section 7, I authorize my bank/credit union to accept debit/credit entries initiated by Putnam Investor Services to my account and to debit/credit, as requested, the same to my/our account, without responsibility for correctness thereof or for the existence of any further authorization relating thereto. I hereby acknowledge that the initiation of an ACH transaction through Putnam is to purchase securities, and accordingly any transaction requested by me through the ACH system is irrevocable. I authorize Putnam to make a follow-up attempt in retrieving those monies which are denied due to insufficient funds (i.e. systematic purchase bounce). I agree to indemnify and hold harmless my bank/credit union, the Putnam funds, and Putnam Investor Services for any loss, liability, or expense incurred from acting on these instructions. I/we also agree to waive any right under the NACHA Rules to rescind any instruction for ACH transactions which have already occurred at the time of the attempt to rescind. This waiver of the rescission right applies to both ACH investments in and ACH redemptions from the Putnam Funds. This authorization may be terminated by me/us at any time by written notification to Putnam Investor Services, with reasonable time given to implement my request. Putnam Investor Services may amend or terminate this agreement at any time. I will be notified before any such changes go into effect. For bank account information (Section 7), Putnam does not assess a fee for federal bank wire and/or ACH transactions on your account(s). Some banks/credit unions may not offer ACH transactions or may charge a fee to conduct such transactions. Please check with your financial institution for information regarding eligibility, fees and applicable routing number(s) for federal bank wire and/or ACH transactions.

Important notice regarding Putnam's IRA Plans and disclosure statements: By signing this application, I acknowledge that Putnam's IRA Plans and Disclosure statements document is available for viewing and printing via Putnam's website at <https://www.putnam.com/literature/pdf/IR616.pdf>.

Section 11 Agreement and authorization (continued)

If applicable, the Parent/Guardian named in Section 3 represents that he or she is the parent or legal guardian of the property of the Owner/Minor indicated above. Notwithstanding any provision of the Adoption Agreement or Plan, PFTC may rely on instructions of the Parent/Guardian with respect to the administration, investment and distribution of the Account until the Owner/Minor reaches the age of majority in his or her State of residence. The Parent/Guardian agrees that he or she shall cease to have any authority or control with respect to the Account upon attainment of the age of majority by the Owner/Minor. Thereafter, the Owner/Minor shall be treated as the Owner for all purposes under the Adoption Agreement and Plan. Notwithstanding the foregoing, the Parent/Guardian agrees that Putnam Fiduciary Trust Company ("PFTC") shall have no responsibility or obligation to determine whether the Owner/Minor has attained the age of majority. Prior to executing any direction or request made by the Parent/Guardian or the Owner/Minor, PFTC may require the Parent/Guardian or the Owner/Minor to demonstrate in a manner satisfactory to PFTC whether the Owner/Minor has attained the age of majority. The Parent/Guardian hereby agrees to indemnify and hold harmless Putnam Fiduciary Trust Company, Putnam Investor Services, and their respective affiliates, agents, directors, officers, and employees (collectively, "Putnam"), from and against any loss, damage, liability, claim, cost or expense, including, but not limited to, legal fees, which Putnam incurs as a result of, or in connection with, any actual or attempted disaffirmance, voiding, reversal, unenforceability, cancellation or limitation of any purchase, exchange, transfer or redemption of assets held in the Account by reason of, or in connection with, the Owner/Minor's status as a minor or the Parent/Guardian's status as a person other than the Owner/Minor's parent or legal guardian. This agreement is binding on the Parent/Guardian and his or her executors, beneficiaries, heirs, administrators, legal representatives and assigns, and will inure to the benefit of Putnam and its successors and assigns. This agreement shall survive termination of the Adoption Agreement.

I hereby (I) adopt The Putnam Traditional IRA Plan or The Putnam Roth IRA Plan (the "Plans") as an individual retirement account under Section 408(a) or 408A of the Internal Revenue Code of 1986, as amended; (II) acknowledge receipt of the Plan and Disclosure Statement; (III) have received and have read a current prospectus of any fund; (IV) appoint PFTC as Trustee; (V) acknowledge that the terms in this agreement mean the same as in the Plan; and (VI) agree that an annual maintenance fee of \$25 will automatically be deducted from the account in accordance with Putnam's annual maintenance fee policy for accounts with a balance below \$50,000 on the day the fee is scheduled to be taken. I also acknowledge that Putnam's annual maintenance fee policy is subject to change.

In accordance with federal law, the Putnam funds are required to obtain the name, residential or business address, Social Security or tax identification number, and date of birth for each registered owner in order to verify their identities. For certain entities such as trusts, estates, corporations, partnerships, or other organizations, additional documentation may be required (see the following terms and conditions or call Putnam at 1-800-225-1581). The funds are unable to accept new accounts if any required information is not provided. If the funds are unable to verify your identity, your account will be closed at the then-current NAV, which may be more or less than your original investment, and the proceeds will be sent to you, net of any applicable sales charges. With respect to any such distribution, I elect that no amount be withheld for federal income taxes due on the taxable part of any such distribution, and I acknowledge that I can incur penalties if my withholding or estimated tax payments for the year are not sufficient.

For spouse beneficiaries only: I further understand that under federal tax law I will have 60 days from date of receipt by me to roll over such distribution to another IRA or eligible plan that will accept it. I will consult my professional tax advisor if I have any questions about the tax consequences of any such distribution. The information you provide may be shared with third parties for the purpose of verification subject to the terms of Putnam's privacy policy.

11B: Authorization

A signature guarantee or medallion guarantee stamp is required for all requests submitted through this form. A signature/medallion guarantee is a stamped assurance by a financial institution that indicates a signature is valid and has the financial backing of the institution. The guaranteed stamp should not be dated. If a signature/medallion guarantee is dated, it is only valid for that date.

I request the transfer and (when applicable) the distribution indicated above. I further certify that all the information on this form, including the Social Security number set forth in section 2A, is true, correct, and complete. I authorize the bank/credit union to accept credit entries initiated by Putnam Investor Services, Inc. to the account designated in Section 7, and to credit the same account, without responsibility for correctness thereof or for the existence of any further authorization relating thereto. I agree to indemnify and hold harmless my bank/credit union, the Putnam funds, and Putnam Investor Services, Inc. for any loss, liability or expense incurred from acting on these instructions. I also agree to waive any right under the NACHA rules to rescind any instruction for ACH transactions which have already occurred at the time of the attempt to rescind. This waiver of the rescission right applies to ACH liquidations from the Putnam funds. This authorization may be terminated by me at anytime by written notification to Putnam Investor Services, Inc. with reasonable time given to implement my request. I also understand my distribution choices, including my right to defer payments to me under the plan.

I make the beneficiary designation(s) indicated in Section 5 and revoke any previous designations made by me for the Plan. This beneficiary designation is not valid unless it is received, in good order, by Putnam on a date prior to my date of death and maintained in Putnam's records at the time of any request for a distribution or other payment from the Plan(s).

Signature of claiming beneficiary or authorized signer

Print name of signature above

Date (mm/dd/yyyy)

PLACE SIGNATURE/MEDALLION GUARANTEE STAMP

The guarantee should not be dated

REQUIRED



Signature of co-authorized signer (if applicable)

Print name of signature above

Date (mm/dd/yyyy)

PLACE SIGNATURE/MEDALLION GUARANTEE STAMP

The guarantee should not be dated

REQUIRED

