

Traditional or Roth IRA adoption agreement



Return by standard delivery:
Putnam Investments
PO Box 219697
Kansas City, MO 64121-9697

Return by overnight delivery:
Putnam Investments
801 Pennsylvania Ave
Suite 219697
Kansas City, MO 64105-1307

For more information:
Putnam Investments
1-800-225-1581
www.putnam.com

Please make checks payable to:
Putnam Fiduciary Trust
Company, LLC



Use this form to open a new Putnam Traditional IRA or Putnam Roth IRA.
Please return all pages. **The full legal name, Social Security number, date of birth, and residential address are required for the account owner.**
You must provide a phone number or e-mail address if you wish to access your account on-line.

If you wish to designate a beneficiary, Putnam Fiduciary Trust Company, LLC (PFTC) requires the full name, tax identification number, and date of birth for each beneficiary. PFTC will not accept beneficiary designations from a parent/guardian on the minor's behalf. If the designated beneficiaries are not accepted by PFTC the provisions of the IRA plan disclosure statement will be in effect.
All references herein to the singular (i.e., "I" or "my") include the plural as applicable. The account owner and **all owners of the bank account** provided in Section 6 (if applicable), must provide their authorization in Section 8.

Section 1 Plan type

Select the account type you want to establish. Please complete a separate Traditional or Roth IRA adoption agreement to establish additional plan types.

Traditional IRA	Roth IRA	Traditional IRA for a minor	Roth IRA for a minor
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Section 2 Account information

Name of account owner

First	MI	Last	Suffix	Social Security number	Date of birth (mm/dd/yyyy)
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Name of parent/guardian (required only if you are opening an IRA for a minor)

First	MI	Last	Suffix	Social Security number	Date of birth (mm/dd/yyyy)
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Contact phone number E-mail address

Note: Providing a phone number or e-mail address above will replace the current contact information on file with Putnam (if applicable). If you are enrolled in electronic delivery, all notifications will be sent to the e-mail address listed above.

Residential street address of account owner (cannot be a P.O. Box or c/o address) City State ZIP code

Mailing address for account (if different from residential address) City State ZIP code

Section 3 Investment instructions

Please indicate how you wish to fund your IRA. Select all that apply. Putnam will invest contributions as current year unless otherwise specified in Section 4.

A check is enclosed **OR** A check is en route (make checks payable to Putnam Fiduciary Trust Company, LLC)

Invest as a contribution to my IRA

Invest as a rollover or a transfer of assets from an account that was held at another financial institution (You must indicate the type of plan held with your previous custodian)

Traditional IRA	Rollover IRA	Roth IRA	Roth IRA Conversion
SEP/SIMPLE IRA	Roth 401(k)/403(b)	401(k)	403(b)
Other qualified company plan (Government 457, Money Purchase Pension, Profit Sharing)			

Alternative investment instructions

Solicit my current trustee (please include an Asset transfer/direct rollover authorization form, IR771/Form B)

Fund my IRA with a purchase from my existing non-retirement account (Investments will be made into the same share class as previously held. Some restrictions may apply.)

Fund number	Account number	Dollar amount
—		\$

Fund my IRA with a purchase from an existing Putnam retirement account due to divorce (contact Putnam for additional requirements)

Convert from a Putnam IRA to a Putnam Roth IRA (please include a Roth conversion authorization form, IR772/Form C)

Draft a one-time debit from my checking or savings account for (limit of \$200,000 per fund-account):

\$	(indicate investment elections in Section 4 and bank account information in Section 6)
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Note: The one-time debit will be initiated on the date the account is established.

Draft systematic investments from my checking or savings account (complete Section 6)

Section 4 Select your funds

Please use the Putnam Fund Guide (<https://www.franklintempleton.com/forms-literature/download/PFGUD-FORM>) to select your investment. Enter the fund name and number for the corresponding share class you wish to establish. For additional fund elections, please attach a separate sheet of paper with the fund number, fund name, dollar amount or percentage, and contribution year.

- For new investments made to Putnam: If no class of shares is indicated, class A shares will be purchased and any unallocated assets will be invested into Money Market A.
 - For assets moved from an existing Putnam registration: Fund allocations will remain consistent with the originating Putnam account(s) unless otherwise indicated. In addition, the share class must remain consistent with the originating Putnam account(s).
- Only prior year and current year contributions are permitted. If no contribution year is indicated, all contributions will always be coded for the current year in which your paperwork is received at Putnam per IRS regulations. For prior year contributions, the envelope must be postmarked on or before the tax filing deadline.

Fund number	Fund name	Dollar amount	Percentage	Contribution year
		\$	or	%
		\$	or	%
		\$	or	%
		\$	or	%
		\$	or	%
			100%	

Section 5 Designate your beneficiary(ies)

Complete Sections 5A and 5B to designate primary and contingent beneficiaries respectively for assets payable upon your death. To update beneficiaries on existing accounts, please use the IRA/403(b) Designation of beneficiary form.

For each beneficiary, Putnam Fiduciary Trust Company, LLC (PFTC) requires the full name, tax identification number, and date of birth. If you name multiple primary or contingent beneficiaries, please specify the percentage each is to receive. If no percentage is specified, your account will be divided among your surviving primary beneficiaries in substantially equal amounts. If no primary beneficiaries survive you, your account will be divided among your surviving contingent beneficiaries. If none of your designated beneficiaries survive you, your account will be distributed according to the provisions of the IRA plan and disclosure statement.

Important:

- PFTC does not accept customized beneficiary designations (for example, designations which involve multiple contingencies within a primary or contingent beneficiary category) or “per stirpes” designations. All 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. PFTC will not accept beneficiary designations from a parent/guardian on the minor’s behalf. If the designated beneficiaries are not accepted by PFTC the provisions of the IRA plan disclosure statement will be in effect.
- Do not list both primary and contingent beneficiary designations on the same page. If you wish to designate more than four primary beneficiaries and/or more than four contingent beneficiaries, you must include a separate sheet of paper with the additional designation. The separate sheet of paper must be signed, dated, indicate whether the designation is for a primary or contingent beneficiary, and include all required beneficiary information (full name, Social Security/Tax ID number, date of birth/date of trust, and allocated percentage).

Section 5A - Primary beneficiary(ies): Percentages for primary beneficiaries must equal 100%.

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Total primary allocations must equal 100%100.00%

Section 5 Designate your beneficiary(ies) (continued)

Section 5B - Contingent beneficiary(ies): Percentages for contingent beneficiaries must equal 100%.

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Name of individual (First, MI, Last, Suffix)/Full name of entity/trust (required)	Relationship			Percentage
	Spouse	Other	Entity/Trust	%
Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required for an individual)		Date of trust (mm/dd/yyyy; required for a trust)	
Residential address (street, city, state, ZIP code)				

Total contingent allocations must equal 100% 100.00%

Section 5C - Signature of IRA owner's spouse (if applicable)

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

Signature of spouse	Current date (mm/dd/yyyy)
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Print name of signer	

Section 6 Select your account features (if applicable)

Section 6A - 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.

Please provide your bank information below to purchase shares by phone, web, or systematic investment plan. All individuals named on the bank account registration must authorize the use of the bank account to purchase shares by signing in Section 8. If you wish to add telephone redemption options via Federal bank wire and/or ACH to a bank within the United States, please complete Putnam's Add or change bank account information form with the applicable signature authentication stamp.

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.

Indicate the type of bank account you would like to use: Checking account Savings account

Please use my enclosed investment check to establish bank account options on my account in lieu of other acceptable documents named above.

Tape voided check/deposit slip here

Bank ABA routing number Bank account number

Section 6B - Systematic investment plan

Complete this section to establish a new systematic investment plan using the bank account information provided above. Investments will be made into the same share class selected in Section 4 unless otherwise indicated (systematic investments will always be coded for the current contribution year). Putnam requests the draft from your bank account on the business day prior to the investment date.

Step 1: Investment frequency

Please indicate a start month, start year, frequency, and investment date for your systematic investment plan. If the investment date falls on a date which does not occur within a particular month (29th-31st), the investment will be made on the prior day, unless the day falls on a weekend or a holiday, then the investment will be made in the next business day.

- If no start month is indicated, distributions will begin on the next available month.
- If no start year is indicated, investments will begin in the current year. If there are no investment dates remaining for the current year, then the program will begin the following year.
- If no frequency is selected investments will take place monthly.
- If no investment date is selected, investments will take place on the 15th.
- Any investments designated for a date which has already occurred will not be processed until the next investment date indicated.

Start month	Start year	Frequency (check one)		Investment date		
		Monthly	Semiannually	1st	10th	20th
		Quarterly	Annually	5th	15th	25th

Step 2: Investment allocation(s)

Please indicate the fund number, fund name, and dollar amount for each investment.

Fund number	Fund name	Dollar amount
		\$
		\$
		\$

Section 6 Select your account features (if applicable)(continued)

Section 6C - Reduced sales charge

If you already own shares of another Putnam fund, or if you agree to invest a certain amount, you may be able to reduce the sales charge you pay. Shares that have not been assessed a sales charge will not count towards your Cumulative Discount or Letter of Intent. This includes commissionable shares of the Putnam Money Market Fund, the Putnam Government Money Market Fund, and the Ultra Short Duration Income Fund, as well as closed end funds and Putnam class Y shares.

Cumulative discount

To qualify for sales charge discounts on class A shares, list the account number(s) of other Putnam fund(s) that you or your family (spouse and/or children under age 21) own. Please contact Putnam for requirements related to linking external accounts invested in Putnam funds.

Fund number	Account number	Fund number	Account number
—		—	

Letter of intent

A letter of intent allows you to receive a reduced sales charge by committing to invest a minimum of \$50,000 with Putnam over a 13-month time frame as disclosed in the Statement of additional information.

- To receive a reduced sales charge through a new letter of intent, complete Putnam’s Letter of intent to purchase form. The form must be included with this application or on file with Putnam prior to the investment to qualify for a reduced sales charge.
- To receive a reduced sales charge through an active letter of intent in your name, provide your existing fund and account number below:

Fund number	Account number
—	

Notes:

- The 13-month time frame will continue to elapse based on the original request for the letter of intent.
- If you do not have an active letter of intent, your investments will incur the applicable sales charge.

Section 7 Financial intermediary information

Please use this section to designate financial intermediary and financial representative information on your Putnam account. A financial intermediary is the broker-dealer, bank, or other financial institution through which you purchase shares of the Putnam Funds. The financial representative is the person associated with the financial intermediary who is assisting you with your investments. You may designate a financial intermediary at any time by returning a signed Financial intermediary change request to Putnam Investor Services. Franklin Distributors, LLC (“FD”) will be designated as the default broker-dealer of record on your account(s) and will retain all applicable sales charges if any of the following apply:

- You do not designate a financial intermediary below.
- The financial intermediary you designate does not have a selling agreement with FD.

Please note that FD is not a full service broker-dealer and does not provide investment advice. As default broker-dealer, FD cannot assist you with financial planning or provide recommendations, services that are provided by a financial intermediary. If you wish to receive such services, you must designate a financial intermediary.

Note: Please refer to <https://www.finra.org> for assistance in locating the Central Registration Depository (CRD) number for the financial intermediary.

Financial institution ID	Branch office ID	Financial representative ID	CRD number
Financial intermediary			
Financial representative name(s) exactly as it appears on firm’s registration			Financial representative’s phone number
Branch office address		City	State ZIP code

Section 8 Traditional or Roth IRA 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 \$250,000 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.

I acknowledge that Putnam's privacy policy is available for viewing and printing at <https://www.franklintempleton.com/help/privacy-policy>.

If I have completed the bank account information in Section 6, 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 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 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 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. You will be notified before any such changes go into effect. For bank account information (Section 6), 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.

If applicable, the Parent/Guardian named in Section 2 represents that they are 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 they 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 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 PFTC, 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 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 indicated in Section 1 of this form, 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 all 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. I also certify under the penalties of perjury that the taxpayer identification number (Social Security number) set forth in Section 2 is true, correct, and complete.

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. 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.

Section 8 **Traditional or Roth IRA agreement (continued)**

By signing below, I certify under penalties of perjury that:

- 1. The number shown on this form is my correct taxpayer identification number
- 2. I am not subject to backup withholding because:
 - a. I am exempt from backup withholding or
 - b. I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends (cross out (b) if you have been notified by the IRS that you are currently subject to backup withholding), or
 - c. The IRS has notified me that I am no longer subject to backup withholding
- 3. I am a U.S. citizen or other U.S. person. For federal tax purposes, you are considered a U.S. person if you are:
 - a. An individual who is a U. S. citizen or a U.S. resident alien
 - b. An estate (other than a foreign estate), or
 - c. A domestic trust (as defined in Treasury Regulation 301.7701-7)
- 4. I am exempt from FATCA reporting

The Internal Revenue Service does not require your consent to any provision of this document other than the certifications required to avoid backup withholding.

The information you provide may be shared with third parties for the purpose of verification subject to the terms of Putnam’s privacy policy.

Signature of Putnam account owner (required)

Signature of owner/parent/guardian/authorized signer

Current date (mm/dd/yyyy)

Print name of signer

All individuals named on the bank account registration in Section 6 who did not already sign above as a Putnam account owner must sign below to authorize the use of the bank account to purchase shares. By signing below, each bank account owner authorizes purchases to be made from their bank account.

Signature of bank account owner(s) (required if different from the Putnam account owner)

Signature of bank account owner

Current date (mm/dd/yyyy)

Print name of signer

Signature of bank account owner

Current date (mm/dd/yyyy)

Print name of signer