Financial intermediary change request

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

1-800-225-1581 www.putnam.com



Please use this form to change the financial intermediary and/or financial representative information on your Putnam account(s). 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.

Complete the information requested in Sections 1, 2, and 3 and then forward this authorization to your new financial intermediary. Your new financial intermediary must complete Section 4 and return the form to Putnam Investor Services. Your account(s) will then be updated to reflect the change. All accounts under the social security number(s) or tax identification number(s) provided will be updated with the financial intermediary information indicated. For accounts with multiple owners/trustees/authorized parties, all individuals must sign Section 3.

All references herein to the singular (i.e., "I" or "my") include the plural as applicable.

Section 1 Account owner information

Name of current owner/custodian/trustee/entity

Tax identification number

Name of current joint owner/minor/co-trustee/authorized party

Tax identification number

Contact phone number

Note: Providing a phone number above will replace the current contact information on file with Putnam (if applicable).

Section 2 Financial intermediary election

I do not wish to have a financial intermediary designated on my accounts at this time.

I wish to designate the financial intermediary listed In Section 4 to my accounts (the financial intermediary must complete and sign Section 4).

Note: 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 elect not to designate a financial intermediary.
- The broker-dealer firm or financial institution you designate does not have a selling agreement with FD.
- An authorized representative of the broker-dealer firm or financial institution you designate does not sign in the financial intermediary information section.

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.

Federal law requires FD to obtain and verify the full name, residential or business address, Social Security or tax identification number, and date of birth for each registered owner of an account for which FD becomes the default dealer of record. For certain entities such as trusts, estates, corporations, partnerships, or other organizations, additional documentation may be required. If FD does not have sufficient information to verify your identity, or if FD is unable to verify any information already on file with the Fund or Putnam Investor Services, FD may be required to reject any additional investments into your account(s).

Section 3 Authorization (all owners must sign below)

My signature below authorizes Putnam to change the firm/financial intermediary on my account(s) as indicated in Section 2 and Section 4 of this form.

Signature of owner/custodian/trustee/authorized party

Signature of joint owner/co-trustee/authorized party

Print name of signer

Print name of signer

Current date (mm/dd/yyyy)

Current date (mm/dd/yyyy)

Section 4 Financial intermediary information (authorized firm representative must sign below)

By signing below, I certify that I am authorized to accept all accounts registered to the account owner(s) listed in Section 1 on behalf of the broker-dealer or financial institution listed below.

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

Financial institution IDBranch office IDFinancial representative IDCRD number

Financial intermediary

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

Branch office street address

City

Signature of authorized representative of the firm

Print name of signer

Current date (mm/dd/yyyy)

State

ZIP code

Financial representative's phone number