

Letter of intent to purchase



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

Return by express delivery:
Putnam Investments
430 W 7th Street Suite 219697
Kansas City, MO 64105-1407

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



Use this form to establish a Letter of Intent (LOI) in order to qualify for a reduced sales charge on purchases of class A or M shares. This form serves as your intent to invest at least \$50,000 over a 13-month period into one or more Putnam funds.

Note: Shares that have not been assessed a sales charge are not eligible for purchase under the LOI. This includes commissionable shares of money market, tax exempt money market, and short duration income funds as well as closed end funds and Putnam class Y shares.

Section 1 Existing account owner information

Name of owner/custodian/trustee/entity

Tax identification number (required)

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

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

Tax identification number (required)

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

Day phone

Evening phone

Please update my day and/or evening phone number

E-mail address

Section 2 Select the purchase amount

By checking an amount below, you agree to the terms and conditions for the LOI as set forth in the Statement of Additional Information (including the escrowing of shares). Although you are not obligated to complete the LOI, you plan to invest an aggregate amount equal to at least the amount of the box checked below in one or more Putnam funds over a 13-month period. You are aware that if you do not invest at least this amount over a 13-month period any purchases made pursuant to this LOI will be adjusted to the commission rate that otherwise would apply.

\$50,000 \$100,000 \$250,000 \$500,000 \$1,000,000

Section 3 Putnam accounts

Please list all of your existing Putnam accounts so that Putnam may determine if a credit can be applied toward the amount indicated in the LOI. The credit will be equal to the public offering price value of all shares owned on the date the LOI is accepted by Putnam. Credits are only applied for shares owned that are eligible for purchase under the LOI (plus any shares of money market or short duration income funds acquired by exchange of such eligible shares).

Putnam account number(s)

Putnam account number(s)

Section 4 Authorization

Your signature(s) below indicate(s) you agree that the minimum initial investment, which will be held in escrow until the full LOI amount is purchased, is 5% of the amount checked. If you invest less than the LOI amount, shares may be redeemed from your account to cover the higher sales charge. If you invest more, the sales charge will only be adjusted when and if your dealer refunds Putnam its portion of the adjustment. You will not receive LOI credit for shares purchased by dividend reinvestment.

Signature of Owner/Custodian/Trustee/Authorized Signer

Signature of Joint Owner/Co-Trustee/Co-Authorized Signer

Print name of signature above

Print name of signature above

Date (mm/dd/yyyy)

Date (mm/dd/yyyy)