On-demand and systematic investment/ exchange plan application



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



Use this form to establish the option to make on-demand investments from your bank account via phone or web or to establish/modify a systematic investment/ systematic exchange plan. Investments are processed via the Automated Clearing House (ACH). Systematic exchanges are only allowed within the same registration. You may wish to consult your tax advisor prior to establishing a systematic exchange, as this may be a taxable event.

Name of owner/custodian/trustee/entity		Social Security/Tax ID number (required)	Date of birth (mm/dd/yyyy; required)
Name of j	oint owner/minor/co-trustee/authorized party	Social Security number (required)	Date of birth (mm/dd/yyyy; required)
Contact p	hone number		
E-mail add	dress		
	viding an e-mail address and/or phone number above will re		
	for fields that are left blank. If you are enrolled in electronic		ddress listed above.
Section	on 2 Please select the applicabl	e option(s) below	
	ish the option to make on-demand investments via phone or w Int number Account number	web (complete section 3) Account number	
Accou	Account number	Account number	
	lish a new/additional systematic investment plan (with automa Ins 3 and 4 for the systematic investment option; complete Sec		systematic exchange plan (complete
	te/Replace an existing on-demand investment, systematic inv		·
	e on-demand and/or systematic investment options; complet option; complete Section 5 for the systematic exchange option		allocation(s) of the systematic invest-
Note:	If the systematic investment program is currently stopped an existing frequency and dollar amount(s).	d Section 4 is not completed, Putnam will default to	restarting the program with the previ-
ously	chieffing medacticy and demanding control		
-	do not wish to restart my existing systematic investment plan	at this time	
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Section 4 Systematic investment plan

Systematic investment schedule (You must also complete the bank account information in Section 3)

Please indicate the investment allocation and the date and frequency of your investments made below. If you are establishing a new account use the Putnam Fund Guide (https://www.putnam.com/literature/pdf/FM103.pdf) to select your investment(s). Please indicate the account(s) to be established by entering the fund name and number for the corresponding share class. Putnam requests the draft from your bank account on the business day prior to the investment date. If no date is selected, Putnam will default to the 15th. If the investment date falls on a weekend or a holiday, the investment will be made the next business day. If the investment date falls on a date that does not occur within a particular month (29th-31st), the investment will be made the prior day, unless this day falls on a weekend or holiday then the investment will be made the next business day.

Fund name	□С □М	Frank more han	A	A
		Fund number	Account number	Amount
			_	\$
				\$
Step 2: Option frequency				
Choose a frequency below. Pu	ıtnam will default to once ı	per month if no option is se	elected:	
Frequency: Invest every	month or □ Invest in the	e month(s) chosen below:		
□ Jan □ Feb □ Mar	□ Apr □ May □	June □ July □ Aug	□ Sept □ Oct □ Nov □ [Dec
ndicate investment date(s):		dditional investment date: DD)	(Use if you wish to invest multiple times	within a month)
Castian F Custs				
Section 5 Syste	matic exchan	ge pian		
ness day. Step 1: Exchange allocatio		ae trie prior day, uniess tris	s day falls on a weekend or holiday then	the exchange will be made the next t
Exchange funds FROM: Fund name		Fund number	Account number	Amount
-unu name			Account number	Amount
				1 3 1 1
Exchange funds TO: Fund name		Fund number	Account number	
and name			Account number	
_		Fund number	Account number	Amount
_		Fund number	Account number	Amount
Exchange funds FROM: Fund name		Fund number	Account number	dr
Fund name Exchange funds TO:		-		dr
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Fund name Exchange funds TO:		-		dr
Exchange funds TO: Eund name Step 2: Option frequency		Fund number	Account number	dr
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Section 6 Authorization

If I/we have completed the bank account information section, I/we authorize my/our bank/credit union to accept credit entries initiated by Putnam Investor Services, Inc., to my/our account and to credit, as requested, the same to my account, without responsibility for correctness thereof or for the existence of any further authorization relating thereto. I/we also authorize my/our bank/credit union to accept debit entries initiated by Putnam Investor Services, Inc., to reverse or otherwise correct any erroneous credit to my/our bank/credit union account. I/we agree to indemnify and hold harmless my/our bank/credit union, the Putnam funds, and Putnam Investor Services, Inc. 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 that 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, Inc., with reasonable time given to implement my/our request. Putnam Investor Services, Inc. may amend or terminate this agreement at any time. You will be notified before any such changes go into effect. For bank account information, Putnam does not assess a fee for federal bank wire and/or 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.

With this application, I/we authorize Putnam Investor Services, Inc. to exchange, as requested, on my account, without responsibility for correctness thereof or for the existence of any further authorization relating thereto. I/We agree to indemnify and hold harmless the Putnam funds, and Putnam Investor Services, Inc. for any loss, liability, or expense incurred from acting on these instructions. This authorization may be terminated by me at any time by written notification to Putnam Investor Services, Inc., with reasonable time given to implement my request.

MY/OUR SIGNATURE(S) BELOW INDICATE(S):

- (1) I/We have read the fund prospectus(es) and agree to the terms therein and herein;
- (2) I/We authorize automatic debits and/or direct telephone/computer authorization to my/our accounts.

Signature of owner/custodian/trustee/authorized party	Signature of joint owner/co-trustee/authorized party (if applicable)
Print name of signature above	Print name of signature above
Date (mm/dd/yyyy)	Date (mm/dd/yyyy)
SIGNATURE OF CONTRIBUTOR OR BANK ACCOUNT OWNER If the checking or savings account indicated in the bank account informal appears on the bank account registration must sign below (only one bank).	ation section is not that of the Putnam account owner, an individual whose name
Signature of bank account owner (if different from account owner)	Date (mm/dd/yyyy)
Print name of signature above	