
Putnam VT Large Cap Value Fund

The fund's portfolio

3/31/22 (Unaudited)

COMMON STOCKS (97.4%)^(a)

	Shares	Value
Aerospace and defense (4.4%)		
Northrop Grumman Corp.	97,800	\$43,738,116
Raytheon Technologies Corp.	318,495	31,553,300
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		75,291,416
Airlines (1.4%)		
Southwest Airlines Co. ^(NON)	512,939	23,492,606
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		23,492,606
Automobiles (1.5%)		
General Motors Co. ^(NON)	572,850	25,056,459
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		25,056,459
Banks (9.9%)		
Bank of America Corp.	1,369,175	56,437,394
Citigroup, Inc.	654,445	34,947,363
JPMorgan Chase & Co.	336,526	45,875,224
KeyCorp	391,160	8,754,161
PNC Financial Services Group, Inc. (The)	126,120	23,262,834
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		169,276,976
Beverages (2.3%)		
Keurig Dr Pepper, Inc.	529,171	20,055,581
PepsiCo, Inc.	110,780	18,542,356
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		38,597,937
Biotechnology (4.6%)		
AbbVie, Inc.	253,540	41,101,369

Regeneron Pharmaceuticals, Inc. <i>(NON)</i>	53,900	37,644,838
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		78,746,207
Building products (1.3%)		
Johnson Controls International PLC	338,420	22,190,199
		<hr/>
		22,190,199
Capital markets (2.3%)		
Goldman Sachs Group, Inc. (The)	85,069	28,081,277
State Street Corp.	135,720	11,823,926
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		39,905,203
Chemicals (3.6%)		
Corteva, Inc.	433,900	24,940,572
Eastman Chemical Co.	158,700	17,783,922
PPG Industries, Inc.	112,960	14,805,667
Sherwin-Williams Co. (The)	13,070	3,262,533
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		60,792,694
Construction materials (0.9%)		
CRH PLC (Ireland)	391,040	15,657,080
		<hr/>
		15,657,080
Consumer finance (0.7%)		
Capital One Financial Corp.	92,070	12,087,870
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		12,087,870
Diversified financial services (0.8%)		
Apollo Global Management, Inc.	223,750	13,870,263
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		13,870,263
Electric utilities (4.6%)		
American Electric Power Co., Inc.	211,010	21,052,468
Constellation Energy Corp.	165,766	9,324,338
Exelon Corp.	497,300	23,686,399
NRG Energy, Inc.	618,980	23,744,073
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		77,807,278
Electrical equipment (1.0%)		

Eaton Corp. PLC	116,470	17,675,487
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		17,675,487
Electronic equipment, instruments, and components (0.6%)		
Vontier Corp.	377,151	9,575,864
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		9,575,864
Equity real estate investment trusts (REITs) (3.1%)		
American Tower Corp. ^(R)	56,848	14,281,355
Boston Properties, Inc. ^(R)	147,880	19,046,944
Gaming and Leisure Properties, Inc. ^(R)	430,522	20,204,397
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		53,532,696
Food and staples retail (4.0%)		
BJ's Wholesale Club Holdings, Inc. ^{(NON)(S)}	295,604	19,985,786
Walmart, Inc.	321,645	47,899,373
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		67,885,159
Health-care providers and services (4.2%)		
Anthem, Inc.	71,260	35,004,337
McKesson Corp.	119,069	36,450,593
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		71,454,930
Hotels, restaurants, and leisure (2.1%)		
Aramark	404,630	15,214,088
Hilton Worldwide Holdings, Inc. ^(NON)	131,412	19,940,457
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		35,154,545
Household durables (1.2%)		
PulteGroup, Inc.	485,168	20,328,539
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		20,328,539
Household products (1.4%)		
Procter & Gamble Co. (The)	157,710	24,098,088
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		24,098,088
Industrial conglomerates (1.5%)		
General Electric Co.	33,202	3,037,983

Honeywell International, Inc.	111,382	21,672,710
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		24,710,693
Insurance (3.6%)		
American International Group, Inc.	329,081	20,656,414
Assured Guaranty, Ltd.	404,787	25,768,740
AXA SA (France)	484,240	14,141,702
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		60,566,856
IT Services (1.0%)		
Fidelity National Information Services, Inc.	174,360	17,509,231
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		17,509,231
Life sciences tools and services (2.6%)		
Danaher Corp.	53,510	15,696,088
Thermo Fisher Scientific, Inc.	48,850	28,853,253
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		44,549,341
Media (2.3%)		
Charter Communications, Inc. Class A ^(NON)	37,660	20,544,283
Comcast Corp. Class A	398,800	18,671,816
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		39,216,099
Metals and mining (2.2%)		
Freeport-McMoRan, Inc. (Indonesia)	761,020	37,853,135
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		37,853,135
Multi-utilities (0.7%)		
Ameren Corp.	127,770	11,979,715
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		11,979,715
Multiline retail (1.3%)		
Target Corp.	106,620	22,626,896
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		22,626,896
Oil, gas, and consumable fuels (8.2%)		
ConocoPhillips	414,310	41,431,000
Enterprise Products Partners LP	469,080	12,106,955
EOG Resources, Inc.	68,480	8,164,870

Exxon Mobil Corp.	271,158	22,394,939
Shell PLC (Euronext Amsterdam Exchange) (United Kingdom)	958,130	26,391,701
Valero Energy Corp.	286,380	29,079,025
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		139,568,490
Pharmaceuticals (6.1%)		
AstraZeneca PLC ADR (United Kingdom)	434,190	28,804,165
Johnson & Johnson	181,150	32,105,215
Merck & Co., Inc.	333,735	27,382,957
Sanofi (France)	149,040	15,199,733
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		103,492,070
Road and rail (1.6%)		
Union Pacific Corp.	100,760	27,528,640
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		27,528,640
Semiconductors and semiconductor equipment (2.9%)		
NXP Semiconductors NV	58,250	10,780,910
Qualcomm, Inc.	171,070	26,142,917
Texas Instruments, Inc.	64,460	11,827,121
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		48,750,948
Software (4.5%)		
Microsoft Corp.	190,590	58,760,803
Oracle Corp.	222,530	18,409,907
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		77,170,710
Specialty retail (1.2%)		
O'Reilly Automotive, Inc. <i>(NON)</i>	30,840	21,124,166
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		21,124,166
Trading companies and distributors (1.0%)		
United Rentals, Inc. <i>(NON)</i>	47,288	16,797,170
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		16,797,170
Wireless telecommunication services (0.8%)		
T-Mobile US, Inc. <i>(NON)</i>	99,470	12,766,975
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12,766,975

Total common stocks (cost \$1,050,483,285)

\$1,658,688,631

CONVERTIBLE PREFERRED STOCKS (1.4%)^(a)

	Shares	Value
Danaher Corp. 5.00% cv. pfd. ^(S)	7,040	\$11,056,320
T-Mobile US, Inc. 144A 5.25% cv. pfd. ^(NON)	11,686	13,029,890
Total convertible preferred stocks (cost \$19,242,799)		\$24,086,210

WARRANTS (—%)^(a)(NON)

	Expiration date	Strike Price	Warrants	Value
Occidental Petroleum Corp.	8/3/27	\$22.00	6,947	\$244,743
Total warrants (cost \$34,389)				\$244,743

U.S. TREASURY OBLIGATIONS (—%)(a)

	Principal amount	Value
U.S. Treasury Notes 0.875%, 6/30/26 ⁽ⁱ⁾	\$135,000	\$126,384
Total U.S. treasury obligations (cost \$126,384)		\$126,384

SHORT-TERM INVESTMENTS (1.8%)(a)

		Principal amount/shares	Value
Interest in \$384,728,000 joint tri-party repurchase agreement dated 3/31/2022 with BofA Securities, Inc. due 4/1/2022 - maturity value of \$19,423,162 for an effective yield of 0.300% (collateralized by Agency Mortgage-Backed Securities with coupon rates ranging from 2.000% to 4.500% and due dates ranging from 2/1/2042 to 3/1/2052, valued at \$392,422,560)		\$19,423,000	\$19,423,000
Putnam Cash Collateral Pool, LLC 0.37% ^(AFF)	Shares	8,948,748	8,948,748
State Street Institutional U.S. Government Money Market Fund, Premier Class 0.25% ^(P)	Shares	510,000	510,000
U.S. Treasury Bills 0.143%, 5/3/22		\$700,000	699,918
U.S. Treasury Bills zero%, 4/28/22 ⁽ⁱ⁾		262,000	261,974
U.S. Treasury Bills 0.079%, 5/19/22		600,000	599,801
Total short-term investments (cost \$30,443,571)			\$30,443,441
TOTAL INVESTMENTS			
Total investments (cost \$1,100,330,428)			\$1,713,589,409

FORWARD CURRENCY CONTRACTS at 3/31/22 (aggregate face value \$93,868,339)
(Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Bank of America N.A.						
	British Pound	Sell	6/15/22	\$2,714,264	\$2,765,647	\$51,383
	Euro	Sell	6/15/22	3,859,593	3,873,136	13,543
Barclays Bank PLC						
	British Pound	Sell	6/15/22	21,933,430	22,245,128	311,698
Goldman Sachs International						
	British Pound	Sell	6/15/22	17,026,269	17,348,458	322,189
	Euro	Sell	6/15/22	2,259,517	2,266,071	6,554
HSBC Bank USA, National Association						
	British Pound	Sell	6/15/22	6,315,116	6,434,699	119,583
Morgan Stanley & Co. International PLC						
	Euro	Sell	6/15/22	13,928,477	13,974,965	46,488
State Street Bank and Trust Co.						
	Euro	Sell	6/15/22	12,149,149	12,192,272	43,123
UBS AG						
	Euro	Sell	6/15/22	12,743,811	12,767,963	24,152
Unrealized appreciation						938,713
Unrealized (depreciation)						—
Total						\$938,713

* The exchange currency for all contracts listed is the United States Dollar.

Key to holding's abbreviations

ADR American Depository Receipts: Represents ownership of foreign securities on deposit with a custodian bank.

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2022 through March 31, 2022 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC, references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures* and references to "OTC", if any, represent over-the-counter.

(a) Percentages indicated are based on net assets of \$1,703,437,519.

(NON) This security is non-income-producing.

(AFF) Affiliated company. For investments in Putnam Cash Collateral Pool, LLC and Putnam Short Term Investment Fund, the rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period. Transactions during the period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/21	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/22
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$14,399,492	\$6,509,068	\$11,959,812	\$5,288	\$8,948,748
Putnam Short Term Investment Fund**	24,089,254	5,455,624	29,544,878	1,578	—
Total Short-term investments	\$38,488,746	\$11,964,692	\$41,504,690	\$6,866	\$8,948,748

* The fund may lend securities, through its agent, to qualified borrowers in order to earn additional income. The loans are collateralized by cash in an amount at least equal to the fair value of the securities loaned. The fair value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. The remaining maturities of the securities lending transactions are considered overnight and continuous. The risk of borrower default will be borne by the fund's agent; the fund will bear the risk of loss with respect to the investment of the cash collateral. The fund receives cash collateral, which is invested in Putnam Cash Collateral Pool, LLC, a limited liability company managed by an affiliate of Putnam Management. Investments in Putnam Cash Collateral Pool, LLC are valued at its closing net asset value each business day. There are no management fees charged to Putnam Cash Collateral Pool, LLC and there were no realized or unrealized gains or losses during the period.

At the close of the reporting period, the fund received cash collateral of \$8,948,748 for securities loaned. The rate quoted in the security description is the annualized 7-day yield at the close of the reporting period. At the close of the reporting period, the value of securities loaned amounted to \$8,716,855.

** Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

- (i) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts.
- (P) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- (R) Real Estate Investment Trust.
- (S) This security is on loan, in part or in entirety, at the close of the reporting period.

At the close of the reporting period, the fund maintained liquid assets totaling \$110,691 to cover certain derivative contracts.

Unless otherwise noted, the rates quoted in Short-term investments security descriptions represent the weighted average yield to maturity.

144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

The dates shown on debt obligations are the original maturity dates.

Security valuation: Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund's assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Investments for which market quotations are readily available are valued at the last reported sales price on their principal exchange, or official closing price for certain markets, and are classified as Level 1 securities under ASC 820. If no sales are reported, as in the case of some securities that are traded OTC, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Market quotations are not considered to be readily available for certain debt obligations (including short-term investments with remaining maturities of 60 days or less) and other investments; such investments are valued on the basis of valuations furnished by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such services or dealers determine valuations for normal institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships, generally recognized by institutional traders, between securities (which consider such factors as security prices, yields, maturities and ratings). These securities will generally be categorized as Level 2.

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depository Receipts,

exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

Repurchase agreements: The fund, or any joint trading account, through its custodian, receives delivery of the underlying securities, the fair value of which at the time of purchase is required to be in an amount at least equal to the resale price, including accrued interest. Collateral for certain tri-party repurchase agreements, which totaled \$19,811,460 at the end of the reporting period, is held at the counterparty's custodian in a segregated account for the benefit of the fund and the counterparty. Putnam Management is responsible for determining that the value of these underlying securities is at all times at least equal to the resale price, including accrued interest. In the event of default or bankruptcy by the other party to the agreement, retention of the collateral may be subject to legal proceedings.

Forward currency contracts: The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts were used to hedge foreign exchange risk.

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position.

For the fund's average contract amount on forward currency contracts, see the appropriate table at the end of these footnotes.

Master agreements: The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements (Master Agreements) with certain counterparties that govern OTC derivative and foreign exchange contracts entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in

accordance with the terms of the Master Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, is presented in the fund's portfolio.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

Termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term and short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund did not have a net liability position on open derivative contracts subject to the Master Agreements.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

	Valuation inputs		
Investments in securities:	Level 1	Level 2	Level 3
Common stocks*:			
Communication services	\$51,983,074	\$—	\$—
Consumer discretionary	124,290,605	—	—
Consumer staples	130,581,184	—	—
Energy	113,176,789	26,391,701	—
Financials	281,565,466	14,141,702	—
Health care	283,042,815	15,199,733	—
Industrials	207,686,211	—	—

Information technology	153,006,753	—	—
Materials	98,645,829	15,657,080	—
Real estate	53,532,696	—	—
Utilities	89,786,993	—	—
	<u> </u>	<u> </u>	<u> </u>
Total common stocks	1,587,298,415	71,390,216	—
Convertible preferred stocks	—	24,086,210	—
U.S. treasury obligations	—	126,384	—
Warrants	244,743	—	—
Short-term investments	510,000	29,933,441	—
	<u> </u>	<u> </u>	<u> </u>
Totals by level	\$1,588,053,158	\$125,536,251	\$—

Valuation inputs

Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$938,713	\$—
	<u> </u>	<u> </u>	<u> </u>
Totals by level	\$—	\$938,713	\$—

* Common stock classifications are presented at the sector level, which may differ from the fund's portfolio presentation.

At the start and close of the reporting period, Level 3 investments in securities represented less than 1% of the fund's net assets and were not considered a significant portion of the fund's portfolio.

The volume of activity for the reporting period for any derivative type that was held at the close of the period is listed below and was based on an average of the holdings of that derivative at the end of each fiscal quarter in the reporting period:

Forward currency contracts (contract amount)	\$97,500,000
Warrants (number of warrants)	7,000

For additional information regarding the fund please see the fund's most recent annual or semiannual shareholder report filed on the Securities and Exchange Commission's Web site, www.sec.gov, or visit Putnam's Individual Investor Web site at www.putnaminvestments.com