Putnam Large Cap Growth Fund

The fund's portfolio

4/30/23 (Unaudited)

COMMON STOCKS (97.9%)(a)

COMMON STOCKS (97.9%)(4)	Shares	Value
Aerospace and defense (1.0%)		
TransDigm Group, Inc.	94,915	\$72,609,975
		72,609,975
Automobiles (2.0%)		
Tesla, Inc.(NON)	911,127	149,707,277
		149,707,277
Broadline retail (4.8%)		
Amazon.com, Inc.(NON)	3,412,637	359,862,572
		359,862,572
Building products (0.8%)		
Johnson Controls International PLC	1,063,152	63,619,016
		63,619,016
Capital markets (1.0%)		
MSCI, Inc.	151,866	73,267,752
		73,267,752
Chemicals (1.1%)		
Sherwin-Williams Co. (The)	344,536	81,841,081
		81,841,081
Commercial services and supplies (0.7%)		
Waste Connections, Inc.	401,283	55,838,529
		55,838,529
Consumer staples distribution and retail (2.1%)		
Costco Wholesale Corp.	321,508	161,789,256
		161,789,256
Entertainment (2.6%)		
Live Nation Entertainment, Inc. (NON)	782,427	53,032,902
Netflix, Inc. (NON)	258,048	85,137,777

Universal Music Group NV (Netherlands)	2,653,682	58,047,353
		196,218,032
Financial services (5.6%)		
Mastercard, Inc. Class A	562,323	213,699,610
Visa, Inc. Class A ^(S)	884,118	205,760,782
		419,460,392
Food products (1.6%)		
Hershey Co. (The)	431,914	117,938,437
		117,938,437
Ground transportation (1.1%)		
	672.072	E2 040 220
Canadian Pacific Kansas City, Ltd. (Canada) ^(S) Union Pacific Corp.	672,872 161,667	53,049,228 31,638,232
Official active corp.	101,007	
		84,687,460
Health care equipment and supplies (2.6%)		
Dexcom, Inc. (NON)	585,837	71,085,462
IDEXX Laboratories, Inc. ^(NON)	80,658	39,696,641
Intuitive Surgical, Inc. (NON)	279,701	84,251,535
intuitive Surgical, inc.	273,701	
		195,033,638
Health care providers and services (5.5%)		
HCA Healthcare, Inc.	329,053	94,546,798
Humana, Inc.	156,853	83,208,948
UnitedHealth Group, Inc.	482,344	237,356,659
		415,112,405
Hotels, restaurants, and leisure (2.6%)		
Booking Holdings, Inc. (NON)	36,869	99,041,563
Chipotle Mexican Grill, Inc. (NON)	47,581	98,379,427
Chipotie Mexican Ghii, inc.	47,361	90,379,427
		197,420,990
Interactive media and services (6.0%)		
Alphabet, Inc. Class C ^(NON)	3,627,939	392,615,559
Meta Platforms, Inc. Class A ^(NON)	251,947	60,547,903
		453,163,462
IT Services (2.2%)		
Accenture PLC Class A	411,297	115,282,436
Gartner, Inc.(NON)	170,360	51,527,086
		166,809,522
		100,003,022

Life sciences tools and services (2.1%)

Danaher Corp. IQVIA Holdings, Inc. (NON)	311,741 246,177	73,854,560 46,337,897
Lonza Group AG (Switzerland)	61,766	38,442,222
		158,634,679
Personal care products (0.8%)		, ,
Estee Lauder Cos., Inc. (The) Class A	239,702	59,139,277
Lotos Ladadi Goo., inc. (The) Glace / (200,7 02	
		59,139,277
Pharmaceuticals (3.7%)		
AstraZeneca PLC (United Kingdom)	552,364	
Eli Lilly and Co.	377,543	
Merck & Co., Inc.	408,336	47,150,558
		277,883,920
Professional services (0.6%)		
CoStar Group, Inc. (NON)	597,728	45,995,170
•		
		45,995,170
Semiconductors and semiconductor equipment (8.4%)		
Advanced Micro Devices, Inc. (NON)	745,730	66,645,890
Applied Materials, Inc.	615,220	69,538,317
Broadcom, Inc.	235,931	147,810,772
NVIDIA Corp.	1,257,621	348,977,251
	, ,	
		632,972,230
Software (19.7%)		632,972,230
Adobe, Inc.(NON)	50,333 784,614	19,003,727 164,337,402
	50,333	19,003,727
Adobe, Inc.(NON) Cadence Design Systems, Inc.(NON)	50,333 784,614	19,003,727 164,337,402
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp.	50,333 784,614 29,006 228,598 2,749,517	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp.	50,333 784,614 29,006 228,598 2,749,517 1,051,547	19,003,727 164,337,402 21,114,918 101,486,082
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON)	50,333 784,614 29,006 228,598 2,749,517	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp.	50,333 784,614 29,006 228,598 2,749,517 1,051,547	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341 1,490,193,782
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341 1,490,193,782
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%) American Tower Corp.	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%) American Tower Corp. Specialty retail (1.2%) Home Depot, Inc. (The)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%) American Tower Corp.	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341
Adobe, Inc. (NON) Cadence Design Systems, Inc. (NON) Fair Isaac Corp. (NON) Intuit, Inc. Microsoft Corp. Oracle Corp. Palo Alto Networks, Inc. (NON) Salesforce, Inc. (NON) Specialized REITs (1.6%) American Tower Corp. Specialty retail (1.2%) Home Depot, Inc. (The)	50,333 784,614 29,006 228,598 2,749,517 1,051,547 813,889 460,404 578,401	19,003,727 164,337,402 21,114,918 101,486,082 844,816,593 99,602,532 148,502,187 91,330,341 1,490,193,782 118,219,380 118,219,380 46,055,050

Technology hardware, storage, and peripherals (12.1%)		
Apple, Inc.	5,402,758	916,739,977
		916,739,977
Textiles, apparel, and luxury goods (3.4%)		
Lululemon Athletica, Inc. (Canada) ^(NON)	289,055	109,820,666
Nike, Inc. Class B	1,148,457	145,532,471
		255,353,137
Wireless telecommunication services (1.0%)		
T-Mobile US, Inc. (NON)	535,912	77,117,738
		77,117,738
Total common stocks (cost \$3,996,191,711)	;	\$7,390,200,794

PURCHASED OPTIONS OUTSTANDING $(-\%)^{(a)}$

Counterparty	Expiration date/ strike price	Notional amount	Contract amount	Value
Citibank, N.A.				
Moderna, Inc. (Call)	Jun- 23/\$261.50	\$136,664,608	\$1,028,404	\$2,600
Total purchased options outstar	nding (cost \$18,511,272)			\$2,600

SHORT-TERM INVESTMENTS $(5.1\%)^{(a)}$

	Shares	Value
Putnam Cash Collateral Pool, LLC 5.06% ^(AFF)	217,918,635	\$217,918,635
Putnam Short Term Investment Fund Class P 4.98% (AFF) State Street Institutional U.S. Government Money Market	163,767,664	163,767,664
Fund, Premier Class 4.76% ^(P)	30,000	30,000

TOTAL INVESTMENTS

Total investments (cost \$4,396,419,282)

\$7,771,919,693

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WRITTEN OPTIONS OUTSTANDING at 4/30/23 (premiums \$13,321,226) (Unaudited)

Counterparty	Expiration date/ Notional strike price amount		Value
Citibank, N.A.			_
Moderna, Inc. (Call)	Jun-23/\$281.60 \$136,664,608	\$1,028,404	\$1,441
Total			\$1,441

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 August 1, 2022 through April 30, 2023 (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 \$7,547,432,489.
- (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:

					outstanding
	Fair value				and fair
Name of	as of	Purchase	Sale Inv	estment	value as of
affiliate	7/31/22	cost	proceeds	income	4/30/23

Short-term investments

Putnam Cash Collateral Pool,

LLC*# \$174,680,400 \$968,487,499 \$925,249,264 \$3,038,992 \$217,918,635

Putnam Short

Term Investment

Fund** 198,744,806 743,723,610 778,700,752 4,416,522 163,767,664

Total Short-term investments

\$373,425,206 \$1,712,211,109 \$1,703,950,016 \$7,455,514 \$381,686,299

* 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 \$217,918,635 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 \$216,821,753.

- ** 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.
- (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.
- (S) This security is on loan, in part or in entirety, at the close of the reporting period.

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.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

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. At the close of the reporting period, fair value pricing was used for certain foreign securities in the portfolio. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate. Short-term securities with remaining maturities of 60 days or less are valued using an independent pricing service approved by the Trustees, and are classified as Level 2 securities.

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.

Options contracts: The fund used options contracts to gain exposure to securities.

The potential risk to the fund is that the change in value of options contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. Realized gains and losses on purchased options are included in realized gains and losses on investment securities. If a written call option is exercised, the premium originally received is recorded as an addition to sales proceeds. If a written put option is exercised, the premium originally received is recorded as a reduction to the cost of investments.

Exchange-traded options are valued at the last sale price or, if no sales are reported, the last bid price for purchased options and the last ask price for written options. OTC traded options are valued using prices supplied by dealers.

Options on swaps are similar to options on securities except that the premium paid or received is to buy or grant the right to enter into a previously agreed upon interest rate or credit default contract. Forward premium swap options contracts include premiums that have extended settlement dates. The delayed settlement of the premiums is factored into the daily valuation of the option contracts. In the case of interest rate cap and floor contracts, in return for a premium, ongoing payments between two parties are based on interest rates exceeding a specified rate, in the case of a cap contract, or falling below a specified rate in the case of a floor contract.

For the fund's average contract amount on options 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	\$668,451,879	\$58,047,353	\$—
Consumer discretionary	1,055,915,684	_	_
Consumer staples	338,866,970	_	_
Financials	492,728,144	_	_
Health care	926,943,230	119,721,412	_
Industrials	322,750,150	_	_
Information technology	3,206,715,511	_	_
Materials	81,841,081	_	_
Real estate	118,219,380	_	_
Total common stocks	7,212,432,029	177,768,76 5	_
Purchased options outstanding	_	2,600	
Short-term investments	30,000	381,686,299	_
Totals by level	\$7,212,462,029	\$559,457,664	\$ —

Valuation inputs

Other financial instruments:	Level 1	Level 2	Level 3
Written options outstanding	\$—	\$(1,441)	\$—

Totals by level \$— \$(1,441) \$—

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

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:

Purchased equity option contracts (contract amount) \$620,000 Written equity option contracts (contract amount) \$620,000

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