Putnam VT Core Equity Fund†

The fund's portfolio

3/31/23 (Unaudited)

† Effective April 30, 2023, the fund changed its name from Putnam VT Multi-Cap Core Fund.

COMMON STOCKS (94.4%) (a)

	Shares	Value
Aerospace and defense (1.6%)		
Northrop Grumman Corp.	2,396	\$1,106,281
Raytheon Technologies Corp.	10,352	1,013,771
		2,120,052
Air freight and logistics (0.2%)		
GXO Logistics, Inc. (NON)	5,663	285,755
		285,755
Automobile components (0.3%)		
Magna International, Inc. (Canada)	7,646	409,596
		409,596
Automobiles (1.0%)		
General Motors Co.	9,342	342,665
Tesla, Inc. (NON)	4,603	954,938
		1,297,603
Banks (2.3%)		
Bank of America Corp.	107,820	3,083,652
		3,083,652
Beverages (2.3%)		
Coca-Cola Co. (The)	38,512	2,388,899
Molson Coors Beverage Co. Class B	14,168	732,202
		3,121,101

Biotechnology (2.6%)

AbbVie, Inc.	7,723	1,230,815
Amgen, Inc.	5,071	1,225,914
Regeneron Pharmaceuticals, Inc. (NON)	1,326	1,089,534
		3,546,263
Broadline retail (2.7%)		
Amazon.com, Inc.(NON)	35,345	3,650,785
		3,650,785
Capital markets (4.0%)		
Ameriprise Financial, Inc.	4,571	1,401,012
Goldman Sachs Group, Inc. (The)	4,903	1,603,820
Morgan Stanley	8,128	713,638
Raymond James Financial, Inc. (S)	14,892	1,388,977
TPG, Inc.	6,944	203,668
		5,311,115
Chemicals (0.8%)		
DuPont de Nemours, Inc.	3,444	247,176
Eastman Chemical Co.	10,032	846,099
		1,093,275
Commercial services and supplies (0.4%)		
Cintas Corp.	1,048	484,889
	1,048	484,889 484,889
Cintas Corp.	1,048	
Cintas Corp. Communications equipment (1.3%)		484,889
Cintas Corp.	1,048 33,816	
Cintas Corp. Communications equipment (1.3%)		484,889
Cintas Corp. Communications equipment (1.3%)		1,767,731
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp.	33,816 8,124	1,767,731 1,767,731 1,345,578
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%)	33,816	1,767,731 1,767,731
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp.	33,816 8,124	1,767,731 1,767,731 1,345,578
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp.	33,816 8,124	1,767,731 1,767,731 1,345,578 1,785,472
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc.	33,816 8,124	1,767,731 1,767,731 1,345,578 1,785,472
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%)	33,816 8,124 12,109	1,767,731 1,767,731 1,345,578 1,785,472 3,131,050
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%) Berry Global Group, Inc.	33,816 8,124 12,109	1,767,731 1,767,731 1,345,578 1,785,472 3,131,050 422,666
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%)	33,816 8,124 12,109	1,767,731 1,767,731 1,345,578 1,785,472 3,131,050 422,666
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%) Berry Global Group, Inc. Distributors (0.5%)	33,816 8,124 12,109 7,176	484,889 1,767,731 1,767,731 1,345,578 1,785,472 3,131,050 422,666 422,666 665,568
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%) Berry Global Group, Inc. Distributors (0.5%) LKQ Corp.	33,816 8,124 12,109 7,176	484,889 1,767,731 1,767,731 1,345,578 1,785,472 3,131,050 422,666 422,666
Communications equipment (1.3%) Cisco Systems, Inc./Delaware Consumer staples distribution and retail (2.3%) Target Corp. Walmart, Inc. Containers and packaging (0.3%) Berry Global Group, Inc. Distributors (0.5%)	33,816 8,124 12,109 7,176	484,889 1,767,731 1,767,731 1,345,578 1,785,472 3,131,050 422,666 422,666 665,568

		630,288
Diversified telecommunication services (0.6%)		
Liberty Global PLC Class A (United Kingdom) (NON)	40,381	787,430
		787,430
Electric utilities (2.4%)		
Constellation Energy Corp.	11,787	925,280
NRG Energy, Inc.	26,111	895,346
PG&E Corp.(NON)	88,304	1,427,876
		3,248,502
Electrical equipment (0.1%)		
FREYR Battery SA (Norway)(NON)	6,870	61,074
		61,074
Energy equipment and services (0.1%)		
Atlas Energy Solutions, Inc. Class A(NON)(S)	3,862	65,770
		65,770
Entertainment (1.1%)		
Universal Music Group NV (Netherlands)	19,296	487,784
Walt Disney Co. (The)(NON)	8,071	808,149
Warner Bros Discovery, Inc. (NON)	15,868	239,607
		1,535,540
Financial services (5.0%)		
Apollo Global Management, Inc.	19,505	1,231,936
Berkshire Hathaway, Inc. Class B ^(NON)	8,911	2,751,449
Mastercard, Inc. Class A	7,567	2,749,923
		6,733,308
Ground transportation (1.3%)		
Union Pacific Corp.	8,870	1,785,176
		1,785,176
Health care equipment and supplies (0.5%)		
Medtronic PLC	7,094	571,918
Nyxoah SA (Belgium) ^(NON)	9,312	68,909
		640,827
		040,027
Health care providers and services (5.2%)	40.004	- 4- 40 4
CVS Health Corp.	10,031	745,404 054 106
Elevance Health, Inc. HCA Healthcare, Inc.	2,075 2,385	954,106 628,877
McKesson Corp.	4,711	1,677,352
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Tenet Healthcare Corp. (NON) UnitedHealth Group, Inc.	7,289 5,468	433,112 2,584,122
		7,022,973
Hotels, restaurants, and leisure (1.2%)		
Booking Holdings, Inc. (NON)	164	434,995
Chuy's Holdings, Inc. (NON)	11,749	421,202
McDonald's Corp.	2,923	817,300
		1,673,497
Household durables (1.4%)		
PulteGroup, Inc.	32,325	1,883,901
		1,883,901
Household products (1.1%)		
Procter & Gamble Co. (The)	9,793	1,456,121
		1,456,121
Industrial conglomerates (1.2%)		
Honeywell International, Inc.	8,544	1,632,929
		1,632,929
Insurance (1.3%)		
Arch Capital Group, Ltd. ^(NON)	13,373	907,626
Assured Guaranty, Ltd.	16,937	851,423
		1,759,049
Interactive media and services (5.4%)		
Alphabet, Inc. Class C ^(NON)	47,984	4,990,336
Meta Platforms, Inc. Class A ^(NON)	10,444	2,213,501
		7,203,837
IT Services (0.7%)		
Gartner, Inc. (NON)	2,874	936,263
		936,263
Machinery (2.1%)		
Deere & Co.	1,765	728,733
Otis Worldwide Corp.	24,931	2,104,176
		2,832,909
Media (0.6%)		
Comcast Corp. Class A	19,808	750,921
		750,921

Metals and mining (1.6%)		
Freeport-McMoRan, Inc. (Indonesia)	25,640	1,048,932
Nucor Corp.	7,148	1,104,152
		2,153,084
Mortgage real estate investment trusts (REITs) (0.2%)		
	17.005	202.224
Starwood Property Trust, Inc. (S)	17,085	302,234
		302,234
Multi-utilities (0.5%)		
CMS Energy Corp.	10,941	671,559
		671,559
Office REITs (—%)		
Vornado Realty Trust	3,529	54,241
		54,241
Oil, gas, and consumable fuels (2.8%)		
Antero Resources Corp. (NON)	6,135	141,657
ConocoPhillips	14,909	1,479,122
Exxon Mobil Corp.	12,136	1,330,834
Phillips 66	8,485	860,209
		3,811,822
Passenger airlines (0.7%)		
Southwest Airlines Co.	30,464	991,299
Codd Woot, armice Co.	00, 10 1	
		991,299
Pharmaceuticals (4.4%)		
Pharmaceuticals (4.4%) Eli Lilly and Co.	5,150	1,768,613
• •	5,150 12,741	1,768,613 1,974,855
Eli Lilly and Co.	,	
Eli Lilly and Co. Johnson & Johnson	12,741	1,974,855
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc.	12,741 11,861	1,974,855 1,261,892
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc.	12,741 11,861	1,974,855 1,261,892 863,981
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%)	12,741 11,861 21,176	1,974,855 1,261,892 863,981 5,869,341
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc.	12,741 11,861	1,974,855 1,261,892 863,981
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%)	12,741 11,861 21,176	1,974,855 1,261,892 863,981 5,869,341
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON)	12,741 11,861 21,176	1,974,855 1,261,892 863,981 5,869,341
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON) Semiconductors and semiconductor equipment (4.5%)	12,741 11,861 21,176	1,974,855 1,261,892 863,981 5,869,341
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON)	12,741 11,861 21,176	1,974,855 1,261,892 863,981 5,869,341 1,461,151
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON) Semiconductors and semiconductor equipment (4.5%) Intel Corp.	12,741 11,861 21,176 20,068	1,974,855 1,261,892 863,981 5,869,341 1,461,151 1,461,151
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON) Semiconductors and semiconductor equipment (4.5%) Intel Corp. Lam Research Corp. NVIDIA Corp. Qualcomm, Inc.	12,741 11,861 21,176 20,068 9,036 2,941	1,974,855 1,261,892 863,981 5,869,341 1,461,151 1,461,151 295,206 1,559,083
Eli Lilly and Co. Johnson & Johnson Merck & Co., Inc. Pfizer, Inc. Real estate management and development (1.1%) CBRE Group, Inc. Class A ^(NON) Semiconductors and semiconductor equipment (4.5%) Intel Corp. Lam Research Corp. NVIDIA Corp.	12,741 11,861 21,176 20,068 9,036 2,941 8,198	1,974,855 1,261,892 863,981 5,869,341 1,461,151 1,461,151 295,206 1,559,083 2,277,158

		6,023,046
Software (10.9%)		
Adobe, Inc. (NON)	2,342	902,537
Fair Isaac Corp. (NON)	376	264,211
Microsoft Corp.	34,787	10,029,092
NCR Corp.(NON)	16,984	400,653
Oracle Corp.	24,565	2,282,580
Salesforce, Inc. (NON)	3,903	779,741
		14,658,814
Specialized REITs (1.3%)		
Gaming and Leisure Properties, Inc.	34,668	1,804,816
		1,804,816
Specialty retail (1.9%)		
Best Buy Co., Inc.	11,145	872,319
Lowe's Cos., Inc.	8,407	1,681,148
		2,553,467
Technology hardware, storage, and peripherals (7.8%)		
Apple, Inc.	63,323	10,441,963
		10,441,963
Textiles, apparel, and luxury goods (0.5%)		
Nike, Inc. Class B	4,993	612,342
		612,342
Tobacco (0.7%)		
Altria Group, Inc.	21,005	937,243
		937,243
Trading companies and distributors (1.1%)		
Karat Packaging, Inc.	8,643	115,211
United Rentals, Inc.	3,274	1,295,719
		1,410,930
Total common stocks (cost \$72,905,618)		\$126,788,768

INVESTMENT COMPANIES (1.5%)(a)

	Shares	Value
iShares Expanded Tech-Software Sector ETF ^(S)	6,825	\$2,079,577
Total investment companies (cost \$1,907,579)		\$2,079,577

SHORT-TERM INVESTMENTS (6.6%)^(a)

	an	Principal nount/shares	Value
Putnam Cash Collateral Pool, LLC 5.03%(AFF)	Shares	3,441,881	\$3,441,881
Putnam Short Term Investment Fund Class P 4.88% (AFF)	Shares	5,070,064	5,070,064
U.S. Treasury Bills 4.735%, 5/2/23 ^(SEG)		\$200,000	199,261
U.S. Treasury Bills 4.627%, 5/23/23 ^(SEG)		100,000	99,362
Total short-term investments (cost \$8,810,493)			\$8,810,568
TOTAL INVESTMENTS			
Total investments (cost \$83,623,690)		;	\$137,678,913

FUTURES CONTRACTS OUTSTANDING at 3/31/23 (Unaudited)

	Number of contracts	Notional amount	Value	Expiration date	appreciation/ (depreciation)
Russell 2000 Index E-Mini (Long)	20	\$1,768,383	\$1,813,500	Jun-23	\$31,692
S&P 500 Index E-Mini (Long)	9	1,849,190	1,861,988	Jun-23	105,799
Unrealized appreciation					137,491
Unrealized (depreciation)					_
Total					\$137,491

Key to holding's abbreviations

ETF Exchange Traded Fund

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, 2023 through March 31, 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 whollyowned 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 \$134,331,516.
- (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 12/31/22	Purchase	Sale proceeds	Investment income	outstanding and fair value as of 3/31/23
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$1,068,687	\$13,836,574	\$11,463,380	\$21,969	\$3,441,881
Putnam Short Term Investment Fund**	4,951,318	3,824,785	3,706,039	55,420	5,070,064
Total Short-term investments	\$6,020,005	\$17,661,359	\$15,169,419	\$77,389	*************************************

Shares

At the close of the reporting period, the fund received cash collateral of \$3,441,881 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 \$3,437,047.

^{*} 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.

- ** 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.
- (SEG) This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$258,792.
 - (S) This security is on loan, in part or in entirety, at the close of the reporting period.

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

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.

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.

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. 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.

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.

Futures contracts: The fund used futures contracts to equitize cash.

The potential risk to the fund is that the change in value of futures 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. With futures, there is minimal counterparty credit risk to the fund since futures are exchange traded and the exchange's clearinghouse, as counterparty to all exchange traded futures, guarantees the futures against default. When the contract is closed, 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.

Futures contracts are valued at the quoted daily settlement prices established by the exchange on which they trade. The fund and the broker agree to exchange an amount of cash equal to the daily fluctuation in the value of the futures contract. Such receipts or payments are known as "variation margin".

For the fund's average number of futures contracts, see the appropriate table at the end of these footnotes.

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: Common stocks*:	Level 1	Level 2	Level 3
Communication services	\$9,789,944	\$487,784	\$—
Consumer discretionary	12,746,759	· —	_
Consumer staples	8,645,515	_	_
Energy	3,877,592	_	_
Financials	17,189,358		_
Health care	17,079,404		_
Industrials	11,605,013		_
Information technology	33,827,817		_
Materials	3,669,025	_	_
Real estate	3,950,496	_	_

Totals by level	\$128,380,561	\$9,298,352	\$ —
Short-term investments		8,810,568	
Investment companies	2,079,577	_	_
Total common stocks	126,300,984	487,784	_
Utilities	3,920,061		

Valuation	n inputs
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Other financial instruments:	Level 1	Level 2	Level 3
Futures contracts	\$137,491	\$—	\$—
Totals by level	\$137.491	<u> </u>	\$ —

^{*} 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:

Futures contracts (number of contracts)

30

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