

Putnam VT Multi-Cap Core Fund

The fund's portfolio

3/31/21 (Unaudited)

COMMON STOCKS (97.6%)^(a)

	Shares	Value
Aerospace and defense (1.8%)		
Northrop Grumman Corp.	6,900	\$2,233,116
Raytheon Technologies Corp.	38,200	2,951,714
		<u>5,184,830</u>
Air freight and logistics (0.5%)		
FedEx Corp.	5,800	1,647,432
		<u>1,647,432</u>
Airlines (1.6%)		
Southwest Airlines Co. ^(NON)	74,000	4,518,440
		<u>4,518,440</u>
Auto components (1.1%)		
Magna International, Inc. (Canada)	37,725	3,321,309
		<u>3,321,309</u>
Banks (5.8%)		
Bank of America Corp.	267,442	10,347,331
Citigroup, Inc.	56,500	4,110,375
KeyCorp	73,307	1,464,674
Wells Fargo & Co.	25,700	1,004,099
		<u>16,926,479</u>
Beverages (1.4%)		
Coca-Cola Co. (The)	47,000	2,477,370
Molson Coors Beverage Co. Class B ^(NON)	28,435	1,454,450
		<u>3,931,820</u>

Biotechnology (3.8%)

AbbVie, Inc.	37,125	4,017,668
Amgen, Inc.	18,295	4,551,979
Biogen, Inc. <i>(NON)</i>	5,000	1,398,750
Vor BioPharma, Inc. <i>(NON)</i>	24,668	1,063,191
		<hr/>
		11,031,588

Capital markets (4.7%)

Ameriprise Financial, Inc.	12,900	2,998,605
Apollo Global Management, Inc.	19,314	907,951
Goldman Sachs Group, Inc. (The)	11,890	3,888,030
KKR & Co., Inc. Class A	45,200	2,208,020
Morgan Stanley	27,038	2,099,771
Raymond James Financial, Inc.	11,700	1,433,952
		<hr/>
		13,536,329

Chemicals (0.9%)

Eastman Chemical Co.	22,600	2,488,712
		<hr/>
		2,488,712

Communications equipment (1.6%)

Cisco Systems, Inc./California	88,741	4,588,797
		<hr/>
		4,588,797

Construction materials (0.4%)

Summit Materials, Inc. Class A <i>(NON)</i>	39,774	1,114,467
		<hr/>
		1,114,467

Distributors (0.2%)

LKQ Corp. <i>(NON)</i>	15,400	651,882
		<hr/>
		651,882

Diversified financial services (2.9%)

Berkshire Hathaway, Inc. Class B <i>(NON)</i>	21,900	5,594,793
Climate Change Crisis Real Impact I Acquisition Corp. Class A (acquired 1/22/21, cost \$904,020) (Private) <i>(NON)</i> <i>(F)(RES)(PIPE)</i>	90,402	1,114,657
FirstMark Horizon Acquisition Corp. Class A <i>(NON)</i>	41,382	413,820
Senior Connect Acquisition Corp. I Class A <i>(NON)</i>	90,234	877,074

Thoma Bravo Advantage Class A ^(NON)	31,021	324,169
		<hr/>
		8,324,513
Diversified telecommunication services (1.0%)		
AT&T, Inc.	39,172	1,185,736
Liberty Global PLC Class A (United Kingdom) ^(NON)	71,474	1,834,023
		<hr/>
		3,019,759
Electric utilities (2.3%)		
Exelon Corp.	50,000	2,187,000
NRG Energy, Inc.	57,700	2,177,021
PG&E Corp. ^(NON)	206,278	2,415,515
		<hr/>
		6,779,536
Entertainment (1.3%)		
Walt Disney Co. (The) ^(NON)	20,000	3,690,400
		<hr/>
		3,690,400
Equity real estate investment trusts (REITs) (1.8%)		
Armada Hoffer Properties, Inc.	96,384	1,208,655
Boston Properties, Inc.	9,700	982,222
Gaming and Leisure Properties, Inc.	70,811	3,004,511
		<hr/>
		5,195,388
Food and staples retail (1.8%)		
Walmart, Inc.	38,800	5,270,204
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		5,270,204
Health-care equipment and supplies (0.6%)		
Medtronic PLC	14,800	1,748,324
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		1,748,324
Health-care providers and services (5.2%)		
Cigna Corp.	7,700	1,861,398
CVS Health Corp.	23,600	1,775,428
HCA Healthcare, Inc.	14,839	2,794,777
McKesson Corp.	11,300	2,203,952
Tenet Healthcare Corp. ^(NON)	33,700	1,752,400
UnitedHealth Group, Inc.	12,900	4,799,703
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		15,187,658
Hotels, restaurants, and leisure (0.4%)		
Chuy's Holdings, Inc. ^(NON)	17,562	778,348
Kura Sushi USA, Inc. Class A ^(NON)	14,077	445,396
		<hr/>
		1,223,744
Household durables (1.4%)		
HC Brillant Services GmbH (acquired 8/2/13, cost \$4) (Private) (Germany) ^{(NON)(F)(RES)}	6	5
PulteGroup, Inc.	78,800	4,132,272
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		4,132,277
Industrial conglomerates (1.2%)		
Honeywell International, Inc.	16,500	3,581,655
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		3,581,655
Insurance (1.3%)		
Arch Capital Group, Ltd. ^(NON)	46,800	1,795,716
Assured Guaranty, Ltd.	45,291	1,914,903
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		3,710,619
Interactive media and services (5.5%)		
Alphabet, Inc. Class C ^(NON)	4,892	10,119,738
Facebook, Inc. Class A ^(NON)	20,100	5,920,053
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		16,039,791
Internet and direct marketing retail (3.7%)		
Amazon.com, Inc. ^(NON)	3,431	10,615,788
		<hr/>
		10,615,788
IT Services (2.6%)		
Mastercard, Inc. Class A	13,700	4,877,885
PayPal Holdings, Inc. ^(NON)	10,400	2,525,536
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		7,403,421
Life sciences tools and services (0.4%)		
Avantor, Inc. ^(NON)	41,431	1,198,599
		<hr/>

		1,198,599
Machinery (0.7%)		
Otis Worldwide Corp.	27,800	1,902,910
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		1,902,910
Media (1.3%)		
Comcast Corp. Class A	67,740	3,665,411
		<hr/>
		3,665,411
Metals and mining (1.8%)		
Freeport-McMoRan, Inc. (Indonesia) ^(NON)	58,800	1,936,284
Nucor Corp.	40,663	3,264,019
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		5,200,303
Mortgage real estate investment trusts (REITs) (0.3%)		
Starwood Property Trust, Inc.	31,400	776,836
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		776,836
Multiline retail (1.6%)		
Target Corp.	23,900	4,733,873
		<hr/>
		4,733,873
Oil, gas, and consumable fuels (2.0%)		
Comstock Resources, Inc. ^(NON)	163,392	905,192
ConocoPhillips	27,157	1,438,506
Enterprise Products Partners LP	101,200	2,228,424
Phillips 66	14,300	1,166,022
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		5,738,144
Pharmaceuticals (2.7%)		
Eli Lilly and Co.	15,400	2,877,028
Johnson & Johnson	30,430	5,001,171
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		7,878,199
Real estate management and development (0.8%)		
CBRE Group, Inc. Class A ^(NON)	30,200	2,389,122
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		2,389,122
Road and rail (1.3%)		

Union Pacific Corp.	16,545	3,646,683
		<hr/>
		3,646,683
Semiconductors and semiconductor equipment (4.4%)		
Intel Corp.	52,620	3,367,680
Lam Research Corp.	8,600	5,119,064
Micron Technology, Inc. <i>(NON)</i>	24,200	2,134,682
Texas Instruments, Inc.	10,900	2,059,991
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		12,681,417
Software (10.5%)		
Citrix Systems, Inc.	7,600	1,066,736
Dynatrace, Inc. <i>(NON)</i>	30,782	1,484,924
Microsoft Corp.	93,750	22,103,438
Oracle Corp.	59,418	4,169,361
Salesforce.com, Inc. <i>(NON)</i>	5,900	1,250,033
Upland Software, Inc. <i>(NON)</i>	9,200	434,148
		<hr/>
		30,508,640
Specialty retail (3.3%)		
Best Buy Co., Inc.	26,000	2,985,060
Lowe's Cos., Inc.	34,600	6,580,228
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		9,565,288
Technology hardware, storage, and peripherals (7.4%)		
Apple, Inc.	164,832	20,134,229
NCR Corp. <i>(NON)</i>	35,700	1,354,815
		<hr/>
		21,489,044
Tobacco (0.8%)		
Altria Group, Inc.	44,800	2,291,968
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		2,291,968
Trading companies and distributors (1.5%)		
United Rentals, Inc. <i>(NON)</i>	13,100	4,313,963
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		4,313,963
Total common stocks (cost \$160,500,741)		\$282,845,562

UNITS (0.6%)^(a)

	Units	Value
COVA Acquisition Corp. <i>(NON)</i>	71,761	\$714,022
SVF Investment Corp. <i>(NON)</i>	11,291	119,233
Switchback II Corp. <i>(NON)</i>	80,979	824,366
Total units (cost \$1,640,310)		\$1,657,621

CONVERTIBLE BONDS AND NOTES (0.6%)^(a)

	Principal amount	Value
Penn National Gaming, Inc. cv. sr. unsec. notes 2.75%, 5/15/26	\$362,000	\$1,632,620
Total convertible bonds and notes (cost \$362,000)		\$1,632,620

WARRANTS (—%)^(a)

	Expiration date	Strike Price Warrants	Value
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Senior Connect Acquisition Corp. I Class A ^(NON)

12/31/27

\$11.50

39,855

\$28,317

Total warrants (cost \$56,498)**\$28,317****SHORT-TERM INVESTMENTS (1.4%)^(a)**

		Principal amount/ shares	Value
Putnam Short Term Investment Fund 0.09% ^(AFF)	Shares	3,585,000	\$3,585,000
U.S. Treasury Cash Management Bills 0.010%, 6/29/21 ^(SEG)		\$400,000	399,990
Total short-term investments (cost \$3,984,990)			\$3,984,990
TOTAL INVESTMENTS			
Total investments (cost \$166,544,539)			\$290,149,110

FUTURES CONTRACTS OUTSTANDING at 3/31/21 (Unaudited)

	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/ (depreciation)
Russell 2000 Index E-Mini (Long)	13	\$1,443,338	\$1,444,625	Jun-21	\$(39,073)
S&P 500 Index E-Mini (Long)	7	1,390,512	1,388,590	Jun-21	28,125
Unrealized appreciation					28,125
Unrealized (depreciation)					(39,073)
Total					\$(10,948)

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, 2021 through March 31, 2021 (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 \$289,860,551.

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

(RES) This security is restricted with regard to public resale. The total fair value of this security and any other restricted securities (excluding 144A securities), if any, held at the close of the reporting period was \$1,114,662, or 0.4% of net assets.

(AFF) Affiliated company. For investments in 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 12/31/20	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/21
Short-term investments					
Putnam Cash Collateral Pool, LLC#	\$4,793,650	\$4,291,037	\$9,084,687	\$1,074	\$—
Putnam Short Term Investment Fund**	10,647,478	13,944,863	21,007,341	2,541	3,585,000
Total Short-term investments	\$15,441,128	\$18,235,900	\$30,092,028	\$3,615	\$3,585,000

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 had no securities on loan at period end.

** 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 \$252,975.

(F) This security is valued by Putnam Management at fair value following procedures approved by the Trustees. Securities are classified as Level 3 for ASC 820 based on the securities' valuation inputs.

(PIPE) Represents the asset to be received in a private investment in public entity (PIPE) commitment. At the close of the reporting period, the total related cost for PIPE commitments held was \$904,020.

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

Debt obligations are considered secured unless otherwise indicated.

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. 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:	Level 1	Level 2	Level 3
Common stocks*:			
Communication services	\$26,415,361	\$—	\$—

Consumer discretionary	34,244,156	—	5
Consumer staples	11,493,992	—	—
Energy	5,738,144	—	—
Financials	42,160,119	—	1,114,657
Health care	37,044,368	—	—
Industrials	24,795,913	—	—
Information technology	76,671,319	—	—
Materials	8,803,482	—	—
Real estate	7,584,510	—	—
Utilities	6,779,536	—	—
	<hr/>	<hr/>	<hr/>
Total common stocks	281,730,900	—	1,114,662
Convertible bonds and notes	—	1,632,620	—
Units	1,657,621	—	—
Warrants	28,317	—	—
Short-term investments	—	3,984,990	—
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Totals by level	\$283,416,838	\$5,617,610	\$1,114,662

Valuation inputs

Other financial instruments:	Level 1	Level 2	Level 3
Futures contracts	\$(10,948)	\$—	\$—
	<hr/>	<hr/>	<hr/>
Totals by level	\$(10,948)	\$—	\$—

* 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:

Futures contracts (number of contracts)	30
Warrants (number of warrants)	30,000

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