

# Putnam VT Multi-Cap Core Fund

## The fund's portfolio

9/30/22 (Unaudited)

### COMMON STOCKS (98.9%)(a)

	Shares	Value
<b>Aerospace and defense (2.2%)</b>		
Northrop Grumman Corp.	3,033	\$1,426,481
Raytheon Technologies Corp.	15,173	1,242,062
		<b>2,668,543</b>
<b>Air freight and logistics (0.3%)</b>		
GXO Logistics, Inc. (NON)	9,279	325,322
		<b>325,322</b>
<b>Airlines (0.7%)</b>		
Southwest Airlines Co. (NON)	26,480	816,643
		<b>816,643</b>
<b>Auto components (0.7%)</b>		
Magna International, Inc. (Canada) (S)	18,220	863,992
		<b>863,992</b>
<b>Automobiles (0.9%)</b>		
General Motors Co.	6,763	217,025
Tesla, Inc. (NON)	3,187	845,352
		<b>1,062,377</b>
<b>Banks (3.6%)</b>		
Bank of America Corp.	119,380	3,605,276
KeyCorp	48,268	773,253
		<b>4,378,529</b>
<b>Beverages (2.5%)</b>		
Coca-Cola Co. (The)	38,512	2,157,442
Molson Coors Beverage Co. Class B	18,069	867,131
		<b>3,024,573</b>
<b>Biotechnology (3.8%)</b>		
AbbVie, Inc.	16,293	2,186,684
Amgen, Inc.	6,784	1,529,114

Regeneron Pharmaceuticals, Inc. <sup>(NON)</sup>	1,354	932,730
		<b>4,648,528</b>
<b>Capital markets (4.6%)</b>		
Ameriprise Financial, Inc.	4,571	1,151,663
Goldman Sachs Group, Inc. (The)	5,521	1,617,929
KKR & Co., Inc.	11,292	485,556
Morgan Stanley	10,018	791,522
Raymond James Financial, Inc.	13,152	1,299,681
TPG, Inc.	8,487	236,278
		<b>5,582,629</b>
<b>Chemicals (0.6%)</b>		
Eastman Chemical Co.	10,032	712,774
		<b>712,774</b>
<b>Communications equipment (1.1%)</b>		
Cisco Systems, Inc./Delaware	33,816	1,352,640
		<b>1,352,640</b>
<b>Containers and packaging (0.2%)</b>		
Berry Global Group, Inc. <sup>(NON)</sup>	6,203	288,626
		<b>288,626</b>
<b>Distributors (0.5%)</b>		
LKQ Corp.	11,726	552,881
		<b>552,881</b>
<b>Diversified financial services (2.7%)</b>		
Apollo Global Management, Inc.	14,363	667,880
Berkshire Hathaway, Inc. Class B <sup>(NON)</sup>	9,611	2,566,329
		<b>3,234,209</b>
<b>Diversified telecommunication services (0.7%)</b>		
AT&T, Inc.	23,085	354,124
Liberty Global PLC Class A (United Kingdom) <sup>(NON)</sup>	30,360	473,312
		<b>827,436</b>
<b>Electric utilities (2.9%)</b>		
Constellation Energy Corp.	14,176	1,179,301
NRG Energy, Inc.	29,220	1,118,249
PG&E Corp. <sup>(NON)(S)</sup>	94,327	1,179,088
		<b>3,476,638</b>
<b>Entertainment (1.1%)</b>		

Universal Music Group NV (Netherlands)	14,040	264,655
Walt Disney Co. (The) <sup>(NON)</sup>	8,071	761,337
Warner Bros Discovery, Inc. <sup>(NON)</sup>	26,918	309,557
		<hr/>
		<b>1,335,549</b>
<b>Equity real estate investment trusts (REITs) (2.2%)</b>		
Armada Hoffer Properties, Inc.	53,369	553,970
Boston Properties, Inc.	5,590	419,082
Gaming and Leisure Properties, Inc.	34,668	1,533,712
Vornado Realty Trust	5,633	130,460
		<hr/>
		<b>2,637,224</b>
<b>Food and staples retailing (1.5%)</b>		
Walmart, Inc.	14,292	1,853,672
		<hr/>
		<b>1,853,672</b>
<b>Health-care equipment and supplies (0.6%)</b>		
Medtronic PLC	8,167	659,485
Nyxoah SA (Belgium) <sup>(NON)</sup>	9,312	58,666
		<hr/>
		<b>718,151</b>
<b>Health-care providers and services (6.7%)</b>		
CVS Health Corp.	12,002	1,144,631
Elevance Health, Inc.	2,075	942,548
HCA Healthcare, Inc.	3,160	580,776
McKesson Corp.	5,537	1,881,860
Tenet Healthcare Corp. <sup>(NON)</sup>	14,048	724,596
UnitedHealth Group, Inc.	5,714	2,885,799
		<hr/>
		<b>8,160,210</b>
<b>Hotels, restaurants, and leisure (0.9%)</b>		
Chuy's Holdings, Inc. <sup>(NON)</sup>	13,159	305,026
McDonald's Corp.	3,409	786,593
		<hr/>
		<b>1,091,619</b>
<b>Household durables (1.2%)</b>		
PulteGroup, Inc.	38,120	1,429,500
		<hr/>
		<b>1,429,500</b>
<b>Household products (1.2%)</b>		
Procter & Gamble Co. (The)	11,102	1,401,628
		<hr/>
		<b>1,401,628</b>
<b>Industrial conglomerates (1.2%)</b>		
Honeywell International, Inc.	9,099	1,519,260
		<hr/>

1,519,260

**Insurance (1.7%)**

Arch Capital Group, Ltd. <i>(NON)</i>	23,646	1,076,839
Assured Guaranty, Ltd.	21,436	1,038,574
		<hr/>
		<b>2,115,413</b>

**Interactive media and services (4.9%)**

Alphabet, Inc. Class C <i>(NON)</i>	46,413	4,462,610
Meta Platforms, Inc. Class A <i>(NON)</i>	10,444	1,417,042
		<hr/>
		<b>5,879,652</b>

**Internet and direct marketing retail (3.3%)**

Amazon.com, Inc. <i>(NON)</i>	35,345	3,993,985
		<hr/>
		<b>3,993,985</b>

**IT Services (2.4%)**

Gartner, Inc. <i>(NON)</i>	2,650	733,229
Mastercard, Inc. Class A	7,667	2,180,035
		<hr/>
		<b>2,913,264</b>

**Machinery (1.9%)**

Deere & Co.	2,114	705,843
Otis Worldwide Corp.	24,931	1,590,598
		<hr/>
		<b>2,296,441</b>

**Media (0.5%)**

Comcast Corp. Class A	19,808	580,969
		<hr/>
		<b>580,969</b>

**Metals and mining (1.5%)**

Freeport-McMoRan, Inc. (Indonesia)	29,871	816,374
Nucor Corp.	8,990	961,840
		<hr/>
		<b>1,778,214</b>

**Mortgage real estate investment trusts (REITs) (0.3%)**

Starwood Property Trust, Inc. <i>(S)</i>	19,587	356,875
		<hr/>
		<b>356,875</b>

**Multi-utilities (0.6%)**

CMS Energy Corp.	12,914	752,111
		<hr/>
		<b>752,111</b>

**Multiline retail (1.1%)**

Target Corp.	9,376	1,391,305
		<hr/>

**1,391,305**

**Oil, gas, and consumable fuels (3.0%)**

ConocoPhillips	14,909	1,525,787
Enterprise Products Partners LP	56,204	1,336,531
Phillips 66	9,725	785,002

**3,647,320**

**Pharmaceuticals (5.0%)**

Eli Lilly and Co.	5,150	1,665,253
Johnson & Johnson	13,449	2,197,029
Merck & Co., Inc.	12,873	1,108,623
Pfizer, Inc.	24,980	1,093,125

**6,064,030**

**Real estate management and development (0.9%)**

CBRE Group, Inc. Class A <i>(NON)</i>	16,296	1,100,143
---------------------------------------	--------	-----------

**1,100,143**

**Road and rail (1.7%)**

Union Pacific Corp.	10,295	2,005,672
---------------------	--------	-----------

**2,005,672**

**Semiconductors and semiconductor equipment (3.4%)**

Intel Corp.	17,823	459,299
Lam Research Corp.	2,838	1,038,708
NVIDIA Corp.	8,198	995,155
Qualcomm, Inc.	6,837	772,444
Texas Instruments, Inc.	5,480	848,194

**4,113,800**

**Software (9.9%)**

Adobe, Inc. <i>(NON)</i>	2,342	644,518
Microsoft Corp.	38,229	8,903,534
NCR Corp. <i>(NON)</i>	16,984	322,866
Oracle Corp.	25,120	1,534,078
salesforce.com, Inc. <i>(NON)</i>	3,903	561,408

**11,966,404**

**Specialty retail (2.1%)**

Best Buy Co., Inc.	11,791	746,842
Lowe's Cos., Inc.	9,591	1,801,286

**2,548,128**

**Technology hardware, storage, and peripherals (7.7%)**

Apple, Inc.	67,839	9,375,350
-------------	--------	-----------

		<b>9,375,350</b>
<b>Textiles, apparel, and luxury goods (0.4%)</b>		
Nike, Inc. Class B	5,402	449,014
		<b>449,014</b>
<b>Tobacco (0.8%)</b>		
Altria Group, Inc.	24,219	977,963
		<b>977,963</b>
<b>Trading companies and distributors (1.2%)</b>		
Karat Packaging, Inc. <i>(NON)</i>	17,099	273,413
United Rentals, Inc. <i>(NON)</i>	4,180	1,129,100
		<b>1,402,513</b>
<b>Total common stocks (cost \$79,213,208)</b>		<b>\$119,671,719</b>

---

**INVESTMENT COMPANIES (0.8%)<sup>(a)</sup>**

	<b>Shares</b>	<b>Value</b>
iShares Expanded Tech-Software Sector ETF	3,659	\$915,226
<b>Total investment companies (cost \$1,067,222)</b>		<b>\$915,226</b>

---

**SHORT-TERM INVESTMENTS (2.3%)<sup>(a)</sup>**

		<b>Principal amount/shares</b>	<b>Value</b>
Putnam Cash Collateral Pool, LLC 3.06% <i>(AFF)</i>	Shares	2,174,633	\$2,174,633
Putnam Short Term Investment Fund Class P 3.11% <i>(AFF)</i>	Shares	550,733	550,733
U.S. Treasury Bills 2.792%, 11/17/22		\$100,000	99,644
<b>Total short-term investments (cost \$2,825,008)</b>			<b>\$2,825,010</b>

**TOTAL INVESTMENTS**

## 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, 2022 through September 30, 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 \$121,021,092.

(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 9/30/22
<b>Short-term investments</b>					
Putnam Cash Collateral Pool, LLC*#	\$4,116,365	\$40,558,364	\$42,500,096	\$13,066	\$2,174,633
Putnam Short Term Investment Fund**	—	9,189,462	8,638,729	10,315	550,733
<b>Total Short-term investments</b>	<b>\$4,116,365</b>	<b>\$49,747,826</b>	<b>\$51,138,825</b>	<b>\$23,381</b>	<b>\$2,725,366</b>

\* 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 \$2,174,633 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 \$2,110,845.

\*\* 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.

(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.

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:

	<b>Valuation inputs</b>		
<b>Investments in securities:</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Common stocks*:</b>			
Communication services	\$8,358,951	\$264,655	\$—
Consumer discretionary	13,382,801	—	—
Consumer staples	7,257,836	—	—
Energy	3,647,320	—	—
Financials	15,667,655	—	—
Health care	19,590,919	—	—
Industrials	11,034,394	—	—
Information technology	29,721,458	—	—
Materials	2,779,614	—	—
Real estate	3,737,367	—	—
Utilities	4,228,749	—	—
	<hr/>	<hr/>	<hr/>
<b>Total common stocks</b>	<b>119,407,064</b>	<b>264,655</b>	<b>—</b>
Investment companies	915,226	—	—
Short-term investments	—	2,825,010	—
	<hr/>	<hr/>	<hr/>
<b>Totals by level</b>	<b>\$120,322,290</b>	<b>\$3,089,665</b>	<b>\$—</b>

\* 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.

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](http://www.sec.gov), or visit Putnam's Individual Investor Web site at [www.putnaminvestments.com](http://www.putnaminvestments.com)