

Putnam VT Small Cap Value Fund

The fund's portfolio

3/31/24 (Unaudited)

COMMON STOCKS (99.3%)(a)

	Shares	Value
Aerospace and defense (0.8%)		
V2X, Inc. <i>(NON)</i>	20,982	\$980,069
		980,069
Automobile components (1.6%)		
Dorman Products, Inc. <i>(NON)</i>	13,800	1,330,182
Motorcar Parts of America, Inc. <i>(NON)</i>	76,795	617,432
		1,947,614
Automobiles (0.9%)		
Harley-Davidson, Inc.	24,586	1,075,392
		1,075,392
Banks (15.5%)		
Amalgamated Financial Corp.	49,400	1,185,600
Axos Financial, Inc. <i>(NON)</i>	28,600	1,545,541
Bancorp, Inc. (The) <i>(NON)</i>	47,440	1,587,342
Bank of NT Butterfield & Son, Ltd. (The) (Bermuda)	32,000	1,023,680
Business First Bancshares, Inc.	38,000	846,640
Capital City Bank Group, Inc.	17,400	481,980
Coastal Financial Corp./WA <i>(NON)</i>	18,063	702,109
ConnectOne Bancorp, Inc.	47,709	930,326
First Foundation, Inc.	263,803	1,991,713
Five Star Bancorp	50,835	1,143,788
Metropolitan Bank Holding Corp. <i>(NON)</i>	25,920	997,920
Northrim BanCorp, Inc.	12,800	646,528
OFG Bancorp (Puerto Rico)	57,300	2,109,213
Origin Bancorp, Inc.	14,300	446,732
Peapack-Gladstone Financial Corp.	17,000	413,610
QCR Holdings, Inc.	18,978	1,152,724
Southern First Bancshares, Inc. <i>(NON)</i>	1,467	46,592
UMB Financial Corp.	13,600	1,183,064
		18,435,102
Biotechnology (3.0%)		
Ironwood Pharmaceuticals, Inc. <i>(NON)(S)</i>	72,445	630,996

MiMedx Group, Inc. <i>(NON)</i>	150,700	1,160,390
Veracyte, Inc. <i>(NON)</i>	48,800	1,081,408
Xencor, Inc. <i>(NON)</i>	31,700	701,521
		<hr/>
		3,574,315
Building products (2.0%)		
Janus International Group, Inc. <i>(NON)</i>	80,100	1,211,913
JELD-WEN Holding, Inc. <i>(NON)</i>	54,800	1,163,404
		<hr/>
		2,375,317
Capital markets (1.2%)		
Perella Weinberg Partners	98,900	1,397,457
		<hr/>
		1,397,457
Chemicals (0.7%)		
Tronox Holdings PLC	47,611	826,051
		<hr/>
		826,051
Commercial services and supplies (2.2%)		
Deluxe Corp.	46,900	965,671
HNI Corp.	37,700	1,701,401
		<hr/>
		2,667,072
Communications equipment (3.6%)		
Aviat Networks, Inc. <i>(NON)</i>	39,172	1,501,854
NETGEAR, Inc. <i>(NON)</i>	76,200	1,201,674
Ribbon Communications, Inc. <i>(NON)</i>	507,000	1,622,400
		<hr/>
		4,325,928
Construction and engineering (1.0%)		
Granite Construction, Inc.	21,547	1,230,980
		<hr/>
		1,230,980
Containers and packaging (0.8%)		
Graphic Packaging Holding Co.	32,400	945,432
		<hr/>
		945,432
Diversified consumer services (2.2%)		
Perdoceo Education Corp.	75,600	1,327,536
Universal Technical Institute, Inc. <i>(NON)</i>	83,227	1,326,638
		<hr/>
		2,654,174
Diversified REITs (1.0%)		
Alpine Income Property Trust, Inc. <i>(R)</i>	77,869	1,189,838
		<hr/>

1,189,838

Electric utilities (2.2%)

ALLETE, Inc.	17,500	1,043,700
NRG Energy, Inc.	23,000	1,556,870
		<hr/>
		2,600,570

Electronic equipment, instruments, and components (2.2%)

Benchmark Electronics, Inc.	43,700	1,311,437
Vishay Intertechnology, Inc.	55,400	1,256,472
		<hr/>
		2,567,909

Energy equipment and services (4.4%)

Diamond Offshore Drilling, Inc. <i>(NON)</i>	103,100	1,406,284
Helix Energy Solutions Group, Inc. <i>(NON)</i>	99,500	1,078,580
Newpark Resources, Inc. <i>(NON)</i>	257,137	1,856,529
Oceaneering International, Inc. <i>(NON)</i>	38,117	891,938
		<hr/>
		5,233,331

Entertainment (0.8%)

Lions Gate Entertainment Corp. Class A <i>(NON)(S)</i>	98,984	984,891
		<hr/>
		984,891

Financial services (1.7%)

NewtekOne, Inc. <i>(S)</i>	67,082	737,902
Walker & Dunlop, Inc.	12,180	1,230,911
		<hr/>
		1,968,813

Health care equipment and supplies (2.1%)

Haemonetics Corp. <i>(NON)</i>	15,300	1,305,855
Integer Holdings Corp. <i>(NON)</i>	9,900	1,155,132
		<hr/>
		2,460,987

Health care providers and services (6.4%)

Aveanna Healthcare Holdings, Inc. <i>(NON)</i>	263,929	657,183
Brookdale Senior Living, Inc. <i>(NON)</i>	273,146	1,805,495
DocGo, Inc. <i>(NON)(S)</i>	296,900	1,199,476
ModivCare, Inc. <i>(NON)</i>	25,355	594,575
Option Care Health, Inc. <i>(NON)</i>	32,100	1,076,634
Quipt Home Medical Corp. <i>(NON)</i>	210,000	917,700
RadNet, Inc. <i>(NON)</i>	27,920	1,358,587
		<hr/>
		7,609,650

Health care REITs (0.8%)

Healthcare Realty Trust, Inc. ^(R)	71,500	1,011,725
		<u>1,011,725</u>
Hotel and resort REITs (2.0%)		
Apple Hospitality REIT, Inc. ^(R)	73,400	1,202,292
RLJ Lodging Trust ^(R)	96,440	1,139,921
		<u>2,342,213</u>
Hotels, restaurants, and leisure (1.5%)		
Aramark	36,200	1,177,224
Dave & Buster's Entertainment, Inc. ^(NON)	9,200	575,920
		<u>1,753,144</u>
Household durables (3.0%)		
Cavco Industries, Inc. ^(NON)	2,900	1,157,274
M/I Homes, Inc. ^(NON)	7,500	1,022,175
Meritage Homes Corp.	4,300	754,478
Taylor Morrison Home Corp. ^(NON)	10,700	665,219
		<u>3,599,146</u>
Insurance (3.4%)		
Heritage Insurance Holdings, Inc. ^(NON)	105,604	1,124,683
Horace Mann Educators Corp.	21,900	810,081
Kemper Corp.	16,800	1,040,256
Skyward Specialty Insurance Group, Inc. ^(NON)	28,605	1,070,113
		<u>4,045,133</u>
Machinery (3.2%)		
Chart Industries, Inc. ^(NON)	8,643	1,423,675
Columbus McKinnon Corp./NY	25,800	1,151,454
Hillman Solutions Corp. ^(NON)	113,200	1,204,448
		<u>3,779,577</u>
Media (1.0%)		
Gray Television, Inc. ^(S)	181,800	1,148,976
		<u>1,148,976</u>
Metals and mining (2.3%)		
Alamos Gold, Inc. Class A (Canada)	62,880	927,480
Major Drilling Group International, Inc. (Canada) ^(NON)	129,100	857,776
Radius Recycling, Inc.	46,700	986,771
		<u>2,772,027</u>
Mortgage real estate investment trusts (REITs) (3.8%)		

AGNC Investment Corp. ^{(R)(S)}	119,900	1,187,010
Ladder Capital Corp. ^(R)	77,312	860,483
MFA Financial, Inc. ^(R)	89,200	1,017,772
Rithm Capital Corp. ^(R)	126,080	1,407,053
		<hr/>
		4,472,318
Multi-utilities (1.8%)		
Algonquin Power & Utilities Corp. (Canada)	157,800	997,296
Unitil Corp.	22,080	1,155,888
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		2,153,184
Oil, gas, and consumable fuels (5.6%)		
CNX Resources Corp. ^(NON)	56,320	1,335,910
Magnolia Oil & Gas Corp. Class A ^(S)	50,585	1,312,681
Permian Resources Corp.	79,313	1,400,668
SM Energy Co.	26,700	1,330,995
Teekay Tankers, Ltd. Class A (Canada)	23,000	1,343,430
		<hr/>
		6,723,684
Passenger airlines (1.0%)		
SkyWest, Inc. ^(NON)	17,100	1,181,268
		<hr/>
		1,181,268
Personal care products (1.0%)		
Edgewell Personal Care Co.	31,200	1,205,568
		<hr/>
		1,205,568
Professional services (1.1%)		
IBEX, Ltd. ^(NON)	82,290	1,269,735
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		1,269,735
Real estate management and development (0.3%)		
LuxUrban Hotels, Inc. ^{(NON)(S)}	218,737	301,857
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		301,857
Semiconductors and semiconductor equipment (3.5%)		
ACM Research, Inc. Class A ^(NON)	40,523	1,180,840
Ichor Holdings, Ltd. ^(NON)	30,909	1,193,706
SMART Global Holdings, Inc. ^{(NON)(S)}	66,800	1,758,176
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		4,132,722
Specialty retail (2.1%)		
Haverty Furniture Cos., Inc.	37,100	1,265,852
ODP Corp. (The) ^(NON)	22,900	1,214,845
		<hr/>

2,480,697

Textiles, apparel, and luxury goods (1.6%)

Steven Madden, Ltd.	26,500	1,120,420
Unifi, Inc. <i>(NON)</i>	136,164	815,622
		<u>1,936,042</u>

Tobacco (1.1%)

Turning Point Brands, Inc.	45,500	1,333,150
		<u>1,333,150</u>

Trading companies and distributors (2.9%)

Beacon Roofing Supply, Inc. <i>(NON)</i>	12,000	1,176,240
BlueLinx Holdings, Inc. <i>(NON)</i>	8,600	1,120,064
Custom Truck One Source, Inc. <i>(NON)</i>	33,100	192,642
Hudson Technologies, Inc. <i>(NON)</i>	91,400	1,006,314
		<u>3,495,260</u>

Total common stocks (cost \$113,382,723) \$118,188,318

SHORT-TERM INVESTMENTS (7.3%)^(a)

	Shares	Value
Putnam Cash Collateral Pool, LLC 5.57% ^(AFF)	8,411,420	\$8,411,420
Putnam Short Term Investment Fund Class P 5.50% ^(AFF)	274,694	274,694
		<u>\$8,686,114</u>

TOTAL INVESTMENTS

Total investments (cost \$122,068,837) \$126,874,432

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, 2024 through March 31, 2024 (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 Franklin Resources, Inc., 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 \$119,065,207.

(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 12/31/23	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/24
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$16,589,974	\$16,763,130	\$24,941,684	\$174,260	\$8,411,420
Putnam Short Term Investment Fund Class P‡	433,965	9,272,229	9,431,500	13,008	274,694
Total Short-term investments	\$17,023,939	\$26,035,359	\$34,373,184	\$187,268	\$8,686,114

* 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 \$8,411,420 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 \$8,094,081.

‡ 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.

(R) Real Estate Investment Trust.

(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. 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, which has been designated as valuation designee pursuant to Rule 2a-5 under the Investment Company Act of 1940, 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:

Investments in securities:	Valuation inputs		
	Level 1	Level 2	Level 3
Common stocks*:			
Communication services	\$2,133,867	\$—	\$—
Consumer discretionary	15,446,209	—	—
Consumer staples	2,538,718	—	—
Energy	11,957,015	—	—
Financials	30,318,823	—	—
Health care	13,644,952	—	—
Industrials	16,979,278	—	—
Information technology	11,026,559	—	—
Materials	4,543,510	—	—
Real estate	4,845,633	—	—
Utilities	4,753,754	—	—
Total common stocks	118,188,318	—	—
Short-term investments	—	8,686,114	—
Totals by level	\$118,188,318	\$8,686,114	\$—

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

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.putnam.com