

Putnam VT Small Cap Value Fund

The fund's portfolio

3/31/22 (Unaudited)

COMMON STOCKS (98.1%)(a)

	Shares	Value
Aerospace and defense (2.3%)		
Aerojet Rocketdyne Holdings, Inc.(NON)(S)	24,500	\$964,075
Maxar Technologies, Inc.	31,200	1,231,152
Vectrus, Inc.(NON)	30,558	1,095,810
		3,291,037
Air freight and logistics (0.8%)		
Radiant Logistics, Inc.(NON)	182,380	1,161,761
		1,161,761
Airlines (0.7%)		
Sun Country Airlines Holdings, Inc.(NON)	39,105	1,023,769
		1,023,769
Banks (18.1%)		
Ameris Bancorp	24,660	1,082,081
Bancorp, Inc. (The)(NON)	45,940	1,301,480
Berkshire Hills Bancorp, Inc.	31,720	918,928
Coastal Financial Corp./WA(NON)	27,763	1,270,157
ConnectOne Bancorp, Inc.	42,409	1,357,512
CrossFirst Bankshares, Inc.(NON)	86,640	1,365,446
Dime Community Bancshares, Inc.	35,500	1,227,235
Equity Bancshares, Inc. Class A	32,400	1,046,844
First Bancshares, Inc. (The)	27,580	928,343
First Foundation, Inc.	59,403	1,442,899
Five Star Bancorp	47,018	1,330,609
Lakeland Bancorp, Inc.	69,060	1,153,302
Metropolitan Bank Holding Corp.(NON)	12,584	1,280,674
OFG Bancorp (Puerto Rico)	55,800	1,486,512
Origin Bancorp, Inc.	26,700	1,129,143
Preferred Bank	18,960	1,404,746
Premier Financial Corp.	39,146	1,187,298
Professional Holding Corp. Class A(NON)	31,789	717,160
QCR Holdings, Inc.	20,778	1,175,827
Southern First Bancshares, Inc.(NON)	18,244	927,525
UMB Financial Corp.	11,600	1,127,056
Univest Financial Corp.	42,020	1,124,455

25,985,232**Building products (0.8%)**

Quanex Building Products Corp.	57,286	1,202,433
		<hr/> 1,202,433

Capital markets (0.8%)

TPG, Inc. <i>(NON)(S)</i>	35,984	1,084,558
		<hr/> 1,084,558

Chemicals (1.9%)

Olin Corp.	26,080	1,363,462
Tronox Holdings PLC Class A (United Kingdom)	71,000	1,405,090
		<hr/> 2,768,552

Commercial services and supplies (4.4%)

ACCO Brands Corp.	159,000	1,272,000
Aris Water Solution, Inc. Class A	93,147	1,695,275
Clean Harbors, Inc. <i>(NON)</i>	12,740	1,422,294
Deluxe Corp.	43,300	1,309,392
SP Plus Corp. <i>(NON)</i>	18,700	586,432
		<hr/> 6,285,393

Communications equipment (1.1%)

Aviat Networks, Inc. <i>(NON)</i>	48,800	1,501,576
		<hr/> 1,501,576

Construction and engineering (2.9%)

APi Group Corp. <i>(NON)</i>	52,200	1,097,766
Sterling Construction Co., Inc. <i>(NON)</i>	58,757	1,574,688
WillScot Mobile Mini Holdings Corp. <i>(NON)</i>	36,492	1,427,932
		<hr/> 4,100,386

Diversified consumer services (1.3%)

Universal Technical Institute, Inc. <i>(NON)</i>	201,705	1,785,089
		<hr/> 1,785,089

Electrical equipment (1.7%)

LSI Industries, Inc.	165,900	995,400
nVent Electric PLC (United Kingdom)	40,300	1,401,634
		<hr/> 2,397,034

Electronic equipment, instruments, and components (0.9%)

Jabil, Inc.	20,227	1,248,613
		<hr/>

1,248,613

Energy equipment and services (1.2%)

Newpark Resources, Inc. <i>(NON)</i>	468,937	1,716,309
		<hr/>
		1,716,309

Entertainment (0.9%)

Lions Gate Entertainment Corp. Class A <i>(NON)(S)</i>	80,884	1,314,365
		<hr/>
		1,314,365

Equity real estate investment trusts (REITs) (6.1%)

Alpine Income Property Trust, Inc. <i>(R)</i>	63,152	1,187,258
Apple Hospitality REIT, Inc. <i>(R)</i>	72,100	1,295,637
Diversified Healthcare Trust <i>(R)</i>	359,528	1,150,490
EPR Properties <i>(R)</i>	24,460	1,338,207
RLJ Lodging Trust <i>(R)</i>	101,240	1,425,459
Spirit Realty Capital, Inc. <i>(R)</i>	25,359	1,167,021
Xenia Hotels & Resorts, Inc. <i>(NON)(R)</i>	59,980	1,157,014
		<hr/>
		8,721,086

Food and staples retail (0.6%)

Andersons, Inc. (The)	15,680	788,077
		<hr/>
		788,077

Gas utilities (0.8%)

ONE Gas, Inc.	12,900	1,138,296
		<hr/>
		1,138,296

Health-care equipment and supplies (1.1%)

Lantheus Holdings, Inc. <i>(NON)</i>	28,940	1,600,671
		<hr/>
		1,600,671

Health-care providers and services (5.7%)

Acadia Healthcare Co., Inc. <i>(NON)</i>	19,205	1,258,504
Aveanna Healthcare Holdings, Inc. <i>(NON)</i>	240,500	820,105
Brookdale Senior Living, Inc. <i>(NON)</i>	282,946	1,994,769
Option Care Health, Inc. <i>(NON)</i>	62,000	1,770,720
RadNet, Inc. <i>(NON)</i>	42,520	951,172
Tivity Health, Inc. <i>(NON)</i>	40,240	1,294,521
		<hr/>
		8,089,791

Hotels, restaurants, and leisure (1.6%)

Brinker International, Inc. <i>(NON)(S)</i>	27,700	1,057,032
Everi Holdings, Inc. <i>(NON)</i>	59,000	1,239,000
		<hr/>

2,296,032**Household durables (0.5%)**

Hooker Furniture Corp.	40,500	767,070
		<hr/>
		767,070

Insurance (1.6%)

Argo Group International Holdings, Ltd. (Bermuda)	28,560	1,178,957
Heritage Insurance Holdings, Inc.	159,780	1,140,829
		<hr/>
		2,319,786

Interactive media and services (0.9%)

Ziff Davis, Inc. <i>(NON)</i>	13,300	1,287,174
		<hr/>
		1,287,174

Internet and direct marketing retail (2.0%)

a.k.a. Brands Holding Corp. <i>(NON)</i>	263,700	1,165,554
RumbleON, Inc. Class B <i>(NON)(S)</i>	47,900	1,638,659
		<hr/>
		2,804,213

IT Services (4.6%)

Hackett Group, Inc. (The)	92,800	2,139,968
IBEX, Ltd. <i>(NON)</i>	72,890	1,161,867
Limelight Networks, Inc. <i>(NON)</i>	392,500	2,048,850
Unisys Corp. <i>(NON)</i>	56,840	1,228,312
		<hr/>
		6,578,997

Leisure products (1.0%)

Vista Outdoor, Inc. <i>(NON)</i>	40,668	1,451,441
		<hr/>
		1,451,441

Machinery (4.0%)

Chart Industries, Inc. <i>(NON)</i>	7,600	1,305,452
Columbus McKinnon Corp./NY	26,959	1,143,062
Crane Co.	15,340	1,661,015
Hillenbrand, Inc.	26,100	1,152,837
Mayville Engineering Co., Inc. <i>(NON)</i>	48,203	451,662
		<hr/>
		5,714,028

Metals and mining (5.1%)

Alamos Gold, Inc. Class A (Canada)	130,080	1,095,274
Commercial Metals Co.	31,500	1,311,030
Ferroglobe Representation & Warranty Insurance Trust <i>(NON)</i>	102,740	—
Haynes International, Inc.	36,456	1,553,026
Major Drilling Group International, Inc. (Canada) <i>(NON)</i>	212,580	2,069,431

Ryerson Holding Corp.	37,400	1,309,748
		7,338,509
Mortgage real estate investment trusts (REITs) (2.2%)		
Ladder Capital Corp. ^(R)	137,012	1,626,332
New Residential Investment Corp. ^(R)	132,180	1,451,336
		3,077,668
Multi-utilities (0.7%)		
Unitil Corp.	19,580	976,650
		976,650
Oil, gas, and consumable fuels (5.9%)		
CNX Resources Corp. ^{(NON)(S)}	96,420	1,997,822
Magnolia Oil & Gas Corp. Class A	97,785	2,312,616
Scorpio Tankers, Inc. ^(S)	63,800	1,364,044
SM Energy Co.	68,446	2,665,972
		8,340,454
Pharmaceuticals (0.9%)		
Antares Pharma, Inc. ^(NON)	299,120	1,226,392
		1,226,392
Professional services (1.2%)		
ICF International, Inc.	17,840	1,679,458
		1,679,458
Semiconductors and semiconductor equipment (1.7%)		
Photronics, Inc. ^(NON)	76,180	1,292,775
Rambus, Inc. ^(NON)	34,340	1,095,103
		2,387,878
Software (0.7%)		
Verra Mobility Corp. ^(NON)	63,738	1,037,655
		1,037,655
Specialty retail (0.8%)		
Citi Trends, Inc. ^(NON)	38,277	1,172,233
		1,172,233
Technology hardware, storage, and peripherals (0.9%)		
Super Micro Computer, Inc. ^(NON)	34,300	1,305,801
		1,305,801

Textiles, apparel, and luxury goods (0.9%)

Unifi, Inc. <i>(NON)</i>	70,464	1,275,398
		<u>1,275,398</u>

Thriffs and mortgage finance (1.8%)

Bridgewater Bancshares, Inc. <i>(NON)</i>	67,980	1,133,906
Walker & Dunlop, Inc.	11,140	1,441,739
		<u>2,575,645</u>

Tobacco (0.8%)

Turning Point Brands, Inc.	34,100	1,159,741
		<u>1,159,741</u>

Trading companies and distributors (4.2%)

Custom Truck One Source, Inc. <i>(NON)(S)</i>	196,600	1,649,474
Karat Packaging, Inc. <i>(NON)</i>	52,302	1,038,195
MRC Global, Inc. <i>(NON)</i>	161,120	1,918,939
Titan Machinery, Inc. <i>(NON)</i>	46,720	1,320,307
		<u>5,926,915</u>

Total common stocks (cost \$122,840,896)		\$139,903,166
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INVESTMENT COMPANIES (1.6%)^(a)

	Shares	Value
PennantPark Investment Corp.	159,780	\$1,243,088
Trinity Capital, Inc.	53,565	1,034,340
		<u>\$2,277,428</u>

Total investment companies (cost \$1,698,573)		\$2,277,428
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SHORT-TERM INVESTMENTS (6.4%)^(a)

	Principal amount/shares	Value
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Interest in \$384,728,000 joint tri-party repurchase agreement dated 3/31/2022 with BofA Securities, Inc. due 4/1/2022 - maturity value of \$983,008 for an effective yield of 0.300% (collateralized by Agency Mortgage-Backed Securities with coupon rates ranging from 2.000% to 4.500% and due dates ranging from 2/1/2042 to 3/1/2052, valued at \$392,422,560)		\$983,000	\$983,000
Putnam Cash Collateral Pool, LLC 0.37% ^(AFF)	Shares	8,128,041	8,128,041
Total short-term investments (cost \$9,111,041)			\$9,111,041
TOTAL INVESTMENTS			
Total investments (cost \$133,650,510)			\$151,291,635

WRITTEN OPTIONS OUTSTANDING at 3/31/22 (premiums \$5,129) (Unaudited)

Counterparty	Expiration date/ strike price	Notional amount	Contract amount	Value
JPMorgan Chase Bank N.A.				
Olin Corp. (Put)	May-22/\$47.00	\$159,611	\$3,053	\$5,838
Total				\$5,838

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 March 31, 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 \$142,540,367.

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

(AFF) Affiliated company. For investments in Putnam Cash Collateral Pool, 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 3/31/22
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$7,233,470	\$14,503,026	\$13,608,455	\$2,054	\$8,128,041
Putnam Short Term Investment Fund**	1,014,103	915,395	1,929,498	61	—
Total Short-term investments	\$8,247,573	\$15,418,421	\$15,537,953	\$2,115	\$8,128,041

* 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 \$8,128,041 for the 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 \$7,894,400.

** 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.

At the close of the reporting period, the fund maintained liquid assets totaling \$143,491 to cover certain derivative contracts.

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 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.

Repurchase agreements: The fund, or any joint trading account, through its custodian, receives delivery of the underlying securities, the fair value of which at the time of purchase is required to be in an amount at least equal to the resale price, including accrued interest. Collateral for certain tri-party repurchase agreements, which totaled \$1,002,660 at the end of the reporting period, is held at the counterparty's custodian in a segregated account for the benefit of the fund and the counterparty. Putnam Management is responsible for determining that the value of these underlying securities is at all times at least equal to the resale price, including accrued interest. In the event of default or bankruptcy by the other party to the agreement, retention of the collateral may be subject to legal proceedings.

Options contracts: The fund used options contracts to hedge against changes in values of securities it owns, owned or expects to own, to generate additional income for the portfolio, to enhance the return on securities owned and to manage downside risks.

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 had a net liability position of \$5,838 on open derivative contracts subject to the Master Agreements. There was no collateral posted by the fund at period end for these 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	\$2,601,539	\$—	\$—
Consumer discretionary	11,551,476	—	—
Consumer staples	1,947,818	—	—
Energy	10,056,763	—	—
Financials	35,042,889	—	—
Health care	10,916,854	—	—
Industrials	32,782,214	—	—
Information technology	14,060,520	—	—

Materials	10,107,061	—	—
Real estate	8,721,086	—	—
Utilities	2,114,946	—	—
	<hr/>	<hr/>	<hr/>
Total common stocks	139,903,166	—	—
Investment companies	2,277,428	—	—
Short-term investments	—	9,111,041	—
	<hr/>	<hr/>	<hr/>
Totals by level	\$142,180,594	\$9,111,041	\$—

Valuation inputs

Other financial instruments:	Level 1	Level 2	Level 3
Written options outstanding	\$—	\$(5,838)	\$—
	<hr/>	<hr/>	<hr/>
Totals by level	\$—	\$(5,838)	\$—

* 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:

Written equity option contracts (contract amount) \$2,000

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