

Putnam VT Small Cap Value Fund

The fund's portfolio

3/31/20 (Unaudited)

COMMON STOCKS (94.7%)(a)

| | Shares | Value |
|--|---------|-------------------|
| Aerospace and defense (2.7%) | | |
| Parsons Corp.(NON) | 28,049 | \$896,446 |
| Vectrus, Inc.(NON) | 25,598 | 1,060,013 |
| | | 1,956,459 |
| Auto components (0.9%) | | |
| Cooper Tire & Rubber Co. | 39,323 | 640,965 |
| | | 640,965 |
| Banks (14.9%) | | |
| Ameris Bancorp | 19,900 | 472,824 |
| Baycom Corp.(NON) | 41,800 | 503,690 |
| Coastal Financial Corp./WA(NON) | 18,098 | 190,210 |
| ConnectOne Bancorp, Inc. | 58,669 | 788,511 |
| First Bancshares, Inc. (The) | 22,300 | 425,261 |
| First Horizon National Corp.(S) | 79,800 | 643,188 |
| First Merchants Corp. | 11,900 | 315,231 |
| Investors Bancorp, Inc. | 115,513 | 922,949 |
| Lakeland Bancorp, Inc. | 65,900 | 712,379 |
| OFG Bancorp (Puerto Rico) | 74,400 | 831,792 |
| Professional Holding Corp. Class A(NON)(S) | 31,522 | 502,776 |
| QCR Holdings, Inc. | 33,106 | 896,179 |
| Southern First Bancshares, Inc.(NON) | 18,684 | 530,065 |
| Sterling Bancorp | 69,649 | 727,832 |
| TCF Financial Corp. | 38,200 | 865,612 |
| TriCo Bancshares | 12,100 | 360,822 |
| Univest Financial Corp. | 19,200 | 313,344 |
| Western Alliance Bancorp | 22,100 | 676,481 |
| | | 10,679,146 |
| Building products (2.9%) | | |
| Builders FirstSource, Inc.(NON) | 40,600 | 496,538 |
| Masonite International Corp.(NON) | 15,800 | 749,710 |
| Quanex Building Products Corp. | 82,666 | 833,273 |
| | | 2,079,521 |

| | | |
|---|---------|------------------|
| Capital markets (0.2%) | | |
| Stifel Financial Corp. | 2,800 | 115,584 |
| | | 115,584 |
| Chemicals (1.3%) | | |
| Element Solutions, Inc. <i>(NON)</i> | 113,100 | 945,516 |
| | | 945,516 |
| Commercial services and supplies (0.9%) | | |
| CECO Environmental Corp. <i>(NON)</i> | 133,326 | 622,632 |
| | | 622,632 |
| Communications equipment (1.0%) | | |
| Lumentum Holdings, Inc. <i>(NON)</i> | 9,500 | 700,150 |
| | | 700,150 |
| Construction and engineering (4.7%) | | |
| Ameresco, Inc. Class A <i>(NON)</i> | 40,301 | 686,326 |
| MasTec, Inc. <i>(NON)</i> | 16,200 | 530,226 |
| MYR Group, Inc. <i>(NON)</i> | 27,602 | 722,896 |
| Sterling Construction Co., Inc. <i>(NON)</i> | 91,817 | 872,262 |
| WillScot Corp. <i>(NON)(S)</i> | 57,100 | 578,423 |
| | | 3,390,133 |
| Containers and packaging (1.3%) | | |
| Silgan Holdings, Inc. | 32,500 | 943,150 |
| | | 943,150 |
| Distributors (1.1%) | | |
| Core-Mark Holding Co., Inc. | 26,200 | 748,534 |
| | | 748,534 |
| Electric utilities (2.4%) | | |
| PNM Resources, Inc. | 21,800 | 828,400 |
| Portland General Electric Co. | 18,900 | 906,066 |
| | | 1,734,466 |
| Electronic equipment, instruments, and components (3.3%) | | |
| Insight enterprises, Inc. <i>(NON)</i> | 17,100 | 720,423 |
| Jabil, Inc. | 40,900 | 1,005,322 |
| SYNNEX Corp. | 8,543 | 624,493 |
| | | 2,350,238 |
| Energy equipment and services (1.2%) | | |
| Newpark Resources, Inc. <i>(NON)</i> | 580,300 | 520,529 |
| Select Energy Services, Inc. Class A <i>(NON)</i> | 96,090 | 310,371 |

| | | |
|--|---------|------------------|
| | | 830,900 |
| Entertainment (1.9%) | | |
| IMAX Corp. (Canada) ^(NON) | 64,600 | 584,630 |
| Lions Gate Entertainment Corp. Class A ^{(NON)(S)} | 128,251 | 779,766 |
| | | 1,364,396 |
| Equity real estate investment trusts (REITs) (7.3%) | | |
| Alpine Income Property Trust, Inc. ^(R) | 62,617 | 770,815 |
| Columbia Property Trust, Inc. ^(R) | 18,100 | 226,250 |
| Diversified Healthcare Trust ^(R) | 95,128 | 345,315 |
| Gaming and Leisure Properties, Inc. ^(R) | 26,735 | 740,827 |
| Plymouth Industrial REIT, Inc. ^(R) | 51,100 | 570,276 |
| QTS Realty Trust, Inc. Class A ^(R) | 20,245 | 1,174,412 |
| Spirit Realty Capital, Inc. ^(R) | 29,367 | 767,947 |
| STORE Capital Corp. ^(R) | 34,500 | 625,140 |
| | | 5,220,982 |
| Food and staples retail (1.6%) | | |
| Ingles Markets, Inc. Class A | 30,800 | 1,113,728 |
| | | 1,113,728 |
| Health-care providers and services (3.8%) | | |
| Acadia Healthcare Co., Inc. ^(NON) | 31,233 | 573,126 |
| Brookdale Senior Living, Inc. ^(NON) | 165,666 | 516,878 |
| Magellan Health, Inc. ^(NON) | 15,400 | 740,894 |
| Premier, Inc. Class A ^(NON) | 27,800 | 909,616 |
| | | 2,740,514 |
| Hotels, restaurants, and leisure (1.3%) | | |
| Darden Restaurants, Inc. | 9,400 | 511,924 |
| Dine Brans Global, Inc. | 13,900 | 398,652 |
| | | 910,576 |
| Household durables (0.7%) | | |
| Purple Innovation, Inc. ^(NON) | 88,459 | 502,447 |
| | | 502,447 |
| Insurance (3.4%) | | |
| Argo Group International Holdings, Ltd. (Bermuda) | 21,300 | 789,378 |
| Heritage Insurance Holdings, Inc. | 71,414 | 764,844 |
| Palomar Holdings, Inc. ^(NON) | 13,522 | 786,440 |
| State Auto Financial Corp. | 3,821 | 106,186 |
| | | 2,446,848 |
| Interactive media and services (1.5%) | | |

| | | |
|---|---------|------------------|
| Meet Group, Inc. (The) ^{(NON)(S)} | 185,583 | 1,089,372 |
| | | 1,089,372 |
| IT Services (2.7%) | | |
| CACI International, Inc. Class A ^(NON) | 5,100 | 1,076,865 |
| Unisys Corp. ^(NON) | 71,400 | 881,790 |
| | | 1,958,655 |
| Leisure products (2.3%) | | |
| Clarus Corp. | 62,070 | 608,286 |
| Vista Outdoor, Inc. ^(NON) | 115,708 | 1,018,230 |
| | | 1,626,516 |
| Machinery (3.7%) | | |
| Columbus McKinnon Corp./NY | 33,200 | 830,000 |
| Mayville Engineering Co., Inc. ^(NON) | 81,811 | 501,501 |
| Rexnord Corp. | 39,200 | 888,664 |
| Wabash National Corp. | 60,700 | 438,254 |
| | | 2,658,419 |
| Media (0.4%) | | |
| Emerald Holding, Inc. | 103,300 | 267,547 |
| | | 267,547 |
| Metals and mining (—%) | | |
| Ferroglobe Representation & Warranty Insurance Trust ^(NON) | 102,740 | — |
| | | — |
| Mortgage real estate investment trusts (REITs) (1.0%) | | |
| KKR Real Estate Finance Trust, Inc. ^(R) | 19,524 | 293,055 |
| Ladder Capital Corp. ^(R) | 87,200 | 413,328 |
| | | 706,383 |
| Multi-utilities (1.5%) | | |
| Unitil Corp. | 21,000 | 1,098,720 |
| | | 1,098,720 |
| Multiline retail (0.9%) | | |
| Big Lots, Inc. | 45,100 | 641,322 |
| | | 641,322 |
| Oil, gas, and consumable fuels (3.3%) | | |
| Arch Coal, Inc. Class A ^(S) | 12,100 | 349,690 |
| Magnolia Oil & Gas Corp. Class A ^(NON) | 89,100 | 356,400 |
| Par Pacific Holdings, Inc. ^(NON) | 24,829 | 176,286 |

| | | |
|--|---------|------------------|
| Range Resources Corp. ^(S) | 104,900 | 239,172 |
| Scorpio Tankers, Inc. ^(S) | 63,304 | 1,210,373 |
| | | <hr/> |
| | | 2,331,921 |
| Paper and forest products (2.1%) | | |
| Louisiana-Pacific Corp. | 48,300 | 829,794 |
| Verso Corp. Class A ^(NON) | 59,400 | 670,032 |
| | | <hr/> |
| | | 1,499,826 |
| Pharmaceuticals (1.4%) | | |
| Prestige Brands Holdings, Inc. ^(NON) | 27,000 | 990,360 |
| | | <hr/> |
| | | 990,360 |
| Professional services (—%) | | |
| BancTec, Inc. 144A CVR ^(F) | 152,299 | — |
| | | <hr/> |
| | | — |
| Semiconductors and semiconductor equipment (3.7%) | | |
| FormFactor, Inc. ^(NON) | 36,700 | 737,303 |
| Photronics, Inc. ^(NON) | 91,906 | 942,956 |
| Silicon Motion Technology Corp. ADR (Taiwan) | 26,200 | 960,492 |
| | | <hr/> |
| | | 2,640,751 |
| Software (1.9%) | | |
| Avaya Holdings Corp. ^{(NON)(S)} | 81,211 | 656,997 |
| j2 Global, Inc. | 9,400 | 703,590 |
| | | <hr/> |
| | | 1,360,587 |
| Specialty retail (1.8%) | | |
| Express, Inc. ^{(NON)(S)} | 71,700 | 106,833 |
| Genesco, Inc. ^(NON) | 19,700 | 262,798 |
| Murphy USA, Inc. ^(NON) | 3,874 | 326,811 |
| Shoe Carnival, Inc. ^(S) | 27,900 | 579,483 |
| | | <hr/> |
| | | 1,275,925 |
| Thriffs and mortgage finance (3.5%) | | |
| First Defiance Financial Corp. | 30,126 | 444,057 |
| Flagstar Bancorp, Inc. | 41,800 | 828,894 |
| MGIC Investment Corp. | 81,500 | 517,525 |
| Walker & Dunlop, Inc. | 17,500 | 704,725 |
| | | <hr/> |
| | | 2,495,201 |
| Tobacco (1.0%) | | |
| Turning Point Brands, Inc. | 35,100 | 740,961 |
| | | <hr/> |
| | | 740,961 |

Trading companies and distributors (2.0%)

| | | |
|--------------------------------------|---------|------------------|
| GMS, Inc. <i>(NON)</i> | 34,208 | 538,092 |
| MRC Global, Inc. <i>(NON)</i> | 96,000 | 408,960 |
| Nesco Holdings, Inc. <i>(NON)(S)</i> | 157,639 | 517,056 |
| | | <u>1,464,108</u> |

Water utilities (1.2%)

| | | |
|---|--------|----------------|
| Consolidated Water Co., Ltd. (Cayman Islands) | 53,823 | 882,697 |
| | | <u>882,697</u> |

Total common stocks (cost \$93,943,156) \$67,766,156

INVESTMENT COMPANIES (2.9%)^(a)

| | Shares | Value |
|--|---------------|---------------------------|
| Crescent Capital BDC, Inc. | 37,527 | \$362,136 |
| Main Street Capital Corp. | 9,700 | 198,947 |
| Owl Rock Capital Corp. | 49,100 | 566,614 |
| Saratoga Investment Corp. | 42,433 | 488,404 |
| TriplePoint Venture Growth BDC Corp. | 79,800 | 458,052 |
| Total investment companies (cost \$3,519,183) | | <u>\$2,074,153</u> |

WARRANTS (—%)^(a)*(NON)*

| | Expiration date | Strike Price | Warrants | Value |
|---------------------------------------|------------------------|---------------------|-----------------|-----------------------|
| Nesco Holdings, Inc. | 1/1/25 | \$11.50 | 25,714 | \$4,371 |
| Total warrants (cost \$32,914) | | | | <u>\$4,371</u> |

SHORT-TERM INVESTMENTS (12.0%)^(a)

| | Shares | Value |
|--|-----------|---------------------|
| Putnam Cash Collateral Pool, LLC 0.54% ^(AFF) | 7,025,625 | \$7,025,625 |
| Putnam Short Term Investment Fund 0.92% ^(AFF) | 1,528,081 | 1,528,081 |
| Total short-term investments (cost \$8,553,706) | | \$8,553,706 |
| TOTAL INVESTMENTS | | |
| Total investments (cost \$106,048,959) | | \$78,398,386 |

Key to holding's abbreviations

ADR American Depository Receipts: represents ownership of foreign securities on deposit with a custodian bank

CVR Contingent Value Rights

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, 2020 through March 31, 2020 (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 \$71,564,441.

^(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 12/31/19 | Purchase cost | Sale proceeds | Investment income | Shares outstanding and fair value as of 3/31/20 |
|-------------------------------------|---------------------------------|---------------------|---------------------|----------------------|---|
| Short-term investments | | | | | |
| Putnam Cash Collateral Pool, LLC*# | \$16,711,340 | \$19,335,296 | \$29,021,011 | \$72,676 | \$7,025,625 |
| Putnam Short Term Investment Fund** | 1,931,235 | 10,211,450 | 10,614,604 | 5,184 | 1,528,081 |
| Total Short-term investments | \$18,642,575 | \$29,546,746 | \$39,635,615 | \$77,860 | \$8,553,706 |

* No management fees are charged to Putnam Cash Collateral Pool, LLC. There were no realized or unrealized gains or losses during the period.

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 received cash collateral of \$7,025,625, 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. 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 \$6,572,375. Certain of these securities were sold prior to the close of the reporting 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.

(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.

(R) Real Estate Investment Trust.

(S) This security is on loan, in part or in entirety, at the close of the reporting period.

144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

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.

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 | \$2,721,315 | \$— | \$— |
| Consumer discretionary | 6,346,285 | — | — |
| Consumer staples | 1,854,689 | — | — |
| Energy | 3,162,821 | — | — |
| Financials | 16,443,162 | — | — |
| Health care | 3,730,874 | — | — |
| Industrials | 12,171,272 | — | —** |
| Information technology | 9,010,381 | — | — |
| Materials | 3,388,492 | — | — |
| Real estate | 5,220,982 | — | — |
| Utilities | 3,715,883 | — | — |
| Total common stocks | 67,766,156 | — | — |
| Investment companies | 2,074,153 | — | — |
| Warrants | 4,371 | — | — |
| Short-term investments | 1,528,081 | 7,025,625 | — |
| Totals by level | \$71,372,761 | \$7,025,625 | \$— |

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

**Value of Level 3 Security is \$—.

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:

| | |
|-------------------------------|--------|
| Warrants (number of warrants) | 26,000 |
|-------------------------------|--------|

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