

Putnam VT Growth Opportunities Fund

The fund's portfolio

3/31/20 (Unaudited)

COMMON STOCKS (98.5%)(a)

	Shares	Value
Aerospace and defense (1.6%)		
Northrop Grumman Corp.	34,180	\$10,341,159
TransDigm Group, Inc.	6,996	2,240,049
		<u>12,581,208</u>
Automobiles (0.5%)		
Tesla Motors, Inc. <i>(NON)</i>	7,037	3,687,388
		<u>3,687,388</u>
Biotechnology (3.7%)		
Regeneron Pharmaceuticals, Inc. <i>(NON)</i>	10,555	5,153,901
Seattle Genetics, Inc. <i>(NON)</i>	69,112	7,974,143
Vertex Pharmaceuticals, Inc. <i>(NON)</i>	63,564	15,125,054
		<u>28,253,098</u>
Capital markets (1.8%)		
London Stock Exchange Group PLC (United Kingdom)	62,925	5,669,645
S&P Global, Inc.	34,161	8,371,153
		<u>14,040,798</u>
Chemicals (2.0%)		
Linde PLC	40,034	6,925,882
Sherwin-Williams Co. (The)	17,602	8,088,471
		<u>15,014,353</u>
Commercial services and supplies (1.2%)		
New Bigfoot Other Assets GmbH (acquired 8/2/13, cost \$44) (Private) (Germany) <i>(NON)(F)(RES)</i>	33	27
New Middle East Other Assets GmbH (acquired 8/2/13, cost \$19) (Private) (Germany) <i>(NON)(F)(RES)</i>	14	12
Waste Connections, Inc.	123,356	9,560,090
		<u>9,560,129</u>
Consumer finance (0.1%)		
Oportun Financial Corp. <i>(NON)</i>	77,348	816,021
		<u>816,021</u>

816,021

Entertainment (2.1%)

Live Nation Entertainment, Inc. <i>(NON)</i>	225,094	10,232,773
Netflix, Inc. <i>(NON)</i>	15,551	5,839,401
		<hr/>
		16,072,174

Equity real estate investment trusts (REITs) (2.0%)

American Tower Corp. <i>(R)</i>	72,180	15,717,195
		<hr/>
		15,717,195

Food and staples retail (1.3%)

Walmart, Inc.	87,977	9,995,947
		<hr/>
		9,995,947

Health-care equipment and supplies (7.2%)

Cooper Cos., Inc. (The)	20,489	5,648,203
Danaher Corp.	133,441	18,469,569
DexCom, Inc. <i>(NON)</i>	24,988	6,728,519
Edwards Lifesciences Corp. <i>(NON)</i>	41,980	7,918,268
IDEXX Laboratories, Inc. <i>(NON)</i>	56,149	13,601,534
Intuitive Surgical, Inc. <i>(NON)</i>	5,924	2,933,624
		<hr/>
		55,299,717

Health-care providers and services (2.5%)

UnitedHealth Group, Inc.	78,525	19,582,565
		<hr/>
		19,582,565

Hotels, restaurants, and leisure (0.9%)

Chipotle Mexican Grill, Inc. <i>(NON)</i>	10,348	6,771,731
		<hr/>
		6,771,731

Household durables (—%)

HC Brillant Services GmbH (acquired 8/2/13 to 8/31/16, cost \$44) (Private) (Germany) <i>(NON)(F)(RES)</i>	66	55
		<hr/>
		55

Household products (0.2%)

Procter & Gamble Co. (The)	16,985	1,868,350
		<hr/>
		1,868,350

Industrial conglomerates (0.9%)

Roper Technologies, Inc.	22,286	6,948,998
		<hr/>
		6,948,998

Insurance (0.7%)

AIA Group, Ltd. (Hong Kong)	565,737	5,089,541
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		5,089,541
Interactive media and services (6.0%)		
Alphabet, Inc. Class C ^(NON)	29,424	34,214,521
Facebook, Inc. Class A ^(NON)	71,443	11,916,692
		46,131,213
Internet and direct marketing retail (8.6%)		
Alibaba Group Holding, Ltd. ADR (China) ^(NON)	39,242	7,631,784
Amazon.com, Inc. ^(NON)	30,202	58,885,443
		66,517,227
IT Services (11.9%)		
Edenred (France)	107,412	4,495,541
Fidelity National Information Services, Inc.	140,556	17,097,232
Mastercard, Inc. Class A	80,608	19,471,668
PayPal Holdings, Inc. ^(NON)	239,670	22,946,006
Visa, Inc. Class A ^(S)	171,407	27,617,096
		91,627,543
Life sciences tools and services (1.6%)		
Lonza Group AG (Switzerland)	29,206	12,151,190
		12,151,190
Media (1.9%)		
Charter Communications, Inc. Class A ^(NON)	32,897	14,353,290
		14,353,290
Multiline retail (0.8%)		
Target Corp.	63,101	5,866,500
		5,866,500
Personal products (0.5%)		
Estee Lauder Cos., Inc. (The) Class A	26,008	4,144,115
		4,144,115
Pharmaceuticals (1.2%)		
Merck & Co., Inc.	122,412	9,418,379
		9,418,379
Professional services (2.1%)		
CoStar Group, Inc. ^(NON)	27,446	16,116,566
		16,116,566
Road and rail (1.0%)		
Union Pacific Corp.	55,683	7,853,530

		<u>7,853,530</u>
Semiconductors and semiconductor equipment (3.6%)		
NVIDIA Corp.	66,327	17,483,797
Texas Instruments, Inc.	100,387	10,031,673
		<u>27,515,470</u>
Software (18.6%)		
Adobe, Inc. <i>(NON)</i>	61,142	19,457,830
Dassault Systemes SA (France)	43,827	6,499,402
DocuSign, Inc. <i>(NON)</i>	105,100	9,711,240
Microsoft Corp.	519,206	81,883,978
RingCentral, Inc. Class A <i>(NON)</i>	35,768	7,579,597
Salesforce.com, Inc. <i>(NON)</i>	129,353	18,624,245
		<u>143,756,292</u>
Specialty retail (1.7%)		
Home Depot, Inc. (The)	68,916	12,867,306
		<u>12,867,306</u>
Technology hardware, storage, and peripherals (7.7%)		
Apple, Inc.	234,900	59,732,721
		<u>59,732,721</u>
Textiles, apparel, and luxury goods (2.7%)		
lululemon athletica, Inc. (Canada) <i>(NON)</i>	36,474	6,913,647
NIKE, Inc. Class B	166,603	13,784,730
		<u>20,698,377</u>
Total common stocks (cost \$486,683,318)		<u>\$760,048,987</u>

WARRANTS (—%)(a)(NON)

	Expiration date	Strike Price	Warrants	Value
Neuralstem, Inc. Ser. K, (acquired 4/20/17, cost \$—) <i>(RES)</i>	1/9/22	\$42.00	430	\$—
Total warrants (cost \$—)				<u>\$—</u>

SHORT-TERM INVESTMENTS (5.2%)(a)

		Principal amount/ shares	Value
Putnam Cash Collateral Pool, LLC 0.54%(AFF)	Shares	27,648,400	\$27,648,400
Putnam Short Term Investment Fund 0.92%(AFF)	Shares	12,348,573	12,348,573
U.S. Treasury Bills 1.569%, 5/21/20		\$162,000	161,985
Total short-term investments (cost \$40,158,629)			\$40,158,958

TOTAL INVESTMENTS

Total investments (cost \$526,841,947)			\$800,207,945
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Key to holding's abbreviations

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

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 \$771,242,839.

(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 \$94, or less than 0.1% of net assets.

(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
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Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$11,751,750	\$132,126,175	\$116,229,525	\$21,762	\$27,648,400
Putnam Short Term Investment Fund**	2,855,645	63,111,141	53,618,213	33,422	12,348,573
Total Short-term investments	\$14,607,395	\$195,237,316	\$169,847,738	\$55,184	\$39,996,973

* 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 \$27,648,400, 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 \$26,359,232.

** 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. At the close of the reporting period, fair value pricing was also used for certain foreign securities in the portfolio.

(R) Real Estate Investment Trust.

(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:

	Valuation inputs		
Investments in securities:	Level 1	Level 2	Level 3
Common stocks*:			
Communication services	\$76,556,677	\$—	\$—
Consumer discretionary	116,408,529	—	55
Consumer staples	16,008,412	—	—
Financials	9,187,174	10,759,186	—
Health care	112,553,759	12,151,190	—

Industrials	53,060,392	—	39
Information technology	311,637,083	10,994,943	—
Materials	15,014,353	—	—
Real estate	15,717,195	—	—
	<u> </u>	<u> </u>	<u> </u>
Total common stocks	726,143,574	33,905,319	94
Warrants	—	—	—
Short-term investments	12,348,573	27,810,385	—
	<u> </u>	<u> </u>	<u> </u>
Totals by level	\$738,492,147	\$61,715,704	\$94

* 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:

Warrants (number of warrants) 400

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