

Putnam VT Growth Opportunities Fund

The fund's portfolio

9/30/21 (Unaudited)

COMMON STOCKS (99.8%)(a)

	Shares	Value
Aerospace and defense (0.5%)		
TransDigm Group, Inc.(NON)	9,491	\$5,927,794
		<u>5,927,794</u>
Automobiles (1.9%)		
Tesla, Inc.(NON)	28,741	22,288,071
		<u>22,288,071</u>
Biotechnology (1.2%)		
Moderna, Inc.(NON)	6,052	2,329,173
Regeneron Pharmaceuticals, Inc.(NON)	19,571	11,843,978
		<u>14,173,151</u>
Building products (1.3%)		
Johnson Controls International PLC	216,842	14,762,603
		<u>14,762,603</u>
Capital markets (1.8%)		
London Stock Exchange Group PLC (United Kingdom)	74,048	7,397,952
S&P Global, Inc.	29,902	12,705,061
		<u>20,103,013</u>
Chemicals (1.0%)		
Sherwin-Williams Co. (The)	42,379	11,854,678
		<u>11,854,678</u>
Entertainment (3.2%)		
Live Nation Entertainment, Inc.(NON)	145,935	13,299,057
Netflix, Inc.(NON)	11,035	6,735,102
Universal Music Group NV (Netherlands)(NON)	168,888	4,522,020
Walt Disney Co. (The)(NON)	69,871	11,820,077
		<u>36,376,256</u>
Equity real estate investment trusts (REITs) (1.2%)		
American Tower Corp.(R)	52,083	13,823,349
		<u>13,823,349</u>

		13,823,349
Health-care equipment and supplies (3.9%)		
Danaher Corp.	64,708	19,699,704
DexCom, Inc. <i>(NON)</i>	23,820	13,026,205
IDEXX Laboratories, Inc. <i>(NON)</i>	19,932	12,395,711
		45,121,620
Health-care providers and services (2.4%)		
HCA Healthcare, Inc.	58,481	14,194,508
UnitedHealth Group, Inc.	35,450	13,851,733
		28,046,241
Hotels, restaurants, and leisure (3.3%)		
Airbnb, Inc. Class A <i>(NON)</i>	89,495	15,012,786
Chipotle Mexican Grill, Inc. <i>(NON)</i>	7,028	12,773,531
DraftKings, Inc. Class A <i>(NON)(S)</i>	202,673	9,760,732
		37,547,049
Household durables (—%)		
HC Brillant Services GmbH (acquired 8/2/13 to 8/31/16, cost \$44) (Private) (Germany) <i>(NON)(F)(RES)</i>	66	—
		—
Insurance (0.7%)		
AIA Group, Ltd. (Hong Kong)	697,137	8,026,933
		8,026,933
Interactive media and services (9.5%)		
Alphabet, Inc. Class C <i>(NON)</i>	25,975	69,231,427
Facebook, Inc. Class A <i>(NON)</i>	119,031	40,397,931
		109,629,358
Internet and direct marketing retail (7.9%)		
Amazon.com, Inc. <i>(NON)</i>	25,500	83,768,520
MercadoLibre, Inc. (Argentina) <i>(NON)</i>	4,191	7,038,365
		90,806,885
IT Services (9.9%)		
Mastercard, Inc. Class A	83,464	29,018,764
PayPal Holdings, Inc. <i>(NON)</i>	144,836	37,687,776
Square, Inc. Class A <i>(NON)</i>	19,681	4,720,291
Twilio, Inc. Class A <i>(NON)</i>	32,144	10,255,543
Visa, Inc. Class A	143,634	31,994,474
		113,676,848
Life sciences tools and services (2.3%)		

IQVIA Holdings, Inc. <i>(NON)</i>	61,702	14,780,097
Lonza Group AG (Switzerland)	16,164	12,109,922
		<hr/>
		26,890,019
Machinery (1.3%)		
Deere & Co.	43,362	14,529,305
		<hr/>
		14,529,305
Media (1.1%)		
Charter Communications, Inc. Class A <i>(NON)(S)</i>	16,855	12,263,024
		<hr/>
		12,263,024
Personal products (1.1%)		
Estee Lauder Cos., Inc. (The) Class A	44,055	13,213,416
		<hr/>
		13,213,416
Pharmaceuticals (1.3%)		
Eli Lilly and Co.	66,047	15,260,159
		<hr/>
		15,260,159
Professional services (1.3%)		
CoStar Group, Inc. <i>(NON)</i>	176,888	15,222,981
		<hr/>
		15,222,981
Road and rail (2.5%)		
Uber Technologies, Inc. <i>(NON)</i>	335,921	15,049,261
Union Pacific Corp.	70,266	13,772,839
		<hr/>
		28,822,100
Semiconductors and semiconductor equipment (5.2%)		
Advanced Micro Devices, Inc. <i>(NON)</i>	111,104	11,432,602
Applied Materials, Inc.	39,839	5,128,474
Marvell Technology, Inc.	75,758	4,568,965
NVIDIA Corp.	184,092	38,136,499
		<hr/>
		59,266,540
Software (19.4%)		
Adobe, Inc. <i>(NON)</i>	53,542	30,825,200
Cadence Design Systems, Inc. <i>(NON)</i>	109,387	16,565,567
DocuSign, Inc. <i>(NON)</i>	40,076	10,316,765
Dynatrace, Inc. <i>(NON)</i>	125,953	8,938,884
Intuit, Inc.	38,106	20,558,568
Microsoft Corp.	406,076	114,480,946
Salesforce.com, Inc. <i>(NON)</i>	9,445	2,561,673
ServiceNow, Inc. <i>(NON)</i>	30,357	18,890,250
		<hr/>

223,137,853

Specialty retail (3.6%)

Home Depot, Inc. (The)	37,543	12,323,865
O'Reilly Automotive, Inc. <i>(NON)</i>	21,159	12,929,419
TJX Cos., Inc. (The)	251,261	16,578,201
		41,831,485

Technology hardware, storage, and peripherals (8.1%)

Apple, Inc.	656,109	92,839,424
		92,839,424

Textiles, apparel, and luxury goods (2.9%)

lululemon athletica, Inc. (Canada) <i>(NON)</i>	34,966	14,150,740
Nike, Inc. Class B	133,707	19,418,265
		33,569,005

Total common stocks (cost \$532,789,261)**\$1,149,009,160****WARRANTS (—%)^(a)*(NON)***

	Expiration date	Strike Price	Warrants	Value
Palisade Bio, Inc. Ser. K, (acquired 4/20/17, cost \$—) <i>(RES)</i>	1/9/22	\$946.40	430	\$—
Total warrants (cost \$—)				\$—

SHORT-TERM INVESTMENTS (2.5%)^(a)

	Shares	Value
Putnam Cash Collateral Pool, LLC 0.09% <i>(AFF)</i>	20,315,435	\$20,315,435
Putnam Short Term Investment Fund Class P 0.08% <i>(AFF)</i>	8,303,189	8,303,189
Total short-term investments (cost \$28,618,624)		\$28,618,624

TOTAL INVESTMENTS

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, 2021 through September 30, 2021 (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 "the SEC" represent the Securities and Exchange Commission, 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 \$1,151,623,278.

(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 \$—.

(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 12/31/20	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 9/30/21
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$33,985,125	\$241,785,261	\$255,454,951	\$17,826	\$20,315,435
Putnam Short Term Investment Fund**	3,279,002	179,334,390	174,310,203	7,549	8,303,189
Total Short-term investments	\$37,264,127	\$421,119,651	\$429,765,154	\$25,375	\$28,618,624

* 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 \$20,315,435 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 \$19,770,540.

** 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.

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 Depositary 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. 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.

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	\$158,268,638	\$—	\$—
Consumer discretionary	226,042,495	—	—**
Consumer staples	13,213,416	—	—
Financials	12,705,061	15,424,885	—
Health care	117,381,268	12,109,922	—
Industrials	79,264,783	—	—
Information technology	488,920,665	—	—
Materials	11,854,678	—	—
Real estate	13,823,349	—	—
	<hr/>	<hr/>	<hr/>
Total common stocks	1,121,474,353	27,534,807	—
Warrants	—	—	—
Short-term investments	—	28,618,624	—
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Totals by level	\$1,121,474,353	\$56,153,431	\$—

* 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)	400
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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