

Putnam VT International Equity Fund

The fund's portfolio

3/31/23 (Unaudited)

COMMON STOCKS (98.2%)(a)

	Shares	Value
Australia (2.4%)		
BHP Group, Ltd. (ASE Exchange)	164,178	\$5,207,375
		<u>5,207,375</u>
Canada (3.4%)		
Canadian National Railway Co.	36,100	4,259,613
Thomson Reuters Corp.	22,202	2,888,642
		<u>7,148,255</u>
Denmark (2.3%)		
Novo Nordisk A/S Class B	31,314	4,969,300
		<u>4,969,300</u>
France (16.1%)		
AXA SA	141,789	4,335,458
Capgemini SE	18,055	3,358,340
LVMH Moet Hennessy Louis Vuitton SA	8,489	7,779,810
Publicis Groupe SA	21,951	1,714,936
Sanofi	57,346	6,245,102
Thales SA	24,216	3,580,084
TotalEnergies SE	59,901	3,534,324
Worldline SA/France ^(NON)	87,234	3,707,386
		<u>34,255,440</u>
Germany (5.8%)		
Deutsche Boerse AG	17,343	3,375,320
Merck KGaA	27,121	5,042,346
Rheinmetall AG	13,525	4,017,814
		<u>12,435,480</u>
Hong Kong (2.1%)		
CK Hutchison Holdings, Ltd.	709,000	4,402,494
		<u>4,402,494</u>
Ireland (5.2%)		
Bank of Ireland Group PLC	396,318	4,010,400
CRH PLC	94,141	4,757,714

Kerry Group PLC Class A	22,838	2,276,020
		11,044,134
Italy (0.7%)		
PRADA SpA	216,600	1,542,653
		1,542,653
Japan (23.2%)		
Asahi Group Holdings, Ltd.	126,800	4,720,764
Asics Corp.	58,500	1,663,584
Chugai Pharmaceutical Co., Ltd.	41,500	1,025,738
Daiichi Sankyo Co., Ltd.	62,500	2,281,042
Hoya Corp.	36,400	4,025,228
ITOCHU Corp.	123,200	4,011,760
Japan Exchange Group, Inc.	239,000	3,646,569
MinebeaMitsumi, Inc.	124,300	2,373,065
Mitsubishi Corp.	146,800	5,277,777
Mitsubishi UFJ Financial Group, Inc.	936,100	6,006,208
Murata Manufacturing Co., Ltd.	36,200	2,210,511
Pan Pacific International Holdings Corp.	158,000	3,057,545
Renesas Electronics Corp. <i>(NON)</i>	234,700	3,407,533
Sony Group Corp.	43,900	3,991,134
TechnoPro Holdings, Inc.	60,000	1,662,944
		49,361,402
Netherlands (4.3%)		
Universal Music Group NV	193,018	4,879,306
Wolters Kluwer NV	33,875	4,274,653
		9,153,959
Norway (1.6%)		
DNB Bank ASA	191,058	3,427,063
		3,427,063
Singapore (2.0%)		
DBS Group Holdings, Ltd.	174,200	4,329,256
		4,329,256
South Korea (0.7%)		
Hana Financial Group, Inc.	47,246	1,485,680
		1,485,680
Spain (2.5%)		
Coca-Cola Europacific Partners PLC	90,700	5,368,533
		5,368,533
Switzerland (3.2%)		

Nestle SA	45,708	5,579,887
Partners Group Holding AG	1,243	1,171,945
		6,751,832
United Kingdom (20.7%)		
Anglo American PLC (London Exchange)	69,877	2,312,754
AstraZeneca PLC	44,074	6,117,474
BP PLC	526,787	3,335,058
Compass Group PLC	117,620	2,957,429
Diageo PLC	91,981	4,105,147
Experian PLC	137,996	4,542,166
InterContinental Hotels Group PLC	52,970	3,480,574
JD Sports Fashion PLC	1,403,361	3,089,807
London Stock Exchange Group PLC	43,943	4,270,566
Prudential PLC	414,979	5,675,374
Shell PLC (London Exchange)	142,045	4,067,557
		43,953,906
United States (2.0%)		
Linde PLC	12,122	4,308,643
		4,308,643
Total common stocks (cost \$183,292,436)		\$209,145,405

SHORT-TERM INVESTMENTS (2.4%)^(a)

		Principal amount/shares	Value
Putnam Short Term Investment Fund Class P 4.88% ^(AFF)	Shares	4,473,350	\$4,473,350
State Street Institutional U.S. Government Money Market Fund, Premier Class 4.70% ^(P)	Shares	330,000	330,000
U.S. Treasury Bills 4.548%, 5/23/23 ^(SEGSF)		\$200,000	198,725
U.S. Treasury Bills 4.759%, 5/2/23 ^(SEGSF)		100,000	99,630
			\$5,101,705
Total short-term investments (cost \$5,101,663)			\$5,101,705
TOTAL INVESTMENTS			
Total investments (cost \$188,394,099)			\$214,247,110

FORWARD CURRENCY CONTRACTS at 3/31/23 (aggregate face value \$82,564,226) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Bank of America N.A.						
	Australian Dollar	Buy	4/19/23	\$505,419	\$515,210	\$(9,791)
	Canadian Dollar	Sell	4/19/23	2,726,477	2,723,327	(3,150)
	Hong Kong Dollar	Buy	5/17/23	1,165,050	1,169,043	(3,993)
	Japanese Yen	Sell	5/17/23	1,350,174	1,323,848	(26,326)
	Swiss Franc	Buy	6/21/23	2,899,420	2,823,949	75,471
Barclays Bank PLC						
	British Pound	Sell	6/21/23	2,877,695	2,837,619	(40,076)
	Israeli Shekel	Buy	4/19/23	367,608	374,400	(6,792)
	Japanese Yen	Buy	5/17/23	1,932,431	1,958,107	(25,676)
	Swiss Franc	Buy	6/21/23	2,344,379	2,282,615	61,764
Citibank, N.A.						
	Australian Dollar	Buy	4/19/23	517,123	527,625	(10,502)
	Danish Krone	Buy	6/21/23	2,845,458	2,793,070	52,388
Goldman Sachs International						
	Australian Dollar	Buy	4/19/23	1,282,576	1,308,487	(25,911)
	British Pound	Sell	6/21/23	1,655,058	1,604,097	(50,961)
	Canadian Dollar	Sell	4/19/23	656,678	655,900	(778)
	New Zealand Dollar	Buy	4/19/23	228,682	228,897	(215)
	South Korean Won	Buy	5/17/23	2,762,765	2,893,584	(130,819)
	Swiss Franc	Buy	6/21/23	1,281,357	1,247,731	33,626
HSBC Bank USA, National Association						
	British Pound	Sell	6/21/23	1,541,393	1,531,336	(10,057)
	Japanese Yen	Sell	5/17/23	480,835	493,759	12,924
	Singapore Dollar	Buy	5/17/23	67,569	57,735	9,834
	Swiss Franc	Buy	6/21/23	1,012,984	997,377	15,607
JPMorgan Chase Bank N.A.						
	British Pound	Sell	6/21/23	2,140,110	2,074,557	(65,553)
	Canadian Dollar	Sell	4/19/23	580,968	580,346	(622)
	Euro	Sell	6/21/23	723,815	708,932	(14,883)
	Hong Kong Dollar	Buy	5/17/23	527,494	529,281	(1,787)

Norwegian Krone	Sell	6/21/23	716,717	718,394	1,677
South Korean Won	Sell	5/17/23	4,257,796	4,604,025	346,229

Morgan Stanley & Co. International PLC

Australian Dollar	Buy	4/19/23	2,959,415	3,041,989	(82,574)
Danish Krone	Sell	6/21/23	823,133	813,302	(9,831)
Euro	Sell	6/21/23	1,380,641	1,367,287	(13,354)
Japanese Yen	Buy	5/17/23	1,939,272	1,961,598	(22,326)
Norwegian Krone	Sell	6/21/23	1,144,287	1,147,054	2,767
Swedish Krona	Sell	6/21/23	163,672	169,764	6,092

NatWest Markets PLC

Swedish Krona	Buy	6/21/23	649,678	641,892	7,786
---------------	-----	---------	---------	---------	-------

State Street Bank and Trust Co.

Australian Dollar	Buy	4/19/23	1,096,111	1,118,041	(21,930)
British Pound	Sell	6/21/23	744,257	721,369	(22,888)
Canadian Dollar	Sell	4/19/23	15,542	15,523	(19)
Chinese Yuan (Offshore)	Buy	5/17/23	629,804	642,314	(12,510)
Israeli Shekel	Buy	4/19/23	1,161,490	1,182,298	(20,808)
Japanese Yen	Sell	5/17/23	1,304,541	1,315,092	10,551
New Zealand Dollar	Buy	4/19/23	255,258	255,496	(238)
Singapore Dollar	Sell	5/17/23	65,312	66,167	855
Swiss Franc	Buy	6/21/23	2,033,022	1,979,155	53,867

Toronto-Dominion Bank

British Pound	Sell	6/21/23	595,999	577,730	(18,269)
Danish Krone	Sell	6/21/23	596,999	592,092	(4,907)
Euro	Sell	6/21/23	467,621	458,001	(9,620)
Singapore Dollar	Sell	5/17/23	1,446,492	1,465,324	18,832
Swiss Franc	Buy	6/21/23	1,477,319	1,438,406	38,913

UBS AG

British Pound	Sell	6/21/23	1,184,584	1,148,290	(36,294)
Canadian Dollar	Sell	4/19/23	2,283,979	2,281,387	(2,592)
Danish Krone	Buy	6/21/23	569,051	558,594	10,457
Euro	Buy	6/21/23	554,762	471,688	83,074
Swedish Krona	Buy	6/21/23	5,764,052	5,695,000	69,052
Swiss Franc	Buy	6/21/23	2,707,977	2,636,552	71,425

WestPac Banking Corp.

Australian Dollar	Buy	4/19/23	632,225	633,469	(1,244)
Australian Dollar	Sell	4/19/23	632,225	650,470	18,245
British Pound	Sell	6/21/23	1,787,131	1,732,172	(54,959)
Canadian Dollar	Sell	4/19/23	962,556	961,446	(1,110)

Japanese Yen	Sell	5/17/23	5,167,287	5,262,013	94,726
Unrealized appreciation					1,096,162
Unrealized (depreciation)					(763,365)
Total					\$332,797

* The exchange currency for all contracts listed is the United States Dollar.

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, 2023 through March 31, 2023 (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 \$212,962,151.

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

(AFF) Affiliated company. For investments in 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 12/31/22	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/23
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$—	\$3,585,450	\$3,585,450	\$3,885	\$—
Putnam Short Term Investment Fund**	1,209,125	18,556,012	15,291,787	24,235	4,473,350
Total Short-term investments	\$1,209,125	\$22,141,462	\$18,877,237	\$28,120	\$4,473,350

* 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 did not have any securities on loan.

** 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.

(SEGSF) This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at period end totaled \$220,552.

(P) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts. The rate quoted in the security description is the annualized 7-day yield of the fund 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 fund had the following sector concentrations greater than 10% at the close of the reporting period (as a percentage of net assets):

Financials	21.3%
Industrials	19.4
Health care	13.9
Consumer discretionary	12.9
Consumer staples	10.4

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 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.

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.

Forward currency contracts: The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts were used to hedge foreign exchange risk.

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position.

For the fund's average contract amount on forward currency 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 posted to the fund which cannot be sold or repledged totaled \$172,100 at the close of the reporting period.

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 \$318,184 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$220,552 and may include amounts related to unsettled 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:			
Australia	\$—	\$5,207,375	\$—
Canada	7,148,255	—	—
Denmark	—	4,969,300	—
France	—	34,255,440	—
Germany	—	12,435,480	—
Hong Kong	—	4,402,494	—
Ireland	—	11,044,134	—
Italy	—	1,542,653	—
Japan	—	49,361,402	—
Netherlands	—	9,153,959	—
Norway	—	3,427,063	—
Singapore	—	4,329,256	—
South Korea	—	1,485,680	—
Spain	5,368,533	—	—
Switzerland	—	6,751,832	—
United Kingdom	—	43,953,906	—
United States	4,308,643	—	—
Total common stocks	16,825,431	192,319,974	—
Short-term investments	330,000	4,771,705	—
Totals by level	\$17,155,431	\$197,091,679	\$—

	Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$332,797	\$—

Totals by level

\$—

\$332,797

\$—

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:

Forward currency contracts (contract amount)

\$97,000,000

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