

Putnam VT International Value Fund

The fund's portfolio

9/30/23 (Unaudited)

COMMON STOCKS (96.9%)(a)

	Shares	Value
Aerospace and defense (1.1%)		
BAE Systems PLC (United Kingdom)	88,314	\$1,072,032
		1,072,032
Air freight and logistics (1.2%)		
Deutsche Post AG (Germany)	28,918	1,178,596
		1,178,596
Automobile components (0.9%)		
Magna International, Inc. (Canada)	16,723	896,203
		896,203
Automobiles (1.3%)		
Yamaha Motor Co., Ltd. (Japan)	49,600	1,303,224
		1,303,224
Banks (19.3%)		
AIB Group PLC (Ireland)	504,676	2,272,641
ANZ Group Holdings, Ltd. (Australia)	127,369	2,095,565
BNP Paribas SA (France)	30,958	1,970,877
CaixaBank SA (Spain)	264,662	1,058,613
DBS Group Holdings, Ltd. (Singapore)	53,704	1,318,674
DNB Bank ASA (Norway)	48,528	977,420
HSBC Holdings PLC (United Kingdom)	371,994	2,914,213
ING Groep NV (Netherlands)	239,369	3,162,119
Mizuho Financial Group, Inc. (Japan)	38,780	656,872
Sumitomo Mitsui Financial Group, Inc. (Japan)	62,500	3,063,949
		19,490,943
Beverages (2.2%)		
Asahi Group Holdings, Ltd. (Japan)	18,700	699,136
Coca-Cola Europacific Partners PLC (Spain)	24,780	1,548,254
		2,247,390
Broadline retail (0.9%)		
Pan Pacific International Holdings Corp. (Japan)	43,500	913,499

913,499

Building products (1.2%)

Cie de Saint-Gobain SA (France)	19,305	1,156,534
		1,156,534

Capital markets (4.4%)

Partners Group Holding AG (Switzerland)	1,094	1,231,024
Quilter PLC (United Kingdom)	390,374	408,330
UBS Group AG (Switzerland)	113,793	2,812,708
		4,452,062

Chemicals (0.6%)

LANXESS AG (Germany)	24,362	619,872
		619,872

Construction and engineering (2.3%)

Vinci SA (France)	21,262	2,353,847
		2,353,847

Construction materials (1.6%)

CRH PLC (Ireland)	30,227	1,667,175
		1,667,175

Consumer staples distribution and retail (2.0%)

Koninklijke Ahold Delhaize NV (Netherlands)	44,994	1,356,709
Seven & i Holdings Co., Ltd. (Japan)	17,000	665,713
		2,022,422

Diversified REITs (0.9%)

Mirvac Group (Australia)	673,730	925,750
		925,750

Diversified telecommunication services (4.1%)

Deutsche Telekom AG (Germany)	68,706	1,442,787
Nippon Telegraph & Telephone Corp. (Japan)	1,897,500	2,241,133
Telstra Group, Ltd. (Australia)	177,206	438,208
		4,122,128

Electric utilities (1.6%)

Fortum OYJ (Finland)	31,011	359,816
SSE PLC (United Kingdom)	63,722	1,248,623
		1,608,439

Financial services (1.2%)

ORIX Corp. (Japan)	63,000	1,176,328
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1,176,328

Food products (1.6%)

Ajinomoto Co., Inc. (Japan)	28,900	1,113,813
Kerry Group PLC Class A (Ireland)	5,565	464,555

1,578,368

Health care equipment and supplies (1.2%)

Hoya Corp. (Japan)	11,400	1,174,810
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1,174,810

Hotels, restaurants, and leisure (0.7%)

Compass Group PLC (United Kingdom)	30,337	739,062
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739,062

Household durables (2.5%)

Cairn Homes PLC (Ireland)	539,765	622,980
Panasonic Holdings Corp. (Japan)	74,900	842,212
Sony Group Corp. (Japan)	13,000	1,063,422

2,528,614

Industrial conglomerates (2.3%)

Siemens AG (Germany)	16,078	2,304,995
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2,304,995

Insurance (8.1%)

ASR Nederland NV (Netherlands)	20,854	783,141
AXA SA (France)	68,360	2,024,846
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen (Germany)	2,803	1,093,530
Prudential PLC (United Kingdom)	135,222	1,456,087
QBE Insurance Group, Ltd. (Australia)	206,542	2,088,735
Sompo Holdings, Inc. (Japan)	18,300	783,333

8,229,672

Machinery (1.9%)

Alstom SA (France)	35,636	845,599
MinebeaMitsumi, Inc. (Japan)	65,300	1,065,119

1,910,718

Metals and mining (2.8%)

Anglo American PLC (London Exchange) (United Kingdom)	48,572	1,344,781
Glencore PLC (United Kingdom)	266,095	1,521,746

2,866,527

Multi-utilities (1.9%)

Veolia Environnement SA (France)	66,323	1,918,733
		1,918,733
Oil, gas, and consumable fuels (8.8%)		
BP PLC (United Kingdom)	350,417	2,262,588
Shell PLC (United Kingdom)	93,951	2,982,946
Suncor Energy, Inc. (Canada)	62,119	2,136,262
TotalEnergies SE (France)	23,415	1,540,879
		8,922,675
Passenger airlines (1.0%)		
Qantas Airways, Ltd. (voting rights) (Australia) ^(NON)	315,638	1,050,613
		1,050,613
Personal care products (1.0%)		
Unilever PLC (United Kingdom)	20,650	1,022,288
		1,022,288
Pharmaceuticals (5.5%)		
AstraZeneca PLC (United Kingdom)	13,064	1,758,111
Sanofi (France)	35,806	3,842,062
		5,600,173
Semiconductors and semiconductor equipment (1.5%)		
Renesas Electronics Corp. (Japan) ^(NON)	96,000	1,472,882
		1,472,882
Specialty retail (1.1%)		
JD Sports Fashion PLC (United Kingdom)	611,397	1,113,833
		1,113,833
Tobacco (0.8%)		
Imperial Brands PLC (United Kingdom)	41,058	833,759
		833,759
Trading companies and distributors (5.8%)		
Ashtead Group PLC (United Kingdom)	13,219	803,485
Ferguson PLC (United Kingdom)	6,631	1,090,306
ITOCHU Corp. (Japan)	35,400	1,279,010
Mitsubishi Corp. (Japan)	57,200	2,725,046
		5,897,847
Wireless telecommunication services (1.6%)		
KDDI Corp. (Japan)	20,200	618,348
Vodafone Group PLC (United Kingdom)	1,035,110	966,575

1,584,923

Total common stocks (cost \$85,140,373)

\$97,956,936

SHORT-TERM INVESTMENTS (3.5%)^(a)

		Principal amount/shares	Value
Putnam Short Term Investment Fund Class P 5.57% ^(AFF)	Shares	3,351,328	\$3,351,328
U.S. Treasury Bills 5.103%, 11/9/23 ^(SEGSF)		\$200,000	198,882
Total short-term investments (cost \$3,550,267)			\$3,550,210

TOTAL INVESTMENTS

Total investments (cost \$88,690,640) \$101,507,146

FORWARD CURRENCY CONTRACTS at 9/30/23 (aggregate face value \$24,947,638) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Bank of America N.A.						
	Australian Dollar	Buy	10/18/23	\$306,642	\$293,400	\$13,242
	Canadian Dollar	Sell	10/18/23	308,697	316,240	7,543
	Danish Krone	Buy	12/20/23	152,619	155,262	(2,643)
	Euro	Sell	12/20/23	1,302,851	1,325,128	22,277
	Hong Kong Dollar	Sell	11/15/23	287,839	288,124	285
	Japanese Yen	Buy	11/15/23	462,284	487,754	(25,470)
	Singapore Dollar	Buy	11/15/23	121,885	124,578	(2,693)
	Swedish Krona	Buy	12/20/23	415,837	409,826	6,011
	Swiss Franc	Buy	12/20/23	25,017	25,782	(765)
Barclays Bank PLC						
	Hong Kong	Buy	11/15/23	36,595	36,737	(142)

Dollar						
Israeli Shekel	Buy	10/18/23	109,797	113,670	(3,873)	
Singapore Dollar	Buy	11/15/23	120,713	123,376	(2,663)	

Citibank, N.A.

Australian Dollar	Sell	10/18/23	910,599	953,587	42,988	
British Pound	Sell	12/20/23	705,601	720,102	14,501	
Canadian Dollar	Sell	10/18/23	798,327	817,889	19,562	
Danish Krone	Buy	12/20/23	517,605	526,481	(8,876)	
Swiss Franc	Buy	12/20/23	782,016	806,304	(24,288)	

Goldman Sachs International

Australian Dollar	Buy	10/18/23	192,335	198,996	(6,661)	
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HSBC Bank USA, National Association

British Pound	Sell	12/20/23	1,059,134	1,080,876	21,742	
Canadian Dollar	Sell	10/18/23	339,847	350,946	11,099	
Euro	Sell	12/20/23	401,955	407,737	5,782	
Hong Kong Dollar	Buy	11/15/23	169,426	170,101	(675)	
Norwegian Krone	Buy	12/20/23	173,280	173,162	118	
Swedish Krona	Buy	12/20/23	233,784	230,308	3,476	
Swiss Franc	Buy	12/20/23	63,037	64,986	(1,949)	

JPMorgan Chase Bank N.A.

Hong Kong Dollar	Buy	11/15/23	979,899	983,816	(3,917)	
New Zealand Dollar	Buy	10/18/23	153,374	156,016	(2,642)	
Singapore Dollar	Buy	11/15/23	177,001	180,905	(3,904)	
Swiss Franc	Buy	12/20/23	139,740	144,076	(4,336)	

Morgan Stanley & Co. International PLC

Australian Dollar	Buy	10/18/23	177,733	183,892	(6,159)	
Czech Koruna	Buy	12/20/23	136,979	139,796	(2,817)	
Euro	Sell	12/20/23	258,703	263,384	4,681	
Japanese Yen	Buy	11/15/23	1,131,142	1,166,873	(35,731)	
Swedish Krona	Buy	12/20/23	994,393	979,912	14,481	
Swiss Franc	Sell	12/20/23	296,893	305,407	8,514	

NatWest Markets PLC

Australian Dollar	Buy	10/18/23	209,831	217,101	(7,270)	
British Pound	Sell	12/20/23	236,828	241,733	4,905	
Swedish Krona	Buy	12/20/23	464,775	457,938	6,837	
Swiss Franc	Buy	12/20/23	1,691,869	1,744,438	(52,569)	

State Street Bank and Trust Co.

Australian Dollar	Buy	10/18/23	409,306	423,421	(14,115)	
British Pound	Sell	12/20/23	1,084,038	1,106,350	22,312	

Canadian Dollar	Sell	10/18/23	287,784	294,855	7,071
Euro	Buy	12/20/23	299,344	304,557	(5,213)
Hong Kong Dollar	Buy	11/15/23	1,208,276	1,213,171	(4,895)
Israeli Shekel	Buy	10/18/23	429,797	445,006	(15,209)
Norwegian Krone	Buy	12/20/23	9,528	9,522	6
Swedish Krona	Buy	12/20/23	302,110	297,595	4,515
Swiss Franc	Buy	12/20/23	288,297	297,274	(8,977)
Toronto-Dominion Bank					
Australian Dollar	Buy	10/18/23	504,123	521,577	(17,454)
British Pound	Sell	12/20/23	398,579	406,772	8,193
Canadian Dollar	Sell	10/18/23	264,955	271,459	6,504
Euro	Sell	12/20/23	391,237	395,691	4,454
Swedish Krona	Buy	12/20/23	318,264	313,591	4,673
Swiss Franc	Buy	12/20/23	347,146	357,919	(10,773)
UBS AG					
Canadian Dollar	Sell	10/18/23	606,569	621,455	14,886
WestPac Banking Corp.					
Canadian Dollar	Sell	10/18/23	293,748	300,784	7,036
Unrealized appreciation					287,694
Unrealized (depreciation)					(276,679)
Total					\$11,015

* 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 September 30, 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 \$101,060,496.

(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 9/30/23
Short-term investments					
Putnam Cash Collateral Pool, LLC*#	\$—	\$12,248,793	\$12,248,793	\$29,716	\$—
Putnam Short Term Investment Fund**	1,381,053	22,440,232	20,469,957	99,054	3,351,328
Total Short-term investments	\$1,381,053	\$34,689,025	\$32,718,750	\$128,770	\$3,351,328

* 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 \$112,311.

Unless otherwise noted, the rates quoted in Short-term investments security descriptions represent the weighted average yield to maturity.

DIVERSIFICATION BY COUNTRY

Distribution of investments by country of risk at the close of the reporting period, excluding collateral received, if any (as a percentage of Portfolio Value):

United Kingdom	23.2 %
Japan	22.5
France	15.4
Germany	6.5
Australia	6.5
Netherlands	5.2
Ireland	5.0
Switzerland	4.0
United States	3.5
Canada	3.0
Spain	2.6
Singapore	1.3
Norway	1.0

Finland

0.3

Total

100.0%

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, which has been designated as valuation designee pursuant to Rule 2a-5 under the Investment Company Act of 1940, 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 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 \$112,174 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$112,311 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*:			
Communication services	\$—	\$5,707,051	\$—

Consumer discretionary	896,203	6,598,232	—
Consumer staples	1,548,254	6,155,973	—
Energy	2,136,262	6,786,413	—
Financials	783,141	32,565,864	—
Health care	—	6,774,983	—
Industrials	—	16,925,182	—
Information technology	—	1,472,882	—
Materials	—	5,153,574	—
Real estate	—	925,750	—
Utilities	—	3,527,172	—
Total common stocks	5,363,860	92,593,076	—
Short-term investments	—	3,550,210	—
Totals by level	\$5,363,860	\$96,143,286	\$—

Valuation inputs			
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$11,015	\$—
Totals by level	\$—	\$11,015	\$—

* 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:

Forward currency contracts (contract amount)	\$31,200,000
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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