

# Putnam VT Emerging Markets Equity Fund

## The fund's portfolio

3/31/24 (Unaudited)

### COMMON STOCKS (95.4%)(a)

	Shares	Value
<b>Automobiles (1.9%)</b>		
BYD Co., Ltd. Class H (China)	5,500	\$141,665
Kia Corp. (South Korea)	3,591	293,949
		<b>435,614</b>
<b>Banks (16.0%)</b>		
Abu Dhabi Islamic Bank PJSC (United Arab Emirates)	88,182	264,624
Alinma Bank (Saudi Arabia)	31,818	371,585
Banco do Brasil SA (Brazil)	23,700	267,555
Bank Central Asia Tbk PT (Indonesia)	445,100	282,837
Bank Mandiri Persero Tbk PT (Indonesia)	827,400	378,344
Bank of China, Ltd. Class H (China)	1,318,000	543,911
Grupo Financiero Banorte SAB de CV Class O (Mexico)	64,825	688,862
ICICI Bank, Ltd. (India)	70,749	927,429
		<b>3,725,147</b>
<b>Broadline retail (3.8%)</b>		
Alibaba Group Holding, Ltd. (China)	33,516	300,821
MercadoLibre, Inc. (Brazil) <sup>(NON)</sup>	164	247,961
PDD Holdings, Inc. ADR (China) <sup>(NON)</sup>	3,019	350,959
		<b>899,741</b>
<b>Capital markets (0.3%)</b>		
HDFC Asset Management Co., Ltd. (India)	1,840	82,822
		<b>82,822</b>
<b>Chemicals (0.6%)</b>		
Hansol Chemical Co., Ltd. (South Korea)	975	148,106
		<b>148,106</b>
<b>Construction and engineering (1.2%)</b>		
Larsen & Toubro, Ltd. (India)	6,169	278,403
		<b>278,403</b>
<b>Construction materials (1.3%)</b>		
UltraTech Cement, Ltd. (India)	2,636	308,129

308,129

**Consumer staples distribution and retail (3.1%)**

Dino Polska SA (Poland) <sup>(NON)</sup>	1,938	188,109
Shoprite Holdings, Ltd. (South Africa)	16,549	216,203
Sumber Alfaria Trijaya Tbk PT (Indonesia)	804,200	147,602
WalMart de Mexico (Walmex) SAB de CV (Mexico)	41,905	169,390

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721,304

**Electrical equipment (1.6%)**

KEI Industries, Ltd. (India)	9,189	381,189
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381,189

**Electronic equipment, instruments, and components (3.4%)**

Dexerials Corp. (Japan)	4,300	189,946
Elite Material Co., Ltd. (Taiwan)	8,000	100,864
Hon Hai Precision Industry Co., Ltd. (Taiwan)	57,000	267,158
Sinbon Electronics Co., Ltd. (Taiwan)	27,000	232,850

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790,818

**Entertainment (0.4%)**

Sea, Ltd. ADR (Singapore) <sup>(NON)</sup>	1,660	89,159
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89,159

**Financial services (2.0%)**

Meritz Financial Group, Inc. (South Korea)	3,741	227,030
REC, Ltd. (India)	43,072	232,912

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459,942

**Gas utilities (1.7%)**

China Resources Gas Group, Ltd. (China)	121,700	387,946
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387,946

**Ground transportation (0.7%)**

Uber Technologies, Inc. <sup>(NON)</sup>	2,034	156,598
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156,598

**Health care providers and services (1.9%)**

Apollo Hospitals Enterprise, Ltd. (India)	4,084	311,276
Max Healthcare Institute, Ltd. (India)	13,390	131,632

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442,908

**Hotels, restaurants, and leisure (6.2%)**

Asea SAB de CV (Mexico) <sup>(NON)</sup>	35,114	173,093
H World Group, Ltd. ADR (China)	10,098	390,793
Indian Hotels Co., Ltd. (India)	75,419	534,564

MakeMyTrip, Ltd. (India) <sup>(NON)</sup>	2,725	193,611
Zomato, Ltd. (India) <sup>(NON)</sup>	75,395	164,617
		<b>1,456,678</b>
<b>Independent power and renewable electricity producers (1.3%)</b>		
NTPC, Ltd. (India)	75,161	302,618
		<b>302,618</b>
<b>Insurance (0.9%)</b>		
AIA Group, Ltd. (Hong Kong)	30,800	206,792
		<b>206,792</b>
<b>Interactive media and services (6.1%)</b>		
Tencent Holdings, Ltd. (China)	36,500	1,416,742
		<b>1,416,742</b>
<b>IT Services (2.2%)</b>		
Tata Consultancy Services, Ltd. (India)	11,338	526,957
		<b>526,957</b>
<b>Metals and mining (1.2%)</b>		
Anglo American PLC (United Kingdom)	6,878	168,921
APL Apollo Tubes, Ltd. (India)	6,071	108,893
		<b>277,814</b>
<b>Oil, gas, and consumable fuels (2.9%)</b>		
PetroChina Co., Ltd. Class H (China)	548,000	468,400
Petroleo Brasileiro SA (Preference) (Brazil)	13,100	97,583
PRIO SA (Brazil)	10,700	103,983
		<b>669,966</b>
<b>Passenger airlines (1.0%)</b>		
Copa Holdings SA Class A (Panama)	2,189	228,006
		<b>228,006</b>
<b>Pharmaceuticals (1.4%)</b>		
AstraZeneca PLC (United Kingdom)	880	118,600
Sun Pharmaceutical Industries, Ltd. (India)	11,212	217,854
		<b>336,454</b>
<b>Professional services (0.5%)</b>		
Benefit Systems SA (Poland)	164	116,196
		<b>116,196</b>
<b>Real estate management and development (1.4%)</b>		

Phoenix Mills, Ltd. (The) (India)	9,856	328,854
		<b>328,854</b>
<b>Semiconductors and semiconductor equipment (18.1%)</b>		
MediaTek, Inc. (Taiwan)	11,000	410,736
Novatek Microelectronics Corp. (Taiwan)	14,000	264,221
SK Hynix, Inc. (South Korea)	5,296	719,899
Taiwan Semiconductor Manufacturing Co., Ltd. (Taiwan)	116,000	2,823,566
		<b>4,218,422</b>
<b>Software (0.5%)</b>		
Totvs SA (Brazil)	19,645	111,163
		<b>111,163</b>
<b>Specialty retail (0.4%)</b>		
JUMBO SA (Greece)	3,447	99,292
		<b>99,292</b>
<b>Technology hardware, storage, and peripherals (6.1%)</b>		
Asia Vital Components Co., Ltd. (Taiwan)	6,000	102,364
Samsung Electronics Co., Ltd. (South Korea)	21,481	1,314,789
		<b>1,417,153</b>
<b>Textiles, apparel, and luxury goods (3.8%)</b>		
LVMH Moet Hennessy Louis Vuitton SA (France)	183	164,597
PRADA SpA (Italy)	44,800	354,879
Shenzhou International Group Holdings, Ltd. (China)	39,000	369,227
		<b>888,703</b>
<b>Transportation infrastructure (1.5%)</b>		
International Container Terminal Services, Inc. (Philippines)	64,360	364,075
		<b>364,075</b>
<b>Total common stocks (cost \$16,821,289)</b>		<b>\$22,273,711</b>

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**INVESTMENT COMPANIES (3.9%)<sup>(a)</sup>**

	<b>Shares</b>	<b>Value</b>
iShares Core MSCI Emerging Markets ETF	17,636	\$910,018

Total investment companies (cost \$855,953)

\$910,018

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**SHORT-TERM INVESTMENTS (1.3%)(a)**

	Shares	Value
Putnam Short Term Investment Fund Class P 5.50%(AFF)	299,738	\$299,738
<b>Total short-term investments (cost \$299,738)</b>		<b>\$299,738</b>
<b>TOTAL INVESTMENTS</b>		
<b>Total investments (cost \$17,976,980)</b>		<b>\$23,483,467</b>

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**Key to holding's abbreviations**

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

ETF Exchange Traded Fund

PJSC Public Joint Stock Company

**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, 2024 through March 31, 2024 (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 Franklin Resources, Inc., 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 \$23,336,206.

(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 12/31/23	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 3/31/24
<b>Short-term investments</b>					

Putnam Cash Collateral Pool, LLC*#	\$—	\$722,260	\$722,260	\$1,784	\$—
Putnam Short Term Investment Fund Class P‡	792,151	1,979,760	2,472,173	7,545	299,738

**Total Short-term investments** **\$792,151** **\$2,702,020** **\$3,194,433** **\$9,329** **\$299,738**

\* 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.

#### **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):

India	21.4%
China	18.6
Taiwan	17.9
South Korea	11.5
United States	5.8
Mexico	4.4
Brazil	3.5
Indonesia	3.4
Saudi Arabia	1.6
Philippines	1.6
Italy	1.5
Poland	1.3
United Kingdom	1.2
United Arab Emirates	1.1
Panama	1.0
South Africa	0.9
Hong Kong	0.9
Japan	0.8
France	0.7
Other	0.9
<b>Total</b>	<b>100.0%</b>

**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, 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.

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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:

	<b>Valuation inputs</b>		
<b>Investments in securities:</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
<b>Common stocks*:</b>			
Communication services	\$1,505,901	\$—	\$—
Consumer discretionary	3,780,028	—	—
Consumer staples	721,304	—	—
Energy	669,966	—	—
Financials	4,474,703	—	—
Health care	779,362	—	—
Industrials	1,524,467	—	—
Information technology	7,064,513	—	—
Materials	734,049	—	—
Real estate	328,854	—	—
Utilities	690,564	—	—
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<b>Total common stocks</b>	<b>22,273,711</b>	<b>—</b>	<b>—</b>
Investment companies	910,018	—	—
Short-term investments	—	299,738	—
	<hr/>	<hr/>	<hr/>
<b>Totals by level</b>	<b>\$23,183,729</b>	<b>\$299,738</b>	<b>\$—</b>

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

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](http://www.sec.gov), or visit Putnam's Individual Investor Web site at [www.putnam.com](http://www.putnam.com)