

# Putnam Variable Trust

# **Putnam VT Global Health Care Fund**

Annual report 12 | 31 | 21

# **Message from the Trustees**

February 10, 2022

Dear Shareholder:

In 2021, most areas of the stock market had another above-average year as corporate earnings rose amid rapid gross domestic product growth. Bonds, on the other hand, had a subpar year, with inflation causing concern. Financial markets are now adjusting to a shift in monetary policy, as the U.S. Federal Reserve reduces its bond-purchasing program and considers raising interest rates.

In 2022, the evolving Covid-19 pandemic remains challenging. Still, companies have learned to adapt to unexpected hurdles. Trends in consumer spending, employment, and credit conditions have been encouraging. We believe economic conditions may remain supportive for financial markets this year.

As the economy shifts gears, Putnam's investment professionals will be actively managing your fund and monitoring risks, as the firm has done for more than 80 years.

Thank you for investing with Putnam.

Respectfully yours,

Robert L. Reynolds

President and Chief Executive Officer

Putnam Investments

Kenneth R. Leibler Chair, Board of Trustees

# Performance summary (as of 12/31/21)

#### **Investment objective**

Capital appreciation

Net asset value December 31, 2021

Class IA: \$19.52

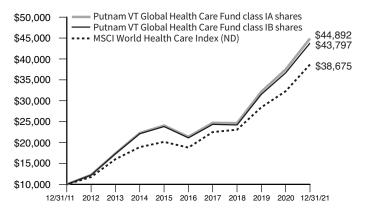
Class IB: \$18.67

#### Total return at net asset value (as of 12/31/21)

	Class IA shares (4/30/98)	Class IB shares (4/30/98)	MSCI World Health Care Index (ND)*
1 year	19.77%	19.40%	19.80%
5 years	109.95	107.33	105.85
Annualized	15.99	15.70	15.53
10 years	348.92	337.97	286.75
Annualized	16.20	15.92	14.48
Life	570.34	534.33	
Annualized	8.37	8.12	

For a portion of the periods, the fund had expense limitations, without which returns would have been lower.

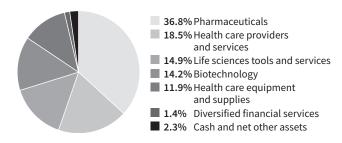
#### Cumulative total returns of a \$10,000 investment in class IA and class IB shares at net asset value — since 12/31/11



The MSCI World Health Care Index (ND) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets in the health care sector. Calculated with net dividends (ND), this total return index reflects the reinvestment of dividends after the deduction of withholding taxes, using a tax rate applicable to non-resident institutional investors who do not benefit from double taxation treaties.

Data represent past performance. Past performance does not guarantee future results. More recent returns may be less or more than those shown. Investment return and principal value will fluctuate, and you may have a gain or a loss when you sell your shares. Performance information does not reflect any deduction for taxes a shareholder may owe on fund distributions or on the redemption of fund shares. All total return figures are at net asset value and exclude contract charges and expenses, which are added to the variable annuity contracts to determine total return at unit value. Had these charges and expenses been reflected, performance would have been lower. For more recent performance, contact your variable annuity provider who can provide you with performance that reflects the charges and expenses at your contract level.

#### **Portfolio composition**



Allocations are shown as a percentage of the fund's net assets. Cash and net other assets, if any, represent the market value weights of cash, derivatives, short-term securities, and other unclassified assets in the portfolio. Summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities, any interest accruals, the exclusion of as-of trades, if any, the use of different classifications of securities for presentation purposes, and rounding. Holdings and allocations may varv over time.

<sup>\*</sup> The fund's benchmark, the MSCI World Health Care Index (ND), was introduced on 1/1/01, which post-dates the inception of the fund's class IA shares.

# Report from your fund's manager

#### How did health care stocks perform for the 12-month reporting period ended December 31, 2021?

Health care stocks posted mixed results for the period. At the start of 2021, record monetary and fiscal stimulus, the availability of multiple Covid-19 vaccines, and the easing of mobility restrictions were supportive of health care stocks. Patient utilization rates increased in the spring and summer. Stocks of health care providers rebounded as the number of routine medical exams, screenings, and surgical procedures soared. In November, a spike in new Covid cases caused by the Omicron variant began to caution investors. Countries reinstated lockdowns and tightened safety protocols. Covid-related hospitalizations surged, and elective surgeries were postponed. Stocks of diagnostic testing, imaging, and surgical equipment providers declined. At the same time, stocks of pharmaceuticals, vaccine makers, and medical devices used to treat and diagnose Covid performed strongly.

#### How did the fund perform during the reporting period?

Putnam VT Global Health Care Fund class IA shares posted a return of 19.77%, which was closely in line with its benchmark, the MSCI World Health Care Index [ND], which posted a return of 19.80% for the period.

### What were some of the top contributors to fund performance during the reporting period?

ICON, a clinical research organization based in Ireland, was the fund's top performer. Demand for ICON's outsourced services, including clinical trials used to develop Covid vaccines, helped boost interest in the stock. Eli Lilly and Company, the U.S.-based pharmaceutical firm, also aided results. Investors responded positively when the U.S. Food and Drug Administration [FDA] granted a Breakthrough Therapy designation for the company's donanemab, a therapy for Alzheimer's disease, in June 2021.

### What were some holdings that detracted from fund performance during the reporting period?

Our decision to hold an underweight position relative to the fund's benchmark in Moderna was a top detractor. U.S.-based Moderna outperformed primarily due to the global distribution of its Covid vaccine. U.S. biotechnology company Biogen also detracted from results. In June 2021, the FDA granted accelerated approval for Aduhelm, Biogen's Alzheimer's disease treatment. This approval was a watershed moment for the company, in our view, given the high unmet medical need to slow the progression of Alzheimer's disease. However, higher-than-expected pricing and communication issues related to the product's launch curbed investor enthusiasm.

#### As the fund begins a new fiscal year, what is your outlook?

The pandemic has created a difficult macroeconomic backdrop for investors. We expect short-term market disruptions to continue as the pandemic transitions to an endemic. In our view, the long-term outlook for health care stocks is compelling. We believe the pace of innovation in the health care sector is significant and will remain robust over the long term. An acceleration in utilization has fueled recoveries in many subsectors, including pharmaceuticals, medical

devices, and biotechnology. Managed care companies, on the other hand, face an uncertain utilization environment given concerns over the duration of Omicron and the emergence of other Covid variants. We believe this could put downward pressure on these stocks, at least in the near term.

For the fund, we continue to favor companies with first-in-class and/or best-in-class products. Using rigorous, bottom-up research, we seek to invest in companies with diversified product lines, solid management, and durable cash flows. We continue to monitor new opportunities against stock-specific risks, including policies to lower drug pricing and a push for government-run health care. As Covid becomes more manageable, we believe these risks could be potential headwinds for health care stocks going forward.

The views expressed in this report are exclusively those of Putnam Management and are subject to change. They are not meant as investment advice. Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future.

Consider these risks before investing: International investing involves currency, economic, and political risks. Emerging market securities carry illiquidity and volatility risks. Investments in small and/or midsize companies increase the risk of greater price fluctuations. The health care industries may be affected by technological obsolescence; changes in regulatory approval policies for drugs, medical devices, or procedures; and changes in governmental and private payment systems. The fund concentrates on a limited group of industries and is non-diversified. Because the fund may invest in fewer issuers than a diversified fund, it is vulnerable to common economic forces and may result in greater losses and volatility.

Growth stocks may be more susceptible to earnings disappointments, and value stocks may fail to rebound. The use of short selling may result in losses if the securities appreciate in value. Risks associated with derivatives include increased investment exposure (which may be considered leverage) and, in the case of over-the-counter instruments, the potential inability to terminate or sell derivatives positions and the potential failure of the other party to the instrument to meet its obligations. The value of investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political, or financial market conditions; investor sentiment and market perceptions; government actions; geopolitical events or changes; and factors related to a specific issuer, geography, industry, or sector. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings.

Our investment techniques, analyses, and judgments may not produce the outcome we intend. The investments we select for the fund may not perform as well as other securities that we do not select for the fund. We, or the fund's other service providers, may experience disruptions or operating errors that could have a negative effect on the fund. You can lose money by investing in the fund.

# Your fund's manager



Portfolio Manager Michael J. Maguire, CFA, joined Putnam in 2009 and has been in the investment industry since 2002.

Your fund's manager also manages other accounts advised by Putnam Management or an affiliate, including retail mutual fund counterparts to the funds in Putnam Variable Trust.

# **Understanding your fund's expenses**

As an investor in a variable annuity product that invests in a registered investment company, you pay ongoing expenses, such as management fees, distribution fees (12b-1 fees), and other expenses. Using the following information, you can estimate how these expenses affect your investment and compare them with the expenses of other funds. You may also pay one-time transaction expenses, which are not shown in this section and would result in higher total expenses. Charges and expenses at the insurance company separate account level are not reflected. For more information, see your fund's prospectus or talk to your financial representative.

#### Review your fund's expenses

The two left-hand columns of the Expenses per \$1,000 table show the expenses you would have paid on a \$1,000 investment in your fund from 7/1/21 to 12/31/21. They also show how much a \$1,000 investment would be worth at the close of the period, assuming actual returns and expenses. To estimate the ongoing expenses you paid over the period, divide your account value by \$1,000, then multiply  $the \, result \, by \, the \, number \, in \, the \, first \, line \, for \, the \, class \, of \, shares \, you \, own.$ 

#### Compare your fund's expenses with those of other funds

The two right-hand columns of the Expenses per \$1,000 table show your fund's expenses based on a \$1,000 investment, assuming a hypothetical 5% annualized return. You can use this information to compare the ongoing expenses (but not transaction expenses or total costs) of investing in the fund with those of other funds. All shareholder reports of mutual funds and funds serving as variable annuity vehicles will provide this information to help you make this comparison. Please note that you cannot use this information to estimate your actual ending account balance and expenses paid during the period.

#### **Expense ratios**

	ClassIA	ClassIB
Total annual operating expenses for the fiscal year ended 12/31/20	0.77%	1.02%
Annualized expense ratio for the six-month period ended 12/31/21*	0.74%	0.99%

Fiscal year expense information in this table is taken from the most recent prospectus, is subject to change, and may differ from that shown for the annualized expense ratio and in the financial highlights of this report.

Expenses are shown as a percentage of average net assets.

\*For the fund's most recent fiscal half year; may differ from expense ratios based on one-year data in the financial highlights.

#### Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 12/31/21		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 12/31/21	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$3.93	\$5.26	\$3.77	\$5.04
Ending value (after expenses)	\$1,108.50	\$1,106.70	\$1,021.48	\$1,020.21

\*Expenses for each share class are calculated using the fund's annualized expense ratio for each class, which represents the ongoing expenses as a percentage of average net assets for the six months ended 12/31/21. The expense ratio may differ for each share class.

†Expenses based on actual returns are calculated by multiplying the expense ratio by the average account value for the period; then multiplying the result by the  $number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \, in \, the \, period \, (184); and \, then \, dividing \, that \, result \, by \, the \, number \, of \, days \,$ days in the year (365). Expenses based on a hypothetical 5% return are calculated by multiplying the expense ratio by the average account value for the six-month period; then multiplying the result by the number of days in the six-month period (184); and then dividing that result by the number of days in the year (365).

# Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Putnam Variable Trust and Shareholders of Putnam VT Global Health Care Fund:

#### Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the fund's portfolio, of Putnam VT Global Health Care Fund (one of the funds constituting Putnam Variable Trust, referred to hereafter as the "Fund") as of December 31, 2021, the related statement of operations for the year ended December 31, 2021, the statement of changes in net assets for each of the two years in the period ended December 31, 2021, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2021 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2021, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2021 and the financial highlights for each of the five years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2021 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP Boston, Massachusetts February 10, 2022

We have served as the auditor of one or more investment companies in the Putnam Investments family of funds since at least 1957. We have not been able to determine the specific year we began serving as auditor.

# The fund's portfolio 12/31/21

COMMON STOCKS (96.8%)*	Shares	Value
Biotechnology (14.3%)		
AbbVie, Inc.	69,100	\$9,356,140
Ascendis Pharma A/S ADR (Denmark) †	36,948	4,970,614
Biogen,Inc. †	3,349	803,492
Ironwood Pharmaceuticals, Inc. †	375,404	4,377,211
Moderna, Inc. †	4,564	1,159,165
Regeneron Pharmaceuticals, Inc. †	3,944	2,490,715
United Therapeutics Corp. †	8,300	1,793,464
Diversified financial services (0.4%)		24,950,801
Health Sciences Acquisitions Corp. 2 †	69,005	690,050
Health-care equipment and supplies (11.9%)		690,050
Abbott Laboratories	47,500	6,685,150
Boston Scientific Corp. †	70,700	3,003,336
DexCom,Inc. †	3,800	2,040,410
Edwards Lifesciences Corp. †	36,200	4,689,710
Intuitive Surgical, Inc. †	5,400	1,940,220
Medtronic PLC	17,500	1,810,375
Terumo Corp. (Japan)	14,600	616,931
Terumo corp. (Japan)	17,000	20,786,132
Health-care providers and services (18.5%)		
AmerisourceBergen Corp.	11,400	1,514,946
Anthem, Inc.	11,600	5,377,064
Cigna Corp.	4,500	1,033,335
CVS Health Corp.	20,700	2,135,412
HCA Healthcare, Inc.	9,500	2,440,740
Humana, Inc.	3,000	1,391,580
McKesson Corp.	11,900	2,957,983
UnitedHealth Group, Inc.	31,100	15,616,554
Life sciences tools and services (14.9%)		32,467,614
Bio-Rad Laboratories, Inc. Class A †	3,300	2,493,381
Danaher Corp.	25,400	8,356,854
ICON PLC (Ireland) †	12,700	3,933,190
Lonza Group AG (Switzerland)	3,420	2,858,507
Thermo Fisher Scientific, Inc.	12,800	8,540,672
,	,	26,182,604
Pharmaceuticals (36.8%)	2 620 021	2 004 401
4Front Ventures Corp. †	2,638,021	2,664,401
Astellas Pharma, Inc. (Japan)	47,800	777,411
AstraZeneca PLC (United Kingdom)	72,645	8,532,959
Chugai Pharmaceutical Co., Ltd. (Japan)	16,100	522,185
Daiichi Sankyo Co., Ltd. (Japan)	39,200	996,798
Eisai Co., Ltd. (Japan)	5,900	335,011
Elanco Animal Health, Inc. †	35,600	1,010,328
Eli Lilly and Co.	18,300	5,054,826
EyePoint Pharmaceuticals, Inc. †	20,664	252,927
Green Thumb Industries, Inc. †	12,700	281,438
Innoviva, Inc. †	182,154	3,142,157
Johnson & Johnson	52,226	8,934,302
Merck&Co., Inc.	56,962	4,365,568
Merck KGaA (Germany)	8,202	2,119,720
Novartis AG (Switzerland)	33,060	2,912,705
Novo Nordisk A/S Class B (Denmark)	20,052	2,256,293
Pfizer, Inc.	125,603	7,416,857
Roche Holding AG (Switzerland)	12,787	5,319,965
Sanofi (France)	50,184	5,060,971

COMMON STOCKS (96.8%)* cont.		Shares	Value
Pharmaceuticals cont.			
Takeda Pharmaceutical Co., Ltd. (Japan	)	37,800	\$1,033,047
TerrAscend Corp. (Canada) †		247,800	1,515,298
			64,505,167
Total common stocks (cost \$103,821,7	738)	:	\$169,582,368
UNITS (1.0%)*		Units	Value
Sarissa Capital Acquisition Corp. †		174,129	\$1,755,220
Total units (cost \$1,749,116)			\$1,755,220
U.S. TREASURY OBLIGATIONS (0.1%)*		Principal amount	Value
U.S. Treasury Notes			
2.00%, 2/15/25 i		\$109,000	\$113,104
0.125%,8/31/22i		10,000	9,997
Total U.S. treasury obligations (cost \$	123,101)		\$123,101
SHORT-TERM INVESTMENTS (2.3%)*		Principal amount/ shares	Value
Putnam Short Term Investment Fund			
Class P 0.13% L	Shares	3,477,767	\$3,477,767
State Street Institutional U.S. Government Money Market Fund,			
Premier Class 0.03% P	Shares	110,000	110,000
U.S. Treasury Bills 0.048%, 2/24/22		\$200,000	199,992
U.S. Treasury Bills 0.038%, 2/3/22		200,000	199,995
Total short-term investments (cost \$3	,987,746)		\$3,987,754
Total investments (cost \$109,681,701)	)		\$175,448,443

#### Key to holding's abbreviations

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, 2021 through December 31, 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 whollyowned subsidiary of Putnam Investments, LLC and references to "ASC 820" represent Accounting Standards Codification 820 Fair Value Measurements and Disclosures.

- \* Percentages indicated are based on net assets of \$175,233,830.
- † This security is non-income-producing.
- i This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts (Note 1).
- L Affiliated company (Note 5). The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- 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.

At the close of the reporting period, the fund maintained liquid assets totaling \$136,635 to cover certain derivative contracts.

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

 $The \, dates \, shown \, on \, debt \, obligations \, are \, the \, original \, maturity \, dates.$ 

#### $\textbf{DIVERSIFICATION BY COUNTRY} \, \triangle$

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 States	75.1%	Japan	2.4%
Switzerland	6.3	Ireland	2.2
United Kingdom	4.9	Germany	1.2
Denmark	4.1	Canada	0.9
France	2.9	Total	100.0%

<sup>△</sup> Methodology differs from that used for purposes of complying with the fund's policy regarding investments in securities of foreign issuers, as discussed further in the fund's prospectus.

FORWARD CURRENCY CONTRACTS a  Counterparty	t 12/31/21 (aggregate face valu Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation
	currency	туре	uate	value	race value	(depreciation
Bank of America N.A.	Australian Dollar	Dung	1/10/22	\$429,126	\$429,766	\$(640
	British Pound	Buy Sell	1/19/22 3/16/22	. , ,		(5,504)
				345,456 4,007,819	339,952	, ,
	Euro	Buy Sell	3/16/22		3,995,298	12,521
	Japanese Yen Swiss Franc		2/16/22	1,396,303	1,412,658	16,355
	SWISSFRANC	Buy	3/16/22	667,944	662,960	4,984
Barclays Bank PLC		- "	- / /-			/
	British Pound	Sell	3/16/22	427,457	420,552	(6,905
	Euro	Buy	3/16/22	1,441,063	1,436,273	4,790
	Japanese Yen	Buy	2/16/22	310,492	314,153	(3,661)
Citibank, N.A.						
	Danish Krone	Sell	3/16/22	2,313,693	2,306,698	(6,995
	Euro	Sell	3/16/22	430,757	429,306	(1,451
Credit Suisse International						
	British Pound	Sell	3/16/22	1,813,882	1,784,739	(29,143
	Japanese Yen	Buy	2/16/22	1,031,560	1,043,579	(12,019
Goldman Sachs International						
	British Pound	Buy	3/16/22	1,517,410	1,493,025	24,385
	Canadian Dollar	Sell	1/19/22	630,372	633,988	3,616
	Euro	Sell	3/16/22	1,460,104	1,455,404	(4,700
	Japanese Yen	Buy	2/16/22	3,615,637	3,658,227	(42,590
HSBC Bank USA, National Associat	ion					
,	British Pound	Buy	3/16/22	745,309	733,451	11,858
	Canadian Dollar	Sell	1/19/22	693,141	697,173	4,032
	Euro	Sell	3/16/22	4,056,846	4,043,322	(13,524
	Swiss Franc	Buy	3/16/22	3,127,959	3,105,586	22,373
JPMorgan Chase Bank N.A.			, ,			
or morgan enase bank nava	Japanese Yen	Sell	2/16/22	1,404,858	1,421,513	16,655
	New Zealand Dollar	Buy	1/19/22	301,037	306,067	(5,030)
Morgan Stanley & Co. Internationa		Bay	1/13/22	301,031	300,001	(3,030)
Morgan Stanley & Co. Internationa	British Pound	Buy	3/16/22	1,664,767	1,638,157	26,610
	Danish Krone	Buy	3/16/22	802,713	795,794	6,919
	Euro	Sell	3/16/22	3,165,916	3,155,914	(10,002
	Japanese Yen	Sell	2/16/22	553,763	561,399	7,636
	Japanese ren	Sell	2/16/22	555,765	501,599	1,030
NatWest Markets PLC	A		1 /10 /00	0.620.610	0.007.000	/2.22.
	Australian Dollar	Buy	1/19/22	2,633,619	2,637,603	(3,984
	Euro	Buy	3/16/22	1,496,932	1,492,159	4,773

FORWARD CURRENCY CONTRACTS	Sat 12/31/21 (aggregate face va					Unrealized
Country	C	Contract	Delivery	W-lo-	Aggregate	appreciation/
Counterparty	Currency	type*	date	Value	face value	(depreciation)
State Street Bank and Trust Co.						
	British Pound	Buy	3/16/22	\$193,093	\$190,017	\$3,076
	Canadian Dollar	Sell	1/19/22	143,086	151,933	8,847
	Euro	Sell	3/16/22	9,805	9,773	(32)
	Israeli Shekel	Buy	1/19/22	267,402	259,219	8,183
	Japanese Yen	Buy	2/16/22	1,282,223	1,297,327	(15,104)
Toronto-Dominion Bank						
	Euro	Buy	3/16/22	399,744	398,457	1,287
UBSAG						
	British Pound	Sell	3/16/22	532,595	524,011	(8,584)
	Canadian Dollar	Buy	1/19/22	445,783	448,330	(2,547)
	Canadian Dollar	Sell	1/19/22	445,783	440,367	(5,416)
	Euro	Buy	3/16/22	433,835	432,434	1,401
	Japanese Yen	Buy	2/16/22	1,227,525	1,241,548	(14,023)
	Swiss Franc	Sell	3/16/22	26,718	26,527	(191)
WestPac Banking Corp.						
	British Pound	Sell	3/16/22	2,139,178	2,115,906	(23,272)
	Euro	Buy	3/16/22	225,526	224,813	713
Unrealized appreciation						191,014
Unrealized (depreciation)						(215,317)
Total	·	·		·		\$(24,303)

<sup>\*</sup> The exchange currency for all contracts listed is the United States Dollar.

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*:			
Financials	\$690,050	\$—	\$—
Health care	164,610,935	4,281,383	_
Total common stocks	165,300,985	4,281,383	_
U.S. treasury obligations	_	123,101	_
Units	1,755,220	_	_
Short-term investments	110,000	3,877,754	_
Totals by level	\$167,166,205	\$8,282,238	\$-

		Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3	
Forward currency contracts	\$-	\$(24,303)	\$—	
Totals by level	\$-	\$(24,303)	\$—	

 $<sup>^{\</sup>star} Common stock \ classifications \ are \ presented \ at the sector level, which \ may \ differ from \ the fund's \ portfolio \ presentation.$ 

# Statement of assets and liabilities

12/31/21

#### Assets

Investment in securities, at value (Notes 1 and 8):	
Unaffiliated issuers (identified cost \$106,203,934)	\$171,970,676
Affiliated issuers (identified cost \$3,477,767) (Note 5)	3,477,767
Foreign currency (cost \$20) (Note 1)	20
Dividends, interest and other receivables	144,541
Foreign tax reclaim	296,050
Receivable for shares of the fund sold	18,795
Unrealized appreciation on forward currency contracts (Note 1)	191,014
Totalassets	176,098,863
Liabilities	
Payable for investments purchased	14,373
Payable for shares of the fund repurchased	151,647
Payable for compensation of Manager (Note 2)	88,489
Payable for custodian fees (Note 2)	3,874
Payable for investor servicing fees (Note 2)	19,914
Payable for Trustee compensation and expenses (Note 2)	66,949
Payable for administrative services (Note 2)	1,880
Payable for distribution fees (Note 2)	25,567
Unrealized depreciation on forward currency contracts (Note 1)	215,317
Collateral on certain derivative contracts, at value (Notes 1 and 8)	233,101
Other accrued expenses	43,922
Total liabilities	865,033
Net assets	\$175,233,830
Represented by	
Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$95,918,104
Total distributable earnings (Note 1)	79,315,726
Total — Representing net assets applicable to capital shares outstanding	\$175,233,830
Computation of net asset value Class IA	
Netassets	\$51,394,028
Number of shares outstanding	2,632,654
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$19.52
Computation of net asset value Class IB	
Net assets	\$123,839,802
Number of shares outstanding	6,631,590
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$18.67

# Statement of operations

Year ended 12/31/21

Investment income	
Dividends (net of foreign tax of \$122,864)	\$2,450,295
Interest (including interest income of \$3,788 from investments in affiliated issuers) (Note 5)	4,287
Securities lending (net of expenses) (Notes 1 and 5)	7,767
Total investment income	2,462,349
Expenses	
Compensation of Manager (Note 2)	1,009,170
Investor servicing fees (Note 2)	115,611
Custodian fees (Note 2)	20,929
Trustee compensation and expenses (Note 2)	6,459
Distribution fees (Note 2)	290,067
Administrative services (Note 2)	4,232
Other	69,028
Total expenses	1,515,496
Expense reduction (Note 2)	(26)
Net expenses	1,515,470
Net investment income	946,879
Realized and unrealized gain (loss)	
Net realized gain (loss) on:	
Securities from unaffiliated issuers (Notes 1 and 3)	13,551,697
Foreign currency transactions (Note 1)	5,068
Forward currency contracts (Note 1)	62,038
Written options (Note 1)	21,312
Total net realized gain	13,640,115
Change in net unrealized appreciation (depreciation) on:	
Securities from unaffiliated issuers	15,422,031
Assets and liabilities in foreign currencies	(12,682)
Forward currency contracts	(318,455)
Total change in net unrealized appreciation	15,090,894
Net gain on investments	28,731,009
Net increase in net assets resulting from operations	\$29,677,888

# Statement of changes in net assets

	Year ended 12/31/21	Year ended 12/31/20
Increase in net assets		
Operations:		
Net investment income	\$946,879	\$1,144,930
Net realized gain on investments and foreign currency transactions	13,640,115	13,033,381
Change in net unrealized appreciation of investments and assets and liabilities in foreign currencies	15,090,894	7,917,705
Net increase in net assets resulting from operations	29,677,888	22,096,016
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(621,964)	(315,414)
Class IB	(1,265,779)	(484,317)
Net realized short-term gain on investments		
Class IA	(1,124,719)	(964,192)
Class IB	(2,746,740)	(2,194,016)
From net realized long-term gain on investments		
Class IA	(2,599,292)	(3,046,435)
Class IB	(6,347,882)	(6,932,156)
Increase from capital share transactions (Note 4)	1,971,763	1,839,742
Total increase in net assets	16,943,275	9,999,228
Net assets:		
Beginning of year	158,290,555	148,291,327
End of year	\$175,233,830	\$158,290,555

# **Financial highlights** (For a common share outstanding throughout the period)

INVESTMENT OPERATIONS:			LESS DIS	STRIBUTI	ONS:			RATIOSAND	ID SUPPLEMENTAL DATA:				
Period ended	Net asset value, beginning of period	Net investment income (loss) a	Netrealized and unrealized gain (loss) on investments	Total from investment operations	From net investment income	From net realized gain on investments	Total distributions	Net asset value, end of period	Total return at net asset value (%) b. c	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) b,4	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%)
ClassIA													
12/31/21	\$17.97	.14	3.09	3.23	(.24)	(1.44)	(1.68)	\$19.52	19.77	\$51,394	.74	.75	51
12/31/20	17.32	.16	2.17	2.33	(.12)	(1.56)	(1.68)	17.97	16.47	48,233	.77	.96	82
12/31/19	13.92	.15	3.97	4.12	(.04)	(.68)	(.72)	17.32	30.58	46,266	.77	1.01	86
12/31/18	16.92	.11	(.17)	(.06)	(.21)	(2.73)	(2.94)	13.92	(.29)	40,061	.77	.69	54
12/31/17	16.10	.13	2.29	2.42	(.14)	(1.46)	(1.60)	16.92	15.60	45,157	.78	.79	60
ClassIB													
12/31/21	\$17.27	.09	2.95	3.04	(.20)	(1.44)	(1.64)	\$18.67	19.40	\$123,840	.99	.50	51
12/31/20	16.70	.11	2.10	2.21	(80.)	(1.56)	(1.64)	17.27	16.28	110,058	1.02	.71	82
12/31/19	13.44	.11	3.83	3.94	_	(.68)	(.68)	16.70	30.29	102,025	1.02	.76	86
12/31/18	16.44	.07	(.18)	(.11)	(.16)	(2.73)	(2.89)	13.44	(.59)	88,885	1.02	.45	54
12/31/17	15.68	.09	2.22	2.31	(.09)	(1.46)	(1.55)	16.44	15.30	97,792	1.03	.54	60

a Per share net investment income (loss) has been determined on the basis of the weighted average number of shares outstanding during the period.

 $<sup>{\</sup>bf b} \ \ {\it The charges and expenses at the insurance company separate account level are not reflected.}$ 

<sup>•</sup> Total return assumes dividend reinvestment.

d Includes amounts paid through expense offset and brokerage/service arrangements, if any (Note 2). Also excludes acquired fund fees and expenses, if any.

#### **Notes to financial statements** 12/31/21

Within the following Notes to financial statements, references to "State Street" represent State Street Bank and Trust Company, references to "the SEC" represent the Securities and Exchange Commission, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC and references to "OTC", if any, represent over-the-counter. Unless otherwise noted, the "reporting period" represents the period from January 1, 2021 through December 31, 2021.

Putnam VT Global Health Care Fund (the fund) is a non-diversified series of Putnam Variable Trust (the Trust), a Massachusetts business trust registered under the Investment Company Act of 1940, as amended, as an open-end management investment company. The goal of the fund is to seek capital appreciation. For this non-diversified fund concentrating in the health care industries, the fund invests mainly in common stocks (growth or value stocks or both) of large and midsize companies worldwide that Putnam Management believes have favorable investment potential. Under normal circumstances, the fund invests at least 80% of the fund's net assets in securities of companies in the health care industries. This policy may be changed only after 60 days' notice to shareholders. Potential investments include companies that manufacture health care supplies or provide health care-related services, and companies in the research, development, production and marketing of pharmaceuticals and biotechnology products. The fund may purchase stocks of companies with stock prices that reflect a value lower than that which Putnam Management places on the company. Putnam Management may also consider other factors that it believes will cause the stock price to rise. Putnam Management may consider, among other factors, a company's valuation, financial strength, growth potential, competitive position in its industry, projected future earnings, cash flows and dividends when deciding whether to buy or sell investments. The fund may also use derivatives, such as futures, options, certain foreign currency transactions, warrants and swap contracts, for both hedging and non-hedging purposes, and may engage in short sales of securities.

The fund offers class IA and class IB shares of beneficial interest. Class IA shares are offered at net asset value and are not subject to a distribution fee. Class IB shares are offered at net asset value and pay an ongoing distribution fee, which is identified in Note 2

In the normal course of business, the fund enters into contracts that may include agreements to indemnify another party under given circumstances. The fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be, but have not yet been, made against the fund. However, the fund's management team expects the risk of material loss to be remote.

The fund has entered into contractual arrangements with an investment adviser, administrator, distributor, shareholder servicing agent and custodian, who each provide services to the fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the fund.

Under the fund's Amended and Restated Agreement and Declaration of Trust, any claims asserted against or on behalf of the Putnam Funds, including claims against Trustees and Officers, must be brought in state and federal courts located within the Commonwealth of Massachusetts.

#### Note 1 — Significant accounting policies

The following is a summary of significant accounting policies consistently followed by the fund in the preparation of its financial statements. The preparation of financial statements is in conformity with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases in net assets from operations. Actual results could differ from those estimates. Subsequent events after the Statement of assets and liabilities date through the date that the financial statements were issued have been evaluated in the preparation of the financial statements.

Investment income, realized and unrealized gains and losses and expenses of the fund are borne pro-rata based on the relative net assets of each class to the total net assets of the fund, except that each class bears expenses unique to that class (including the distribution fees applicable to such classes). Each class votes as a class only with respect to its own distribution plan or other matters on which a class vote is required by law or determined by the Trustees. If the fund were liquidated, shares of each class would receive their pro-rata share of the net

assets of the fund. In addition, the Trustees declare separate dividends on each class of shares.

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 Accounting Standards Codification 820 Fair Value Measurements and Disclosures (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.

Security transactions and related investment income Security transactions are recorded on the trade date (the date the order to buy or sell is executed). Gains or losses on securities sold are determined on the identified cost basis.

Interest income, net of any applicable withholding taxes, if any, and including amortization and accretion of premiums and discounts on debt securities, is recorded on the accrual basis. Dividend income, net of any applicable withholding taxes, is recognized on the ex-dividend date except that certain dividends from foreign securities, if any, are recognized as soon as the fund is informed of the ex-dividend date. Non-cash dividends, if any, are recorded at the fair value of the securities received. Dividends representing a return of capital or capital gains, if any, are reflected as a reduction of cost and/or as a realized gain.

Foreign currency translation The accounting records of the fund are maintained in U.S. dollars. The fair value of foreign securities, currency holdings, and other assets and liabilities is recorded in the books and records of the fund after translation to U.S. dollars based on the exchange rates on that day. The cost of each security is determined using historical exchange rates. Income and withholding taxes are translated at prevailing exchange rates when earned or incurred. The fund does not isolate that portion of realized or unrealized gains or losses resulting from changes in the foreign exchange rate on investments from fluctuations arising from changes in the market prices of the securities. Such gains and losses are included with the net realized and unrealized gain or loss on investments. Net realized gains and losses on foreign currency transactions represent net realized exchange gains or losses on disposition of foreign currencies, currency gains and losses realized between the trade and settlement dates on securities transactions and the difference between the amount of investment income and foreign withholding taxes recorded on the fund's books and the U.S. dollar equivalent amounts actually received or paid. Net unrealized appreciation and depreciation of assets and liabilities in foreign currencies arise from changes in the value of assets and liabilities other than investments at the period end, resulting from changes in the exchange rate.

**Options contracts** The fund uses options contracts to gain exposure to securities and to manage downside risks.

The potential risk to the fund is that the change in value of options contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. Realized gains and losses on purchased options are included in realized gains and losses on investment securities. If a written call option is exercised, the premium originally received is recorded as an addition to sales proceeds. If a written put option is exercised, the premium originally received is recorded as a reduction to the cost of investments.

Exchange-traded options are valued at the last sale price or, if no sales are reported, the last bid price for purchased options and the last ask price for written options. OTC traded options are valued using prices supplied by dealers.

Options on swaps are similar to options on securities except that the premium paid or received is to buy or grant the right to enter into a previously agreed upon interest rate or credit default contract. Forward premium swap option contracts include premiums that have extended settlement dates. The delayed settlement of the premiums is factored into the daily valuation of the option contracts. In the case of interest rate cap and floor contracts, in return for a premium, ongoing payments between two parties are based on interest rates exceeding a specified rate, in the case of a cap contract, or falling below a specified rate in the case of a

Written option contracts outstanding at period end, if any, are listed after the fund's portfolio.

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 are 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. Risks may exceed amounts recognized on the Statement of assets and liabilities.

Forward currency contracts outstanding at period end, if any, are listed after the fund's portfolio.

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 pledged 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 \$126,592 on open derivative contracts subject to the Master Agreements. There was no collateral pledged by the fund at period end for these agreements.

Securities lending 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. Income from securities lending, net of expenses, is included in investment income on the Statement of operations. Cash collateral 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. At the close of the reporting period, the fund had no securities out on loan.

**Interfund lending** The fund, along with other Putnam funds, may participate in an interfund lending program pursuant to an exemptive order issued by the SEC. This program allows the fund to borrow from or lend to other Putnam funds that permit such transactions. Interfund lending transactions are subject to each fund's investment policies and borrowing and lending limits. Interest earned or paid on the interfund lending transaction will be based on the average of certain current market rates. During the reporting period, the fund did not utilize the program.

Lines of credit The fund participates, along with other Putnam funds, in a \$317.5 million unsecured committed line of credit and a \$235.5 million unsecured uncommitted line of credit, both provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the committed line of credit and 1.30% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the uncommitted line of credit. A closing fee equal to 0.04% of the committed line of credit and 0.04% of the uncommitted line of credit has been paid by the participating funds. In addition, a commitment fee of 0.21% per annum on any unutilized portion of the committed line of credit is allocated to the participating funds based on their relative net assets and paid quarterly. During the reporting period, the fund had no borrowings against these arrangements.

Federal taxes It is the policy of the fund to distribute all of its taxable income within the prescribed time period and otherwise comply with the provisions of the Internal Revenue Code of 1986, as amended (the Code), applicable to regulated investment companies.

The fund is subject to the provisions of Accounting Standards Codification 740 Income Taxes (ASC 740). ASC 740 sets forth a minimum threshold for financial statement recognition of the benefit of a tax position taken or expected to be taken in a tax return. The fund did not have a liability to record for any unrecognized tax benefits in the accompanying financial statements. No provision has been made for federal taxes on income, capital gains or unrealized appreciation on securities held nor for excise tax on income and capital gains. Each of the fund's federal tax returns for the prior three fiscal years remains subject to examination by the Internal Revenue Service.

The fund may also be subject to taxes imposed by governments of countries in which it invests. Such taxes are generally based on either income or gains earned or repatriated. The fund accrues and applies such taxes to net investment income, net realized gains and net unrealized gains as income and/or capital gains are earned. In some cases, the fund may be entitled to reclaim all or a portion of such taxes, and such reclaim amounts, if any, are reflected as an asset on the fund's books. In many cases, however, the fund may not receive such amounts for an extended period of time, depending on the country of investment.

Distributions to shareholders Distributions to shareholders from net investment income are recorded by the fund on the ex-dividend date. Distributions from capital gains, if any, are recorded on the ex-dividend date and paid at least annually. The amount and character of income and gains to be distributed are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. These differences include temporary and/or permanent differences from losses on wash sale transactions and from foreign currency gains and losses. Reclassifications are made to the fund's capital accounts to reflect income and gains available for distribution (or available capital loss carryovers) under income tax regulations. At the close of the reporting period,  $the fund \, reclassified \, \$79,\!696 \, to \, increase \, undistributed \, net \, investment \, income \, and \, investment \, investment \, income \, and \, investment \, investmen$ \$79,696 to decrease accumulated net realized gain.

Tax cost of investments includes adjustments to net unrealized appreciation (depreciation) which may not necessarily be final tax cost basis adjustments, but closely approximate the tax basis unrealized gains and losses that may be realized and distributed to shareholders. The tax basis components of distributable earnings and the federal tax cost as of the close of the reporting period were as follows:

Unrealized appreciation	\$67,821,609
Unrealized depreciation	(3,134,875)
Net unrealized appreciation	64,686,734
Undistributed ordinary income	529,773
Undistributed long-term gains	8,620,502
Undistributed short-term gains	5,464,453
Cost for federal income tax purposes	\$110,737,406

Expenses of the Trust Expenses directly charged or attributable to any fund will be paid from the assets of that fund. Generally, expenses of the Trust will be allocated among and charged to the assets of each fund on a basis that the Trustees deem fair and equitable, which may be based on the relative assets of each fund or the nature of the services performed and relative applicability to each fund.

**Beneficial interest** At the close of the reporting period, insurance companies or their separate accounts were record owners of all but a de minimis number of the shares of the fund. Approximately 34.5% of the fund is owned by accounts of one insurance company.

#### Note 2 — Management fee, administrative services and other transactions

The fund pays Putnam Management a management fee (based on the fund's average net assets and computed and paid monthly) at annual rates that may vary based on the average of the aggregate net assets of all open-end mutual funds sponsored by Putnam Management (excluding net assets of funds that are invested in, or that are invested in by, other Putnam funds to the extent necessary to avoid "double counting" of those assets). Such annual rates may vary as follows:

0.780% of the first \$5 billion, 0.730% of the next \$5 billion, of the next \$10 billion, 0.680% 0.630% of the next \$10 billion. of the next \$50 billion, 0.580% of the next \$50 billion, 0.560% of the next \$100 billion and 0.550% of any excess thereafter. 0.545%

For the reporting period, the management fee represented an effective rate (excluding the impact from any expense waivers in effect) of 0.611% of the fund's average net assets.

Putnam Management has contractually agreed, through April 30, 2023, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plan, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were not reduced as a result of

Putnam Investments Limited (PIL), an affiliate of Putnam Management, is authorized by the Trustees to manage a separate portion of the assets of the fund as determined by Putnam Management from time to time. PIL did not manage any portion of the assets of the fund during the reporting period. If Putnam Management were to engage the services of PIL, Putnam Management would pay a quarterly sub-management fee to PIL for its services at an annual rate of 0.35% of the average net assets of the portion of the fund managed by PIL.

The Putnam Advisory Company, LLC (PAC), an affiliate of Putnam Management, is authorized by the Trustees to manage a separate portion of the assets of the fund, as designated from time to time by Putnam Management or PIL. PAC did not manage any portion of the assets of the fund during the reporting period. If Putnam Management or PIL were to engage the services of PAC, Putnam Management or PIL, as applicable, would pay a quarterly sub-advisory fee to PAC for its services at the annual rate of 0.35% of the average net assets of the portion of the fund's assets for which PAC is engaged as sub-adviser.

The fund reimburses Putnam Management an allocated amount for the compensation and related expenses of certain officers of the fund and their staff who provide administrative services to the fund. The aggregate amount of all such reimbursements is determined annually by the Trustees.

Custodial functions for the fund's assets are provided by State Street. Custody fees are based on the fund's asset level, the number of its security holdings and transaction volumes.

Putnam Investor Services, Inc., an affiliate of Putnam Management, provides investor servicing agent functions to the fund. Putnam Investor Services, Inc. was paid a monthly fee for investor servicing at an annual rate of 0.07% of the fund's average daily net assets. During the reporting period, the expenses for each class of shares related to investor servicing fees were as follows:

Class IA	\$34,410
Class IB	81,201
Total	\$115,611

The fund has entered into expense offset arrangements with Putnam Investor Services, Inc. and State Street whereby Putnam Investor Services, Inc.'s and State Street's fees are reduced by credits allowed on cash balances. For the reporting period, the fund's expenses were reduced by \$26 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$110, as a quarterly retainer, has been allocated to the fund, and an additional fee for each Trustees meeting attended. Trustees also are reimbursed for expenses they incur relating to their services as Trustees.

The fund has adopted a Trustee Fee Deferral Plan (the Deferral Plan) which allows the Trustees to defer the receipt of all or a portion of Trustees fees payable on or after July 1, 1995. The deferred fees remain invested in certain Putnam funds until distribution in accordance with the Deferral Plan.

The fund has adopted an unfunded noncontributory defined benefit pension plan (the Pension Plan) covering all Trustees of the fund who have served as a Trustee for at least five years and were first elected prior to 2004. Benefits under the Pension Plan are equal to 50% of the Trustee's average annual attendance and retainer fees for the three years ended December 31, 2005. The retirement benefit is payable during a Trustee's lifetime, beginning the year following retirement, for the number of years of service through December 31, 2006. Pension expense for the fund is included in Trustee compensation and expenses in the Statement of operations. Accrued pension liability is included in Payable for Trustee compensation and expenses in the Statement of assets and liabilities. The Trustees have terminated the Pension Plan with respect to any Trustee first elected after 2003.

The fund has adopted a distribution plan (the Plan) with respect to its class IB shares pursuant to Rule 12b-1 under the Investment Company Act of 1940. The purpose of the Plan is to compensate Putnam Retail Management Limited Partnership, an indirect wholly-owned subsidiary of Putnam Investments, LLC, for services provided and expenses incurred in distributing shares of the fund. The Plan provides for payment by the fund to Putnam Retail Management Limited Partnership at an annual rate of up to 0.35% of the average net assets attributable to the fund's class IB shares. The Trustees have approved payment by the fund at an annual rate of 0.25% of the average net assets attributable to the fund's class IB shares. The expenses related to distribution fees during the reporting period are included in Distribution fees in the Statement of operations.

#### Note 3 — Purchases and sales of securities

During the reporting period, the cost of purchases and the proceeds from sales, excluding short-term investments, were as follows:

	Cost of purchases	Proceeds from sales
Investments in securities (Long-term)	\$81,608,998	\$93,213,622
U.S. government securities (Long-term)	_	_
Total	\$81,608,998	\$93,213,622

The fund may purchase or sell investments from or to other Putnam funds in the ordinary course of business, which can reduce the fund's transaction costs, at prices determined in accordance with SEC requirements and policies approved by the Trustees. During the reporting period, purchases or sales of long-term securities from or to other Putnam funds, if any, did not represent more than 5% of the fund's total cost of purchases and/or total proceeds from sales.

#### Note 4 — Capital shares

At the close of the reporting period, there were an unlimited number of shares of beneficial interest authorized. Subscriptions and redemptions are presented at the omnibus level. Transactions in capital shares were as follows:

	Class IA shares				Class IB shares				
	Year e	Year ended 12/31/21		1 Year ended 12/31/20		Year ended 12/31/21		Year ended 12/31/20	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	
Shares sold	118,485	\$2,114,296	112,008	\$1,794,003	548,084	\$9,503,780	833,800	\$13,052,351	
Shares issued in connection with reinvestment of distributions	265,809	4,345,975	314,392	4,326,041	661,162	10,360,401	725,868	9,610,489	
	384,294	6,460,271	426,400	6,120,044	1,209,246	19,864,181	1,559,668	22,662,840	
Shares repurchased	(435,045)	(7,852,307)	(414,536)	(6,824,638)	(951,598)	(16,500,382)	(1,293,565)	(20,118,504)	
Net increase (decrease)	(50,751)	\$(1,392,036)	11,864	\$(704,594)	257,648	\$3,363,799	266,103	\$2,544,336	

#### Note 5 — Affiliated transactions

Transactions during the reporting 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 12/31/21
Short-term investments					
Putnam Cash Collateral Pool, LLC*	\$2,609,775	\$65,256,419	\$67,866,194	\$3,477	\$—
Putnam Short Term Investment Fund**	4,337,567	38,766,400	39,626,200	3,788	3,477,767
Total Short-term investments	\$6,947,342	\$104,022,819	\$107,492,394	\$7,265	\$3,477,767

<sup>\*</sup>No management fees are charged to Putnam Cash Collateral Pool, LLC (Note 1). Investment income shown is included in securities lending income on the Statement of operations. There were no realized or unrealized gains or losses during the period.

#### Note 6 — Market, credit and other risks

In the normal course of business, the fund trades financial instruments and enters into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the contracting party to the transaction to perform (credit risk). The fund may be exposed to additional credit risk that an institution or other entity with which the fund has unsettled or open transactions will default. Investments in foreign securities involve certain risks, including those related to economic instability, unfavorable political developments, and currency fluctuations. The fund concentrates a majority of its investments in the health care sector, which involves more risk than a fund that invests more broadly.

Beginning in January 2020, global financial markets have experienced, and may continue to experience, significant volatility resulting from the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread of a virus known as a significant volatility of the spread ofCovid-19. The outbreak of Covid-19 has resulted in travel and border restrictions, quarantines, supply chain disruptions, lower consumer demand, and general market uncertainty. The effects of Covid-19 have adversely affected, and may continue to adversely affect, the global economy, the economies of certain nations, and individual issuers, all of which may negatively impact the fund's performance.

<sup>\*</sup>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.

#### Note 7 — Summary of derivative activity

The volume of activity for the reporting period for any derivative type that was held during the period is listed below and was based on an average of the holdings at the end of each fiscal quarter:

Purchased equity option contracts (contract amount)	\$*
Written equity option contracts (contract amount)	\$-*
Forward currency contracts (contract amount)	\$54,600,000
Warrants (number of warrants)	12,000

<sup>\*</sup>For the reporting period, there were no holdings at the end of each fiscal quarter and the transactions were considered minimal.

The following is a summary of the fair value of derivative instruments as of the close of the reporting period:

#### Fair value of derivative instruments as of the close of the reporting period

	Asset der	rivatives	Liability derivatives		
Derivatives not accounted for as hedging instruments under ASC 815	Statement of assets and liabilities location Fair value		Statement of assets and liabilities location	Fair value	
Foreign exchange contracts	Receivables	\$191,014	Payables	\$215,317	
Total		\$191,014		\$215,317	

The following is a summary of realized and change in unrealized gains or losses of derivative instruments in the Statement of operations for the reporting period (Note 1):

#### Amount of realized gain or (loss) on derivatives recognized in net gain or (loss) on investments

Derivatives not accounted for as hedging instruments under ASC 815	Warrants	Options	Forward currency contracts	Total
Foreign exchange contracts	\$-	\$—	\$62,038	\$62,038
Equity contracts	_	(80,160)	_	\$(80,160)
Total	\$-	\$(80,160)	\$62,038	\$(18,122)

#### Change in unrealized appreciation or (depreciation) on derivatives recognized in net gain or (loss) on investments

Derivatives not accounted for as hedging instruments under ASC 815	Warrants	Forward currency contracts	Total
Foreign exchange contracts	\$—	\$(318,455)	\$(318,455)
Equity contracts	_	_	\$—
Total	\$—	\$(318,455)	\$(318,455)

#### Note 8 — Offsetting of financial and derivative assets and liabilities

The following table summarizes any derivatives, repurchase agreements and reverse repurchase agreements, at the end of the reporting period, that are subject to an enforceable master netting agreement or similar agreement. For securities lending transactions or borrowing transactions associated with securities sold short, if any, see Note 1. For financial reporting purposes, the fund does not offset financial assets and financial liabilities that are subject to the master netting agreements in the Statement of assets and liabilities.

	Bank of America N.A.	Barclays Bank PLC	Citibank, N.A.	Credit Suisse International	Goldman Sachs International	HSBC Bank USA, National Association
Assets:						
Forward currency contracts#	\$33,860	\$4,790	\$—	\$—	\$28,001	\$38,263
Total Assets	\$33,860	\$4,790	\$—	\$—	\$28,001	\$38,263
Liabilities:						
Forward currency contracts#	6,144	10,566	8,446	41,162	47,290	13,524
Total Liabilities	\$6,144	\$10,566	\$8,446	\$41,162	\$47,290	\$13,524
Total Financial and Derivative Net Assets	\$27,716	\$(5,776)	\$(8,446)	\$(41,162)	\$(19,289)	\$24,739
Total collateral received (pledged)†##	\$—	\$—	\$-	\$—	\$—	\$24,739
Netamount	\$27,716	\$(5,776)	\$(8,446)	\$(41,162)	\$(19,289)	\$—
Controlled collateral received (including TBA commitments)**	\$—	\$-	\$-	\$-	\$-	\$113,104
Uncontrolled collateral received	\$-	\$-	\$-	\$-	\$-	\$—
Collateral (pledged) (including TBA commitments)**	\$-	\$—	\$—	\$—	\$—	\$-

 $<sup>^{\</sup>star\star}$  Included with Investments in securities on the Statement of assets and liabilities.

<sup>†</sup> Additional collateral may be required from certain brokers based on individual agreements.

 $<sup>^{\#}</sup>$ Covered by master netting agreement (Note 1).

<sup>##</sup> Any over-collateralization of total financial and derivative net assets is not shown. Collateral may include amounts related to unsettled agreements.

JPMorgan Chase Bank N.A.	Morgan Stanley & Co. International PLC	NatWest Markets PLC	State Street Bank and Trust Co.	Toronto-Dominion Bank	UBSAG	WestPac Banking Corp.	Total
\$16,655	\$41,165	\$4,773	\$20,106	\$1,287	\$1,401	\$713	\$191,014
\$16,655	\$41,165	\$4,773	\$20,106	\$1,287	\$1,401	\$713	\$191,014
5,030	10,002	3,984	15,136	_	30,761	23,272	215,317
\$5,030	\$10,002	\$3,984	\$15,136	\$—	\$30,761	\$23,272	\$215,317
\$11,625	\$31,163	\$789	\$4,970	\$1,287	\$(29,360)	\$(22,559)	\$(24,303)
\$-	\$31,163	\$-	\$4,970	\$-	\$—	\$—	
\$11,625	\$-	\$789	\$-	\$1,287	\$(29,360)	\$(22,559)	
\$—	\$110,000	\$—	\$9,997	\$—	\$—	\$—	\$233,101
\$-	\$—	\$-	\$—	\$—	\$—	\$-	\$—
\$-	\$-	\$-	\$-	\$—	\$-	\$—	\$—

# Federal tax information (Unaudited)

Pursuant to §852 of the Internal Revenue Code, as amended, the fund hereby designates \$9,501,312 as a capital gain dividend with respect to the taxable year ended December 31, 2021, or, if subsequently determined to be different, the net capital gain of such year.

The fund designated 23.92% of ordinary income distributions as qualifying for the dividends received deduction for corporations.

### **About the Trustees**

Name Year of birth Position held	Principal occupations during past five years	Other directorships	
Independent Trustee		other unectorsings	
<b>Liaquat Ahamed</b> Born 1952 Trustee since 2012	Author; won Pulitzer Prize for Lords of Finance: The Bankers Who Broke the World.	Chairman of the Sun Valley Writers Conference, a literary not-for-profit organization, and a Trustee of the Journal of Philosophy.	
<b>Ravi Akhoury</b> Born 1947 Trustee since 2009	Private investor	Director of English Helper, Inc., a private software company; Trustee of the Rubin Museum, serving on the Investment Committee; and previously a Director of RAGE Frameworks, Inc.	
<b>Barbara M. Baumann</b> Born 1955 Trustee since 2010	President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.	Director of Devon Energy Corporation, a publicly traded independent natural gas and oil exploration and production company; Director of National Fuel Gas Company, a publicly traded energy company that engages in the production, gathering, transportation, distribution, and marketing of natural gas; Senior Advisor to the energy private equity firm First Reserve; Director of Ascent Resources, LLC, a private independent exploration and production company; Director of Texas American Resources Company II, a private, independent oil and gas exploration and production company; member of the Finance Committee of the Children's Hospital of Colorado; member of the Investment Committee of the Board of The Denver Foundation; and previously a Director of publicly traded companies Buckeye Partners LP, UNS Energy Corporation, CVR Energy Company, and SM Energy Corporation.	
<b>Katinka Domotorffy</b> Born 1975 Trustee since 2012	Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies.	Director of the Great Lakes Science Center and of College Now Greater Cleveland.	
<b>Catharine Bond Hill</b> Born 1954 Trustee since 2017	Managing Director of Ithaka S+R, a not-for-profit service that helps the academic community navigate economic and technological change. From 2006 to 2016, the 10th president of Vassar College.	Director of Yale-NUS College and Trustee of Yale University.	
Paul L. Joskow Born 1947 Trustee since 1997	The Elizabeth and James Killian Professor of Economics, Emeritus at the Massachusetts Institute of Technology (MIT). From 2008 to 2017, the President of the Alfred P. Sloan Foundation, a philanthropic institution focused primarily on research and education on issues related to science, technology, and economic performance.	Vice Chair of the Board of Directors of the Whitehead Institute for Biomedical Research, a non-profit biomedical research institute; a Director of Exelon Corporation, an energy company focused on power services; and a member Emeritus of the Board of Advisors of the Boston Symphony Orchestra.	
Kenneth R. Leibler Born 1949 Trustee since 2006 Vice Chair from 2016 to 2018, and Chair since 2018	Vice Chairman Emeritus of the Board of Trustees of Beth Israel Deaconess Hospital in Boston. Member of the Investment Committee of the Boston Arts Academy Foundation.	Director of Eversource Corporation, which operates New England's largest energy delivery system; previously the Chairman of the Boston Options Exchange, an electronic market place for the trading of listed derivatives securities; previously the Chairman and Chief Executive Officer of the Boston Stock Exchange; and previously the President and Chief Operating Officer of the American Stock Exchange.	
<b>George Putnam, III</b> Born 1951 Trustee since 1984	Chairman of New Generation Research, Inc., a publisher of financial advisory and other research services, and President of New Generation Advisors, LLC, a registered investment adviser to private funds.	Director of The Boston Family Office, LLC, a registered investment advisor; a Trustee of the Gloucester Marine Genomics Institute; previously a Trustee of the Marine Biological Laboratory; and previously a Trustee of Epiphany School.	

Name Year of birth Position held	Principal occupations during past five years	Other directorships	
Manoj P. Singh Born 1952 Trustee since 2017	Until 2015, Chief Operating Officer and Global Managing Director at Deloitte Touche Tohmatsu, Ltd., a global professional services organization, serving on the Deloitte U.S. Board of Directors and the boards of Deloitte member firms in China, Mexico, and Southeast Asia.	Director of Abt Associates, a global research firm working in the fields of health, social and environmental policy, and international development; Trustee of Carnegie Mellon University; Director of Pratham USA, an organization dedicated to children's education in India; member of the advisory board of Altimetrik, a business transformation and technology solutions firm; and Director of DXC Technology, a global IT services and consulting company.	
Mona K. Sutphen Born 1967 Trustee since 2020	Senior Advisor at The Vistria Group, a private investment firm focused on middle-market companies in the healthcare, education, and financial services industries. From 2014 to 2018, Partner at Macro Advisory Partners, a global consulting firm.	Director of Unitek Learning, a private nursing and medical services education provider in the United States; Director of Pattern Energy Group LP, a private renewable energy company; previous Director of Pattern Energy, a publicly traded renewable energy company; Board Member, International Rescue Committee; Co-Chair of the Board of Human Rights First; Trustee of Mount Holyoke College; and member of the Advisory Board for the Center on Global Energy Policy at Columbia University's School of International and Public Affairs.	

#### **Interested Trustee**

#### Robert L. Reynolds\* Born 1952 Trustee since 2008 and President and Chief Executive Officer of Putnam Investments

since 2008

President and Chief Executive Officer of Putnam Investments: member of Putnam Investments' Board of Directors; and Chair of Great-West Lifeco U.S. LLC. Prior to 2019, also President and Chief Executive Officer of Great-West Financial, a financial services company that provides retirement savings plans, life insurance, and annuity and executive benefits products, and of Great-West Lifeco U.S. LLC, a holding company that owns Putnam Investments and Great-West Financial, and a member of Great-West Financial's Board of Directors

Director of the Concord Museum; Director of the Dana-Farber Cancer Institute; Director of the U.S. Ski & Snowboard Association Foundation; Chairman of the Boston Advisory Board of the American Ireland Fund; National Council Co-Chairman of the American Enterprise Institute; Executive Committee Member of the Greater Boston Chamber of Commerce; member of the U.S. Chamber of Commerce, Center for Capital Markets Competitiveness; Chairman of the Massachusetts High Technology Council; member of the Chief Executives Club of Boston; member of the Massachusetts General Hospital President's Council; and previously the Chairman of the Massachusetts Competitive Partnership.



\*Mr. Reynolds is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Investments. He is President and Chief Executive Officer of Putnam Investments, as well as the President of your fund and each of the other Putnam funds.

The address of each Trustee is 100 Federal Street, Boston, MA 02110.

As of December 31, 2021, there were 100 Putnam funds. All Trustees serve as Trustees of all Putnam funds.

Each Trustee serves for an indefinite term, until his or her resignation, retirement at age 75, removal, or death.

#### **Officers**

In addition to Robert L. Reynolds, the other officers of the fund are shown below:

#### James F. Clark (Born 1974)

Vice President and Chief Compliance Officer Since 2016

Chief Compliance Officer and Chief Risk Officer, Putnam Investments, and Chief Compliance Officer, Putnam Management

#### Nancy E. Florek (Born 1957)

Vice President, Director of Proxy Voting and Corporate Governance, Assistant Clerk, and Assistant Treasurer Since 2000

Michael J. Higgins (Born 1976) Vice President, Treasurer, and Clerk Since 2010

Jonathan S. Horwitz (Born 1955) Executive Vice President, Principal Executive Officer, and Compliance Liaison Since 2004

#### Richard T. Kircher (Born 1962)

Vice President and BSA Compliance Officer Since 2019

Assistant Director, Operational Compliance, Putnam Investments and Putnam Retail Management

#### Martin Lemaire (Born 1984)

Vice President and Derivatives Risk Manager Since 2022

Risk Manager and Risk Analyst, Putnam Investments

#### Susan G. Malloy (Born 1957)

Vice President and Assistant Treasurer Since 2007

Head of Accounting and Middle Office Services, Putnam Investments and Putnam Management

#### Alan G. McCormack (Born 1964)

Vice President and Derivatives Risk Manager Since 2022

Head of Quantitative Equities and Risk, Putnam Investments

Denere P. Poulack (Born 1968) Assistant Vice President, Assistant Clerk, and Assistant Treasurer

Janet C. Smith (Born 1965)

Since 2004

Vice President, Principal Financial Officer, Principal Accounting Officer, and Assistant Treasurer Since 2007

Head of Fund Administration Services, Putnam Investments and Putnam Management

#### Stephen J. Tate (Born 1974)

Vice President and Chief Legal Officer Since 2021

General Counsel, Putnam Investments, Putnam Management, and Putnam Retail Management

#### Mark C. Trenchard (Born 1962)

Vice President Since 2002

Director of Operational Compliance, Putnam Investments and Putnam Retail Management

The principal occupations of the officers for the past five years have been with the employers as shown above, although in some cases they have held different positions with such employers. The address of each officer is 100 Federal Street, Boston, MA 02110.

# Other important information

#### **Proxy voting**

Putnam is committed to managing our mutual funds in the best interests of our shareholders. The Putnam funds' proxy voting guidelines and procedures, as well as information regarding how your fund voted proxies relating to portfolio securities during the 12-month period ended June 30, 2021, are available in the Individual Investors section of putnam.com and on the Securities and Exchange Commission's (SEC) website at www.sec.gov. If you have questions about finding forms on the SEC's website, you may call the SEC at 1-800-SEC-0330. You may also obtain the Putnam funds' proxy voting guidelines and procedures at no charge by calling Putnam's Shareholder Services at 1-800-225-1581.

#### Fund portfolio holdings

The fund will file a complete schedule of its portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-PORT within 60 days of the end of such fiscal quarter. Shareholders may obtain the fund's Form N-PORT from the SEC's website at www.sec.gov.

Prior to its use of Form N-PORT, the fund filed its complete schedule of its portfolio holdings with the SEC on Form N-Q, which is available online at www.sec.gov.

# **Fund information**

#### Investment Manager

Putnam Investment Management, LLC 100 Federal Street Boston, MA 02110

#### Investment Sub-Advisors

Putnam Investments Limited 16 St James's Street London, England SW1A 1ER

The Putnam Advisory Company, LLC 100 Federal Street Boston, MA 02110

#### **Marketing Services**

Putnam Retail Management Limited Partnership 100 Federal Street Boston, MA 02110

### Investor Servicing Agent

Putnam Investments
Mailing address:
P.O. Box 219697
Kansas City, MO 64121-9697
1-800-225-1581

#### Custodian

State Street Bank and Trust Company

#### Legal Counsel

Ropes & Gray LLP

#### Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP

#### Trustees

Kenneth R. Leibler, *Chair*Liaquat Ahamed
Ravi Akhoury
Barbara M. Baumann
Katinka Domotorffy
Catharine Bond Hill
Paul L. Joskow
George Putnam, III
Robert L. Reynolds
Manoj P. Singh
Mona K. Sutphen

The fund's Statement of Additional Information contains additional information about the fund's Trustees and is available without charge upon request by calling 1-800-225-1581.