

# Putnam Variable Trust

12|31|11

Annual report

Putnam VT  
Global Health Care Fund



# Message from the Trustees

Dear Shareholder:

Global financial uncertainty and the European debt crisis continue to contribute to risk aversion and volatility within markets around the world. While we have experienced some positive trends in recent months, stock markets ended 2011 essentially where they began.

Until a lasting and meaningful solution is found for the European debt problem and the U.S. economy establishes a solid footing, it is our belief that this volatility and uncertainty will persist, at least over the near term. In this kind of market, Putnam's portfolio managers and analysts are dedicated to uncovering opportunities, while seeking to guard against downside risk.

During periods of market uncertainty, it is especially important to rely on the counsel and expertise of your financial advisor, who can help you maintain a long-term focus and a balanced investment approach suitable to your goals.

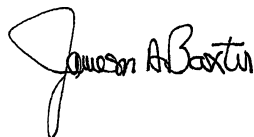
In other developments, please join us in welcoming the return of Elizabeth T. Kennan to the Board of Trustees. Dr. Kennan, who served as a Trustee from 1992 until 2010, has rejoined the Board, effective January 1, 2012. Dr. Kennan is a Partner of Cambus-Kenneth Farm (thoroughbred horse breeding and general farming), and is also President Emeritus of Mount Holyoke College.

We would also like to take this opportunity to welcome new shareholders to the fund and to thank all of our investors for your continued confidence in Putnam.

Respectfully yours,



Robert L. Reynolds  
President and Chief Executive Officer  
Putnam Investments



Jameson A. Baxter  
Chair, Board of Trustees

February 13, 2012

## Performance summary (as of 12/31/11)

### Investment objective

Capital appreciation

**Net asset value** December 31, 2011

Class IA: \$11.85

Class IB: \$11.69

### Total return at net asset value

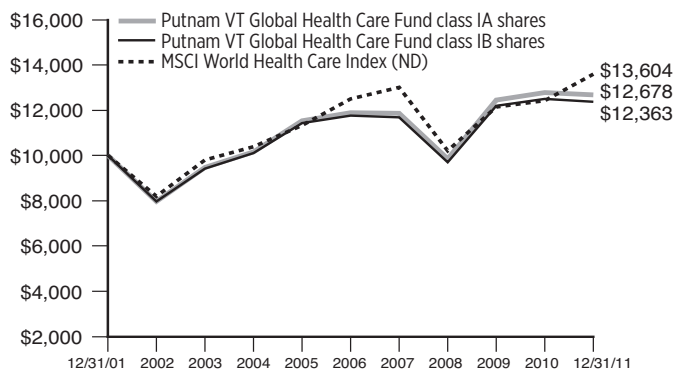
(as of 12/31/11)	Class IA shares*	Class IB shares*	MSCI World Health Care Index (ND)†
1 year	-0.89%	-1.18%	9.46%
5 years	6.55	5.17	8.74
Annualized	1.28	1.01	1.69
10 years	26.78	23.63	36.04
Annualized	2.40	2.14	3.13
Life	49.32	44.83	—
Annualized	2.98	2.75	—

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

\* Class inception date: April 30, 1998.

† 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.

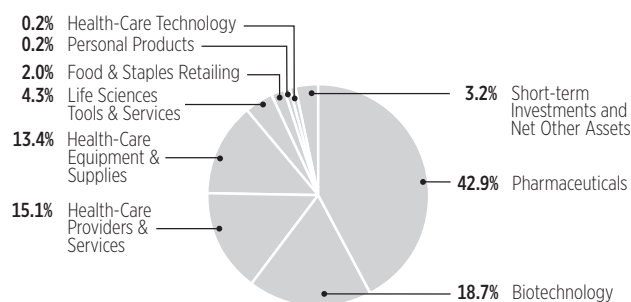
### Cumulative total returns of a \$10,000 investment in class IA and class IB shares at net asset value — since 12/31/01



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.

**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. 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



Portfolio holdings and allocations may vary over time. Allocations are represented as a percentage of net assets as of 12/31/11. Summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities and the exclusion of as-of trades, if any.

## Report from your fund's managers

### **The 12 months ended December 31, 2011, marked a challenging time for the overall stock market. How did health-care stocks fare?**

In an increasingly turbulent environment for world financial markets, stocks in the health-care sector performed slightly better than the broader stock market. Health care is traditionally viewed as a defensive sector; investors tend to seek out these stocks as safe havens when economic growth is weakening and stock markets are volatile. Investors found quite a bit to be nervous about, particularly in the last half of the period, when stock markets around the world declined sharply in response to slowing economic growth and worsening debt issues in Europe and the United States. For the fund, performance was dampened in part by its exposure to health-care companies whose new product launches were more sluggish than anticipated.

### **Which holdings produced disappointing results?**

A notable disappointment was Dendreon, a biotechnology company that specializes in cancer treatments. In 2010, Dendreon's stock rallied after the company received FDA approval for Provenge, a prostate cancer vaccine. Although the FDA gave Dendreon approval to quadruple the production capacity of the drug, sales have been slower than anticipated. This is mainly due to concerns about government reimbursement. Because of the high cost of the treatment, Medicare has undertaken a review to decide if it will cover the costs of Provenge. Physicians are more hesitant to prescribe expensive drugs without the assurance that they will be reimbursed.

We saw a similar challenge for Human Genome Sciences, another biotechnology company. This stock performed very well in 2010 after the company completed two successful FDA Phase III trials for Benlysta. Earlier this year, the FDA approved Benlysta, the first medication sanctioned for treating systemic lupus in the United States since 1955. However, as is the case with Provenge, uncertainty about reimbursement has dampened enthusiasm somewhat, and the Human Genome Sciences' stock declined.

### **Could you highlight some stocks that helped performance for the period?**

One of the top performers for the fund was the stock of Pharmasset, a biotechnology company that specializes in the treatment of hepatitis C. Like many small biotech companies, Pharmasset is not yet profitable, but the company has delivered very promising data on hepatitis C compounds in development. We believe a successful launch of these drugs could help Pharmasset gain a significant share of the hepatitis C treatment market. Investor optimism about these developments helped boost Pharmasset's stock price during the period.

We have also been pleased with the performance of Aetna, a health-care benefits company that serves approximately 35.3 million people. Unlike many health-care companies, HMOs like Aetna benefit from declines in utilization trends. When fewer people visit the doctor, elect to have surgery, or otherwise cut back on health-related spending, the result is lower expenses

for health insurers. Consequently, Aetna has been able to deliver solid financial results that exceeded expectations and drove up the stock's price. Also, last year, investors had considerable concerns about the Patient Protection and Affordable Care Act [PPACA] and its potential impact on HMOs. A key issue was the effect of PPACA's medical loss ratio [MLR] provision. The provision requires companies to spend 80% to 85% of premium dollars on medical care and health-care quality improvement. While still a concern, it appears that the provision may not be as big a burden for these companies as initially feared, and this also helped Aetna's performance.

### **As the fund begins a new fiscal year, what is your outlook for the health-care sector?**

At the close of the fiscal year, global financial markets remained somewhat volatile. As a result, we believe that health-care stocks — which continue to be perceived as a defensive investment choice — may be able to outperform the broader market. However, many potential headwinds confront the sector, including a high level of investor uncertainty about government spending cuts.

In terms of utilization of health-care products and services, we expect it to remain stable as macroeconomic uncertainty persists. We believe trends could improve if we see more positive indications of an economic recovery and a better employment picture. Over the longer term, as the PPACA takes effect, we anticipate that millions more people will have access to health insurance, which should also boost utilization.

*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 certain risks, such as currency fluctuations, economic instability, and political developments. Additional risks may be associated with emerging-market securities, including illiquidity and volatility. The fund's policy of concentrating on a limited group of industries and the fund's non-diversified status, which means the fund may invest in fewer issuers, can increase the fund's vulnerability to common economic forces and may result in greater losses and volatility. The use of derivatives involves additional risks, such as the potential inability to terminate or sell derivatives positions and the potential failure of the other party to the instrument to meet its obligations. 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. The prices of stocks in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including both general financial market conditions and factors related to a specific issuer or industry. Current and future portfolio holdings are subject to risk.

## Your fund's managers



Portfolio Manager **Kelsey Chen** joined Putnam in 2000 and has been in the investment industry since 1999.



Portfolio Manager **Christopher J. Stevo** is a CFA charterholder. He has been in the investment industry since he joined Putnam in 1999.

Your fund's managers may also manage 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 first two columns in the following table show the expenses you would have paid on a \$1,000 investment in your fund from July 1, 2011, to December 31, 2011. 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 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.

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 12/31/11		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 12/31/11	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*	\$4.08	\$5.26	\$4.38	\$5.65
Ending value (after expenses)	\$881.70	\$880.30	\$1,020.87	\$1,019.61
Annualized expense ratio†	0.86%	1.11%	0.86%	1.11%

\*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 12/31/11. The expense ratio may differ for each share class. Expenses 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; and then dividing that result by the number of days in the year.

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

## Report of Independent Registered Public Accounting Firm

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

In our opinion, the accompanying statement of assets and liabilities, including the portfolio, and the related statements of operations and of changes in net assets and the financial highlights present fairly, in all material respects, the financial position of Putnam VT Global Health Care Fund (the “fund”) at December 31, 2011, and the results of its operations, the changes in its net assets and the financial highlights for each of the periods indicated, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as “financial statements”) are the responsibility of the fund’s management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of investments owned at December 31, 2011 by correspondence with the custodian, brokers, and transfer agent, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP  
Boston, Massachusetts  
February 13, 2012

## The fund's portfolio 12/31/11

COMMON STOCKS (96.9%)*	Shares	Value
<b>Biotechnology (18.7%)</b>		
Acorda Therapeutics, Inc. †	27,500	\$655,600
Actelion NV (Switzerland) †	8,348	285,442
Affymax, Inc. †	60,200	397,922
Amarin Corp. PLC ADR (Ireland) † S	66,900	501,081
Amgen, Inc.	12,455	799,736
Amylin Pharmaceuticals, Inc. † S	30,900	351,642
Anthera Pharmaceuticals, Inc. † S	42,657	261,914
Ariad Pharmaceuticals, Inc. †	28,297	346,638
Arqule, Inc. † S	62,995	355,292
AVEO Pharmaceuticals, Inc. † S	32,485	558,742
BioMarin Pharmaceuticals, Inc. † S	31,600	1,086,408
Celgene Corp. †	60,700	4,103,320
Chelsea Therapeutics International, Ltd. † S	57,426	294,595
Codexis, Inc. †	29,178	154,643
CSL, Ltd. (Australia)	27,204	890,348
Dendreon Corp. † S	107,600	817,760
Dyax Corp. † S	107,156	145,732
Human Genome Sciences, Inc. † S	125,600	928,184
Ironwood Pharmaceuticals, Inc. †	14,594	174,690
Medivation, Inc. †	11,900	548,709
Onyx Pharmaceuticals, Inc. †	12,600	553,770
Pharmacyclics, Inc. †	13,800	204,516
Spectrum Pharmaceuticals, Inc. †	58,100	850,003
Synta Pharmaceuticals Corp. † S	96,100	448,787
United Therapeutics Corp. †	53,400	2,523,150
Vertex Pharmaceuticals, Inc. †	7,900	262,359
		<b>18,500,983</b>
<b>Food and staples retail (2.0%)</b>		
CVS Caremark Corp.	48,500	1,977,830
		<b>1,977,830</b>
<b>Health-care equipment and supplies (13.5%)</b>		
Baxter International, Inc.	89,400	4,423,512
CareFusion Corp. †	8,100	205,821
China Kanghui Holdings, Inc. ADR (China) † S	10,210	150,495
China Medical Technologies, Inc. ADR (China) † S	99,000	281,160
Covidien PLC (Ireland)	83,100	3,740,331
Medtronic, Inc.	33,600	1,285,200
Microport Scientific Corp. (China)	72,000	35,430
Smith & Nephew PLC (United Kingdom)	32,107	311,114
St. Jude Medical, Inc.	25,400	871,220
Stryker Corp. S	24,800	1,232,808
West Pharmaceutical Services, Inc. S	20,200	766,590
		<b>13,303,681</b>
<b>Health-care providers and services (15.1%)</b>		
Aetna, Inc.	110,600	4,666,214
AmerisourceBergen Corp.	52,300	1,945,037
Cardinal Health, Inc.	9,200	373,612
CIGNA Corp.	59,500	2,499,000
Coventry Health Care, Inc. † S	23,700	719,769
Express Scripts, Inc. † S	24,300	1,085,967
Fresenius Medical Care AG & Co. KGaA (Germany)	8,036	546,015
Fresenius Medical Care AG & Co., KGaA ADR (Germany) S	2,213	150,440
McKesson Corp.	4,159	324,028

COMMON STOCKS (96.9%)* cont.	Shares	Value
<b>Health-care providers and services cont.</b>		
Medco Health Solutions, Inc. †	11,000	\$614,900
Quest Diagnostics, Inc. S	10,000	580,600
Sinopharm Group Co. (China)	34,800	83,569
WellPoint, Inc.	20,700	1,371,375
		<b>14,960,526</b>
<b>Health-care technology (0.2%)</b>		
MedAssets, Inc. †	17,700	163,725
		<b>163,725</b>
<b>Life sciences tools and services (4.3%)</b>		
Agilent Technologies, Inc. †	5,800	202,594
Complete Genomics, Inc. † S	26,000	76,180
Life Technologies Corp. †	45,900	1,785,969
Sequenom, Inc. † S	29,600	131,720
ShangPharma Corp. ADR (China) †	55,112	400,664
Thermo Fisher Scientific, Inc. †	27,800	1,250,166
WuXi PharmaTech (Cayman), Inc. ADR (China) † S	36,858	406,912
		<b>4,254,205</b>
<b>Personal products (0.2%)</b>		
Synutra International, Inc. †	37,276	188,617
		<b>188,617</b>
<b>Pharmaceuticals (42.9%)</b>		
Abbott Laboratories	52,900	2,974,567
Astellas Pharma, Inc. (Japan)	34,300	1,393,672
Auxilium Pharmaceuticals, Inc. † S	122,400	2,439,432
Bayer AG (Germany)	2,790	178,372
Endocyte, Inc. †	25,600	96,256
GlaxoSmithKline PLC (United Kingdom)	128,623	2,932,942
Hospira, Inc. † S	29,400	892,878
Johnson & Johnson	110,900	7,272,822
Merck & Co., Inc.	111,300	4,196,010
Mitsubishi Tanabe Pharma (Japan)	41,800	661,041
Novartis AG (Switzerland)	65,286	3,729,549
Pfizer, Inc.	404,515	8,753,706
Roche Holding AG (Switzerland)	418	70,691
Sanofi (France)	38,476	2,815,327
Sanofi CVR (France) †	238,700	286,440
Sihuan Pharmaceutical Holdings Group, Ltd. (China)	204,000	71,910
Somaxon Pharmaceuticals, Inc. † S	211,300	95,085
Teva Pharmaceutical Industries, Ltd. ADR (Israel)	76,806	3,099,890
Warner Chilcott PLC Class A (Ireland) †	10,000	151,300
Watson Pharmaceuticals, Inc. †	4,500	271,530
		<b>42,383,420</b>
<b>Total common stocks (cost \$90,825,781)</b>		<b>\$95,732,987</b>
<b>SHORT-TERM INVESTMENTS (14.3%)*</b>		
	Principal amount/shares	Value
Putnam Cash Collateral Pool, LLC 0.14% d	10,674,020	\$10,674,020
Putnam Money Market Liquidity Fund 0.05% e	3,037,224	3,037,224
U.S. Treasury Bills with effective yields ranging from 0.090% to 0.105%, November 15, 2012 ##	\$270,000	269,792
U.S. Treasury Bills with effective yields ranging from 0.102% to 0.104%, October 18, 2012 ##	170,000	169,884
U.S. Treasury Bills with an effective yield of 0.072%, July 26, 2012 ##	10,000	9,997
<b>Total short-term investments (cost \$14,160,874)</b>		<b>\$14,160,917</b>
<b>Total investments (cost \$104,986,655)</b>		<b>\$109,893,904</b>



**Key to holding's abbreviations**

ADR American Depository Receipts  
 CVR Contingent Value Rights

**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, 2011 through December 31, 2011 (the reporting period).

\* Percentages indicated are based on net assets of \$98,826,839.

† Non-income-producing security.

## This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period.

d See Note 1 to the financial statements regarding securities lending. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.

e See Note 6 to the financial statements regarding investments in Putnam Money Market Liquidity Fund. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.

s Securities on loan, in part or in entirety, at the close of the reporting period. At the close of the reporting period, the fund maintained liquid assets totaling \$268,835 to cover certain derivatives contracts.

**DIVERSIFICATION BY COUNTRY\***

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

United States	76.7%	Japan	2.1%
Ireland	4.4	China	1.4
Switzerland	4.1	Australia	0.9
United Kingdom	3.3	Germany	0.9
France	3.1	<b>Total</b>	<b>100.0%</b>
Israel	3.1		

\* 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 at 12/31/11 (aggregate face value \$14,043,511)**

Counterparty	Currency	Contract type	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
<b>Bank of America, N.A.</b>						
	Euro	Buy	1/18/12	\$3,492,315	\$3,641,221	\$(148,906)
<b>Citibank, N.A.</b>						
	British Pound	Buy	1/18/12	3,125,813	3,163,792	(37,979)
	Danish Krone	Buy	1/18/12	1,632,532	1,700,463	(67,931)
<b>Credit Suisse AG</b>						
	Japanese Yen	Buy	1/18/12	2,237,183	2,217,943	19,240
<b>HSBC Bank USA, National Association</b>						
	Australian Dollar	Buy	1/18/12	1,839,751	1,833,668	6,083
<b>JPMorgan Chase Bank, N.A.</b>						
	Swiss Franc	Buy	1/18/12	1,448,120	1,486,424	(38,304)
<b>Total</b>						<b>\$(267,797)</b>

Accounting Standards Codification ASC 820 *Fair Value Measurements and Disclosures* (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:

Investments in securities:	Valuation inputs		
	Level 1	Level 2	Level 3
Common stocks:			
Consumer staples	\$2,166,447	\$—	\$—
Health care	79,561,118	14,005,422	—
<b>Total common stocks</b>	<b>81,727,565</b>	<b>14,005,422</b>	<b>—</b>
Short-term investments	3,037,224	11,123,693	—
<b>Totals by level</b>	<b>\$84,764,789</b>	<b>\$25,129,115</b>	<b>\$—</b>

Other financial instruments:	Valuation inputs		
	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(267,797)	\$—
<b>Totals by level</b>	<b>\$—</b>	<b>\$(267,797)</b>	<b>\$—</b>

The accompanying notes are an integral part of these financial statements.

# Statement of assets and liabilities

12/31/11

## Assets

Investment in securities, at value, including \$10,353,360 of securities on loan (Note 1):	
Unaffiliated issuers (identified cost \$91,275,411)	\$96,182,660
Affiliated issuers (identified cost \$13,711,244) (Notes 1 and 6)	13,711,244
Dividends, interest and other receivables	180,891
Receivable for shares of the fund sold	4,133
Unrealized appreciation on forward currency contracts (Note 1)	25,323
<b>Total assets</b>	<b>110,104,251</b>

## Liabilities

Payable to custodian	15,227
Payable for shares of the fund repurchased	95,880
Payable for compensation of Manager (Note 2)	52,907
Payable for investor servicing fees (Note 2)	7,560
Payable for custodian fees (Note 2)	4,635
Payable for Trustee compensation and expenses (Note 2)	68,230
Payable for administrative services (Note 2)	246
Payable for distribution fees (Note 2)	12,411
Collateral on securities loaned, at value (Note 1)	10,674,020
Unrealized depreciation on forward currency contracts (Note 1)	293,120
Other accrued expenses	53,176
<b>Total liabilities</b>	<b>11,277,412</b>

**Net assets** **\$98,826,839**

## Represented by

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$84,820,111
Undistributed net investment income (Note 1)	1,380,084
Accumulated net realized gain on investments and foreign currency transactions (Note 1)	7,988,460
Net unrealized appreciation of investments and assets and liabilities in foreign currencies	4,638,184
<b>Total — Representing net assets applicable to capital shares outstanding</b>	<b>\$98,826,839</b>

## Computation of net asset value Class IA

Net assets	\$39,802,476
Number of shares outstanding	3,359,142
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$11.85

## Computation of net asset value Class IB

Net assets	\$59,024,363
Number of shares outstanding	5,048,201
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$11.69

The accompanying notes are an integral part of these financial statements.

## Statement of operations

Year ended 12/31/11

### Investment income

Dividends (net of foreign tax of \$66,566)	\$2,010,608
Interest (including interest income of \$1,802 from investments in affiliated issuers) (Note 6)	2,154
Securities lending (Note 1)	199,203
<b>Total investment income</b>	<b>2,211,965</b>

### Expenses

Compensation of Manager (Note 2)	700,042
Investor servicing fees (Note 2)	111,931
Custodian fees (Note 2)	13,605
Trustee compensation and expenses (Note 2)	8,563
Administrative services (Note 2)	3,253
Distribution fees — Class IB (Note 2)	165,339
Other	89,080
<b>Total expenses</b>	<b>1,091,813</b>
Expense reduction (Note 2)	(5,890)

**Net expenses** **1,085,923**

**Net investment income** **1,126,042**

Net realized gain on investments (Notes 1 and 3)	9,248,134
Net realized gain on foreign currency transactions (Note 1)	705,072
Net unrealized depreciation of assets and liabilities in foreign currencies during the year	(677,047)
Net unrealized depreciation of investments during the year	(11,240,019)
<b>Net loss on investments</b>	<b>(1,963,860)</b>
<b>Net decrease in net assets resulting from operations</b>	<b>\$(837,818)</b>

## Statement of changes in net assets

	Year ended 12/31/11	Year ended 12/31/10
<b>Decrease in net assets</b>		
<b>Operations:</b>		
Net investment income	\$1,126,042	\$929,238
Net realized gain on investments and foreign currency transactions	9,953,206	6,012,903
Net unrealized depreciation of investments and assets and liabilities in foreign currencies	(11,917,066)	(4,372,965)
<b>Net increase (decrease) in net assets resulting from operations</b>	<b>(837,818)</b>	<b>2,569,176</b>
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(494,071)	(1,095,087)
Class IB	(552,631)	(1,482,608)
From net realized long-term gain on investments		
Class IA	(1,185,055)	—
Class IB	(1,775,930)	—
Decrease from capital share transactions (Note 4)	(12,579,974)	(20,760,773)
<b>Total decrease in net assets</b>	<b>(17,425,479)</b>	<b>(20,769,292)</b>
<b>Net assets:</b>		
Beginning of year	116,252,318	137,021,610
<b>End of year</b> (including undistributed net investment income of \$1,380,084 and \$583,134, respectively)	<b>\$98,826,839</b>	<b>\$116,252,318</b>

The accompanying notes are an integral part of these financial statements.

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

Period ended	INVESTMENT OPERATIONS:				LESS DISTRIBUTIONS:			RATIOS AND SUPPLEMENTAL DATA:					
	Net asset value, beginning of period	Net investment income (loss) <sup>a</sup>	Net realized 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 (%) <sup>b, c</sup>	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) <sup>d</sup>	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%)
<b>Class IA</b>													
12/31/11	\$12.40	.15	(.23)	(.08)	(.14)	(.33)	(.47)	\$11.85	(.89)	\$39,802	.84	1.17	31
12/31/10	12.32	.11	.23	.34	(.26)	—	(.26)	12.40	2.68	46,428	.82	.90	33
12/31/09	11.11	.07	2.46	2.53	—	(1.32)	(1.32)	12.32	26.46	54,163	.87	.64	33
12/31/08	13.49	.06	(2.33)	(2.27)	—	(.11)	(.11)	11.11	(16.90)	52,520	.83 <sup>f</sup>	.49 <sup>f</sup>	19
12/31/07	13.69	.13 <sup>e</sup>	(.18)	(.05)	(.15)	—	(.15)	13.49	(.36)	81,384	.81 <sup>f</sup>	.95 <sup>e, f</sup>	16
<b>Class IB</b>													
12/31/11	\$12.24	.11	(.23)	(.12)	(.10)	(.33)	(.43)	\$11.69	(1.18)	\$59,024	1.09	.92	31
12/31/10	12.16	.08	.23	.31	(.23)	—	(.23)	12.24	2.47	69,824	1.07	.65	33
12/31/09	11.02	.04	2.42	2.46	—	(1.32)	(1.32)	12.16	26.00	82,858	1.12	.39	33
12/31/08	13.40	.03	(2.30)	(2.27)	—	(.11)	(.11)	11.02	(17.01)	79,525	1.08 <sup>f</sup>	.24	19
12/31/07	13.60	.10 <sup>e</sup>	(.19)	(.09)	(.11)	—	(.11)	13.40	(.67)	118,713	1.06 <sup>f</sup>	.69 <sup>e, f</sup>	16

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

<sup>b</sup> The charges and expenses at the insurance company separate account level are not reflected.

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

<sup>d</sup> Includes amounts paid through expense offset arrangements and for certain funds, brokerage/service arrangements (Note 2).

<sup>e</sup> Net investment income (loss) per share and ratio of net investment income (loss) for the fund's class IA and class IB shares reflect a special dividend received by the fund, which amounted to \$0.08 per share and 0.60% as a percentage of average net assets for the period ended December 31, 2007.

<sup>f</sup> Reflects an involuntary contractual expense limitation in effect during the period. For periods prior to December 31, 2008, certain fund expenses were waived in connection with the fund's investment in Putnam Prime Money Market Fund. As a result of such limitation and/or waivers, the expenses of each class reflect a reduction of the following amounts:

	Percentage of average net assets
12/31/08	0.03%
12/31/07	0.02

The accompanying notes are an integral part of these financial statements.

### Note 1 — Significant accounting policies

Putnam VT Global Health Care Fund (the fund) is a non-diversified series of Putnam Variable Trust (the Trust), a Massachusetts business trust, which is registered under the Investment Company Act of 1940, as amended, as an open-end management investment company. The fund seeks capital appreciation by investing primarily in common stocks of companies in the health sciences industries. The fund concentrates its investments in one sector, which involves more risk than a fund that invests more broadly.

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.

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.

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 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. Unless otherwise noted, the "reporting period" represents the period January 1, 2011 through December 31, 2011.

**A) Security valuation** 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. If no sales are reported, as in the case of some securities traded over-the-counter, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Investments in other open-end investment companies, which are classified as Level 1 securities, are based on their net asset value (NAV). The NAV of an investment company equals the total value of its assets less its liabilities and divided by the number of its outstanding shares. Shares are only valued as of the close of regular trading on the New York Stock Exchange each day that the exchange is open.

Many securities markets and exchanges outside the U.S. close prior to the 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 close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value 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. These securities, which will generally represent a transfer from a Level 1 to a Level 2 security, will be classified as Level 2. 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.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Investment Management, LLC (Putnam Management), the fund's manager, an indirect wholly-owned subsidiary of

Putnam Investments, LLC, does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management. 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 and recovery rates. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

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.

**B) 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 is recorded on the accrual basis. Dividend income, net of 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 market 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. All premiums/discounts are amortized/accreted on a yield-to-maturity basis.

**C) Foreign currency translation** The accounting records of the fund are maintained in U.S. dollars. The market 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 closed forward currency contracts, 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 open forward currency contracts and assets and liabilities other than investments at the period end, resulting from changes in the exchange rate. Investments in foreign securities involve certain risks, including those related to economic instability, unfavorable political developments, and currency fluctuations, not present with domestic investments. The fund may 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.

**D) 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 market value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in market 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. Outstanding forward currency contracts at the close of the reporting period are indicative of the volume of activity during the reporting period.

**E) Master agreements** The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements (Master Agreements) with certain counterparties that govern over-the-counter derivative and foreign exchange contracts entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and with respect to those amounts which can be sold or repledged, are 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 \$293,120 on derivative contracts subject to the Master Agreements. Collateral posted by the fund totaled \$299,781.

**F) 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 market value of the securities loaned. The market value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. 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 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 value of securities loaned amounted to \$10,353,360 and the fund received cash collateral of \$10,674,020.

**G) Interfund lending** The fund, along with other Putnam funds, may participate in an interfund lending program pursuant to an exemptive order issued by the Securities and Exchange Commission (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.

**H) Line of credit** The fund participates, along with other Putnam funds, in a \$325 million unsecured committed line of credit and a \$185 million unsecured uncommitted line of credit, both provided by State Street Bank and Trust Company (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 the Federal Funds rate plus 1.25% for the committed line of credit and the Federal Funds rate plus 1.30% for the uncommitted line of credit. A closing fee equal to 0.02% of the committed line of credit and \$50,000 for the uncommitted line of credit has been paid by the participating funds. In addition, a commitment fee of 0.13% 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.

**I) 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. It is also the intention of the fund to distribute an amount sufficient to avoid imposition of any excise tax under Section 4982 of the Code. The fund is subject to the provisions of Accounting Standards Codification ASC 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.

**J) 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 of losses on wash sale transactions and 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. For the reporting period ended, the fund reclassified \$717,610 to increase undistributed net investment income and with a decrease to accumulated net realized gains of \$717,610.

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	\$16,526,815
Unrealized depreciation	(12,290,090)
Net unrealized appreciation	4,236,725
Undistributed ordinary income	1,183,096
Undistributed long-term gain	6,448,105
Undistributed short-term gain	2,207,999
Cost for federal income tax purposes	\$105,657,179

**K) 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.

**L) 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 24.4% of the fund is owned by accounts of one group of insurance companies.

## 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 most open-end funds, as defined in the fund's management contract, sponsored by Putnam Management. Such annual rates may vary as follows:

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

Putnam Management has contractually agreed, through June 30, 2012, to waive fees 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 and payments under

the fund's investor servicing contract, investment management contract and distribution plans, 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 this limit.

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. Putnam Management pays 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. Putnam Management or PIL, as applicable, pays 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 0.10% of the fund's average net assets. The amounts incurred for investor servicing agent functions during the reporting period are included in Investor servicing fees in the Statement of operations.

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. The fund also reduced expenses through brokerage/service arrangements. For the reporting period, the fund's expenses were reduced by \$31 under the expense offset arrangements and by \$5,859 under the brokerage/service arrangements.

#### Note 4 — Capital shares

At the close of the reporting period, there was 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 ended 12/31/11		Year ended 12/31/10		Year ended 12/31/11		Year ended 12/31/10	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	108,855	\$1,460,536	37,098	\$448,415	326,318	\$4,150,834	241,760	\$2,888,997
Shares issued in connection with reinvestment of distributions	132,737	1,679,126	85,755	1,095,087	186,285	2,328,561	117,388	1,482,608
	241,592	3,139,662	122,853	1,543,502	512,603	6,479,395	359,148	4,371,605
Shares repurchased	(627,665)	(7,729,998)	(773,796)	(9,297,448)	(1,171,085)	(14,469,033)	(1,463,668)	(17,378,432)
<b>Net decrease</b>	<b>(386,073)</b>	<b>\$(4,590,336)</b>	<b>(650,943)</b>	<b>\$(7,753,946)</b>	<b>(658,482)</b>	<b>\$(7,989,638)</b>	<b>(1,104,520)</b>	<b>\$(13,006,827)</b>

#### Note 5 — Summary of derivative activity

The following is a summary of the market values of derivative instruments as of the close of the reporting period:

##### Market values of derivative instruments as of the close of the reporting period

Derivatives not accounted for as hedging instruments under ASC 815	Asset derivatives		Liability derivatives	
	Statement of assets and liabilities location	Market value	Statement of assets and liabilities location	Market value
Foreign exchange contracts	Receivables	\$25,323	Payables	\$293,120
<b>Total</b>		<b>\$25,323</b>		<b>\$293,120</b>

Each independent Trustee of the fund receives an annual Trustee fee, of which \$76, 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, a wholly-owned subsidiary of Putnam Investments, LLC and Putnam Retail Management GP, Inc., 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.

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

During the reporting period, cost of purchases and proceeds from sales of investment securities other than short-term investments aggregated \$33,344,027 and \$48,445,669, respectively. There were no purchases or proceeds from sales of long-term U.S. government securities.

The following is a summary of realized and changes in unrealized gains or losses of derivative instruments on the Statement of operations for the reporting period (see 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	Forward currency contracts	Total
Foreign exchange contracts	\$686,705	\$686,705
<b>Total</b>	<b>\$686,705</b>	<b>\$686,705</b>

**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	Forward currency contracts	Total
Foreign exchange contracts	\$(662,051)	\$(662,051)
<b>Total</b>	<b>\$(662,051)</b>	<b>\$(662,051)</b>

**Note 6 — Investment in Putnam Money Market Liquidity Fund**

The fund invested in Putnam Money Market Liquidity Fund, an open-end management investment company managed by Putnam Management. Investments in Putnam Money Market Liquidity Fund are valued at its closing net asset value each business day. Income distributions earned by the fund are recorded as interest income in the Statement of operations and totaled \$1,802 for the reporting period. During the reporting period, cost of purchases and proceeds of sales of investments in Putnam Money Market Liquidity Fund aggregated \$24,829,213 and \$25,030,988, respectively. Management fees charged to Putnam Money Market Liquidity Fund have been waived by Putnam Management.

**Note 7 — New accounting pronouncement**

In May 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2011-04 “Fair Value Measurements and Disclosures (Topic 820) — Amendments to Achieve Common Fair

Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS”. ASU 2011-04 amends FASB Topic 820 “Fair Value Measurement” and seeks to develop common requirements for measuring fair value and for disclosing information about fair value measurements in accordance with GAAP. ASU 2011-04 is effective for fiscal years and interim periods beginning after December 15, 2011. Putnam Management is currently evaluating the application of ASU 2011-04 and its impact, if any, on the fund’s financial statements.

**Note 8 — Market and credit risk**

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.






## **Federal tax information** (Unaudited)

Pursuant to §852 of the Internal Revenue Code, as amended, the fund hereby designates \$6,453,748 as a capital gain dividend with respect to the taxable year ended December 31, 2011, or, if subsequently determined to be different, the net capital gain of such year.

The fund designated 37.78% 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
<b>Independent Trustees</b>			
	<b>Ravi Akhoury</b> Born 1947 Trustee since 2009	Advisor to New York Life Insurance Company. Trustee of American India Foundation and of the Rubin Museum. From 1992 to 2007, was Chairman and CEO of MacKay Shields, a multi-product investment management firm with over \$40 billion in assets under management.	Jacob Ballas Capital India, a non-banking finance company focused on private equity advisory services; RAGE Frameworks, Inc., a private software company
	<b>Barbara M. Baumann</b> Born 1955 Trustee since 2010	President and Owner of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects. Trustee of Mount Holyoke College and member of the Investment Committee for the college's endowment. Former Chair and current board member of Girls Incorporated of Metro Denver. Member of the Finance Committee, The Children's Hospital of Denver.	SM Energy Company, a domestic exploration and production company; UniSource Energy Corporation, an Arizona utility; CVR Energy, a petroleum refiner and fertilizer manufacturer
	<b>Jameson A. Baxter</b> Born 1943 Trustee since 1994, Vice Chair from 2005 to 2011, and Chair since 2011	President of Baxter Associates, Inc., a private investment firm. Chair of Mutual Fund Directors Forum. Chair Emeritus of the Board of Trustees of Mount Holyoke College. Director of the Adirondack Land Trust and Trustee of the Nature Conservancy's Adirondack Chapter.	None
	<b>Charles B. Curtis</b> Born 1940 Trustee since 2001	Former President and Chief Operating Officer of the Nuclear Threat Initiative, a private foundation dealing with national security issues. Senior Advisor to the Center for Strategic and International Studies. Member of the Council on Foreign Relations.	Edison International; Southern California Edison
	<b>Robert J. Darretta</b> Born 1946 Trustee since 2007	Health Care Industry Advisor to Permira, a global private equity firm. Until April 2007, was Vice Chairman of the Board of Directors of Johnson & Johnson. Served as Johnson & Johnson's Chief Financial Officer for a decade.	UnitedHealth Group, a diversified health-care company
	<b>John A. Hill</b> Born 1942 Trustee since 1985 and Chairman from 2000 to 2011	Founder and Vice-Chairman of First Reserve Corporation, the leading private equity buyout firm focused on the worldwide energy industry. Serves as a Trustee and Chairman of the Board of Trustees of Sarah Lawrence College. Also a member of the Advisory Board of the Millstein Center for Corporate Governance and Performance at the Yale School of Management.	Devon Energy Corporation, a leading independent natural gas and oil exploration and production company
	<b>Paul L. Joskow</b> Born 1947 Trustee since 1997	Economist and 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. Elizabeth and James Killian Professor of Economics, Emeritus at the Massachusetts Institute of Technology (MIT). Prior to 2007, served as the Director of the Center for Energy and Environmental Policy Research at MIT.	TransCanada Corporation, an energy company focused on natural gas transmission and power services; Exelon Corporation, an energy company focused on power services
	<b>Elizabeth T. Kennan</b> Born 1938 Trustee from 1992 to 2010 and since 2012	Partner of Cambus-Kenneth Farm (thoroughbred horse breeding and general farming). President Emeritus of Mount Holyoke College. Trustee of the National Trust for Historic Preservation and of Centre College. Chairman of the Board of Shaker Village of Pleasant Hill.	Former Chairman and now Lead Director of Northeast Utilities, which operates New England's largest energy delivery system
	<b>Kenneth R. Leibler</b> Born 1949 Trustee since 2006	Founder and former Chairman of Boston Options Exchange, an electronic marketplace for the trading of derivative securities. Vice Chairman of the Board of Trustees of Beth Israel Deaconess Hospital in Boston, Massachusetts. Until November 2010, director of Ruder Finn Group, a global communications and advertising firm.	Northeast Utilities, which operates New England's largest energy delivery system
	<b>Robert E. Patterson</b> Born 1945 Trustee since 1984	Senior Partner of Cabot Properties, LP and Co-Chairman of Cabot Properties, Inc., a private equity firm investing in commercial real estate. Past Chairman and Trustee of the Joslin Diabetes Center.	None

	<b>Name</b> <b>Year of birth</b> <b>Position held</b>	<b>Principal occupations during past five years</b>	<b>Other directorships</b>
	<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 founder and President of New Generation Advisors, LLC, a registered investment advisor to private funds. Director of The Boston Family Office, LLC, a registered investment advisor.	None
	<b>W. Thomas Stephens</b> Born 1942 Trustee from 1997 to 2008 and since 2009	Retired as Chairman and Chief Executive Officer of Boise Cascade, LLC, a paper, forest products, and timberland assets company, in December 2008. Prior to 2010, Director of Boise Inc., a manufacturer of paper and packaging products.	TransCanada Pipelines Ltd., an energy infrastructure company
<b>Interested Trustee</b>			
	<b>Robert L. Reynolds*</b> Born 1952 Trustee since 2008 and President of the Putnam Funds since 2009	President and Chief Executive Officer of Putnam Investments since 2008. Prior to joining Putnam Investments, served as Vice Chairman and Chief Operating Officer of Fidelity Investments from 2000 to 2007.	None

The address of each Trustee is One Post Office Square, Boston, MA 02109.

As of December 31, 2011, there were 108 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.

\*Mr. Reynolds is an "interested person" (as defined in the Investment Company Act of 1940) of the fund, Putnam Management, and/or Putnam Retail Management. 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.

## Officers

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

### **Jonathan S. Horwitz** *(Born 1955)*

Executive Vice President, Principal Executive Officer, Treasurer and Compliance Liaison  
Since 2004

### **Steven D. Krichmar** *(Born 1958)*

Vice President and Principal Financial Officer  
Since 2002  
Chief of Operations, Putnam Investments and Putnam Management

### **Janet C. Smith** *(Born 1965)*

Vice President, Assistant Treasurer and Principal Accounting Officer  
Since 2007  
Director of Fund Administration Services, Putnam Investments and Putnam Management

### **Robert R. Leveille** *(Born 1969)*

Vice President and Chief Compliance Officer  
Since 2007  
Chief Compliance Officer, Putnam Investments, Putnam Management, and Putnam Retail Management

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

Vice President and BSA Compliance Officer  
Since 2002  
Director of Operational Compliance, Putnam Investments and Putnam Retail Management

### **Robert T. Burns** *(Born 1961)*

Vice President and Chief Legal Officer  
Since 2011  
General Counsel, Putnam Investments and Putnam Management

### **James P. Pappas** *(Born 1953)*

Vice President  
Since 2004  
Director of Trustee Relations, Putnam Investments and Putnam Management

### **Judith Cohen** *(Born 1945)*

Vice President, Clerk and Assistant Treasurer  
Since 1993

### **Michael Higgins** *(Born 1976)*

Vice President, Senior Associate Treasurer and Assistant Clerk  
Since 2010  
Manager of Finance, Dunkin' Brands (2008–2010); Senior Financial Analyst, Old Mutual Asset Management (2007–2008); Senior Financial Analyst, Putnam Investments (1999–2007)

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

Vice President, Assistant Clerk, Assistant Treasurer and Proxy Manager  
Since 2000

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

Vice President and Assistant Treasurer  
Since 2007  
Director of Accounting & Control Services, Putnam 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 One Post Office Square, Boston, MA 02109.

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## 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, 2011, are available in the Individual Investors section of putnam.com and on the SEC's website, 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

Each Putnam VT 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-Q. Shareholders may obtain the fund's Forms N-Q on the SEC's website at www.sec.gov. In addition, the fund's Forms N-Q may be reviewed and copied at the SEC's public reference room in Washington, D.C. You may call the SEC at 1-800-SEC-0330 for information about the SEC's website or the operation of the public reference room.

## Fund information

### Investment Manager

Putnam Investment Management, LLC  
One Post Office Square  
Boston, MA 02109

### Investment Sub-Manager

Putnam Investments Limited  
57-59 St James's Street  
London, England SW1A 1LD

### Investment Sub-Advisor

The Putnam Advisory Company, LLC  
One Post Office Square  
Boston, MA 02109

### Marketing Services

Putnam Retail Management  
One Post Office Square  
Boston, MA 02109

### Investor Servicing Agent

Putnam Investor Services, Inc.  
Mailing address:  
P.O. Box 8383  
Boston, MA 02266-8383  
1-800-225-1581

### Custodian

State Street Bank and Trust Company

### Legal Counsel

Ropes & Gray LLP

### Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP

### Trustees

Jameson A. Baxter, *Chair*  
Ravi Akhoury  
Barbara M. Baumann  
Charles B. Curtis  
Robert J. Darretta  
John A. Hill  
Paul L. Joskow  
Elizabeth T. Kennan  
Kenneth R. Leibler  
Robert E. Patterson  
George Putnam, III  
Robert L. Reynolds  
W. Thomas Stephens

