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# Putnam Variable Trust

**Semiannual report**

**6 | 30 | 18**

**Putnam VT  
Multi-Asset Absolute Return Fund**

Prior to April 30, 2018, the fund was known as Putnam VT Absolute Return 500 Fund®.

# Message from the Trustees

August 13, 2018

Dear Shareholder:

During the first half of 2018, conditions became more challenging for global financial markets. After an extended period of record advances and low volatility, a downturn early in the year pushed stocks into a brief correction. The market has since rallied, but both stocks and bonds have been more volatile, due in part to uncertainty surrounding trade policy and interest rates. Fortunately, navigating a change in market trends is nothing new to Putnam's experienced investment professionals, who continue to monitor risks and seek opportunities.

We would like to take this opportunity to extend our thanks to Jameson A. Baxter, who retired from her position as Chair of your Board of Trustees on June 30, 2018. It is hard to express in a few words the extent of Jamie's commitment to protecting the interests of Putnam shareholders like you. In addition to her professional and directorship experience, Jamie brought intelligence, insight, and compassion to a board she served for decades. Jamie began as a Trustee in 1994, served as Vice Chair for six years, and became Chair in 2011. We are also pleased to announce the appointment of Kenneth R. Leibler as your new Board of Trustees Chair. Ken became a Trustee in 2006, has served as Vice Chair since 2016, and now leads the Board in overseeing your fund and protecting your interests.

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

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*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:** Allocation of assets among asset classes may hurt performance. The value of stocks and bonds in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general financial market conditions, changing market perceptions (including, in the case of bonds, perceptions about the risk of default and expectations about monetary policy or interest rates), changes in government intervention in the financial markets, and factors related to a specific issuer or industry. These and other factors may also lead to increased volatility and reduced liquidity in the fund's portfolio holdings. Growth stocks may be more susceptible to earnings disappointments, and value stocks may fail to rebound. Bond investments are subject to interest-rate risk (the risk of bond prices falling if interest rates rise) and credit risk (the risk of an issuer defaulting on interest or principal payments). Interest-rate risk is greater for longer-term bonds, and credit risk is greater for below-investment-grade bonds. Unlike bonds, funds that invest in bonds have fees and expenses. Lower-rated bonds may offer higher yields in return for more risk. Funds that invest in government securities are not guaranteed. Mortgage-backed securities are subject to prepayment risk and the risk that they may increase in value less than other bonds when interest rates decline and decline in value more than other bonds when interest rates rise. International investing involves currency, economic, and political risks. Emerging-market securities have illiquidity and volatility risks. Our alpha strategy may lose money or not earn a return sufficient to cover associated trading and other costs. Our use of leverage obtained through derivatives increases these risks by increasing investment exposure. 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 fund's efforts to produce lower-volatility returns may not be successful. The fund may not achieve its goal, and it is not intended to be a complete investment program. You can lose money by investing in the fund. The fund's prospectus lists additional risks.

The fund is not intended to outperform stocks and bonds during strong market rallies.

## Performance summary (as of 6/30/18)

### Investment objective

Positive total return

**Net asset value** June 30, 2018

Class IA: \$10.18

Class IB: \$10.05

### Total return at net asset value

(as of 6/30/18)	Class IA shares*	Class IB shares*	ICE BofAML U.S. Treasury Bill Index	Bloomberg Barclays U.S. Aggregate Bond Index	S&P 500 Index
6 months	-2.09%	-2.19%	0.79%	-1.62%	2.65%
1 year	2.04	1.79	1.31	-0.40	14.37
5 years	13.28	11.85	2.17	11.89	87.70
Annualized	2.53	2.26	0.43	2.27	13.42
Life	15.76	13.62	2.41	20.63	132.06
Annualized	2.06	1.80	0.33	2.65	12.46

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

\* Class inception date: May 2, 2011.

Prior to April 30, 2018, the fund was known as Putnam VT Absolute Return 500 Fund.

The S&P 500 Index is an unmanaged index of common stock performance. The ICEBofAML U.S. Treasury Bill Index is an unmanaged index that tracks the performance of U.S. dollar denominated U.S. Treasury bills publicly issued in the U.S. domestic market. Qualifying securities must have a remaining term of at least one month to final maturity and a minimum amount outstanding of \$1 billion. The Bloomberg Barclays U.S. Aggregate Bond Index is an unmanaged index of U.S. investment-grade fixed-income securities.

ICE Data Indices, LLC ("ICE BofAML"), used with permission. ICE BofAML permits use of the ICE BofAML indices and related data on an "as is" basis; makes no warranties regarding same; does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the ICE BofAML indices or any data included in, related to, or derived therefrom; assumes no liability in connection with the use of the foregoing; and does not sponsor, endorse, or recommend Putnam Investments, or any of its products or services.

**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

U.S. Treasury/agency	34.0%
Commodities	19.9%
U.S. stocks	13.3%
Agency pass-through	6.4%
Commercial MBS	5.5%
International stocks	3.7%
Agency CMO	3.6%
Residential MBS (non-agency)	0.9%
High-yield corporate bonds	0.9%
Emerging-market bonds	0.9%
Asset-backed securities (ABS)	0.5%
Investment-grade corporate bonds	0.1%
Emerging-market stocks	-0.3%
Cash and net other assets	66.9%

Allocations are shown as a percentage of the fund's net assets as of 6/30/18. 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 use of different classifications of securities for presentation purposes, and rounding. Allocations may not total 100% because the table includes the notional value of certain derivatives (the economic value for purposes of calculating periodic payment obligations), in addition to the market value of securities. Holdings and allocations may vary over time.

Negative weights may result from timing differences between trade and settlement dates of securities, such as TBAs, or by the use of derivatives.

## 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. In the most recent six-month period, your fund's expenses were limited; had expenses not been limited, they would have been higher. 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 1/1/18 to 6/30/18. 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

	Class IA	Class IB
Net expenses for the fiscal year ended 12/31/17*	0.94%	1.19%
Total annual operating expenses for the fiscal year ended 12/31/17	1.39%	1.64%
Annualized expense ratio for the six-month period ended 6/30/18	0.90%	1.15%

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.

Prospectus expense information also includes the impact of acquired fund fees and expenses of 0.04%, which is not included in the financial highlights or annualized expense ratios. Expenses are shown as a percentage of average net assets.

\*Reflects Putnam Management's contractual obligation to limit certain fund expenses through 4/30/19.

### Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 6/30/18		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 6/30/18	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$4.42	\$5.64	\$4.51	\$5.76
Ending value (after expenses)	\$979.10	\$978.10	\$1,020.33	\$1,019.09

\*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 6/30/18. 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; and then dividing that result by the number of days in the year. 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; and then dividing that result by the number of days in the year.

## Your fund's managers



Portfolio Manager **James A. Fetch** is a Co-Head of Global Asset Allocation. He has been in the investment industry since he joined Putnam in 1994.

Your fund is also managed by Chief Investment Officer, Global Asset Allocation, Robert J. Schoen and Co-Head of Global Asset Allocation Jason R. Vaillancourt, CFA.

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

Shareholders were informed through a supplement to the fund's prospectus that Putnam Management has recommended, and the fund's Board of Trustees has approved, changes to the fund's investment goal and strategy. The fund's new goal is to seek positive total return, and the investment strategy has remained substantially the same, but with a higher risk/return profile resulting from increased exposure to certain equity and equity-like asset classes. In connection with these changes, the fund's name changed to Putnam VT Multi-Asset Absolute Return Fund as of April 30, 2018. See the fund's prospectus for more information.

## ABOUT DERIVATIVES

Derivatives are an increasingly common type of investment instrument, the performance of which is *derived* from an underlying security, index, currency, or other area of the capital markets. Derivatives employed by the fund's managers generally serve one of two main purposes: to implement a strategy that may be difficult or more expensive to invest in through traditional securities, or to hedge unwanted risk associated with a particular position.

For example, the fund's managers might use currency forward contracts to capitalize on an anticipated change in exchange rates between two currencies. This approach would require a significantly smaller outlay of capital than purchasing traditional bonds denominated in the underlying currencies. In another example, the managers may identify a bond that they believe is undervalued relative to its risk of default, but may seek to reduce the interest-rate risk of that bond by using interest-rate swaps, a derivative through which two parties "swap" payments based on the movement of certain rates. In other examples, the managers may use options and futures contracts to hedge against a variety of risks by establishing a combination of long and short exposures to specific equity markets or sectors.

Like any other investment, derivatives may not appreciate in value and may lose money. Derivatives may amplify traditional investment risks through the creation of leverage and may be less liquid than traditional securities. And because derivatives typically represent contractual agreements between two financial institutions, derivatives entail "counterparty risk," which is the risk that the other party is unable or unwilling to pay. Putnam monitors the counterparty risks we assume. For example, Putnam often enters into collateral agreements that require the counterparties to post collateral on a regular basis to cover their obligations to the fund. Counterparty risk for exchange-traded futures and centrally cleared swaps is mitigated by the daily exchange of margin and other safeguards against default through their respective clearinghouses.

## The fund's portfolio 6/30/18 (Unaudited)

U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS (12.8%)*		
	Principal amount	Value
<b>U.S. Government Agency Mortgage Obligations (12.8%)</b>		
Federal National Mortgage Association Pass-Through Certificates		
3.50%, TBA, 8/1/48	\$2,000,000	\$1,987,969
3.50%, TBA, 7/1/48	2,000,000	1,990,312
		<b>3,978,281</b>
<b>Total U.S. government and agency mortgage obligations (cost \$3,968,008)</b>		
		<b>\$3,978,281</b>
COMMON STOCKS (10.4%)*		
	Shares	Value
<b>Basic materials (1.2%)</b>		
Anhui Conch Cement Co., Ltd. (China)	10,500	\$60,225
Astral Foods, Ltd. (South Africa)	353	7,338
Evrax PLC (Russia)	7,596	50,947
Formosa Chemicals & Fibre Corp. (Taiwan)	17,000	67,747
Formosa Plastics Corp. (Taiwan)	7,000	25,829
Freeport-McMoRan, Inc. (Indonesia)	929	16,035
Kumba Iron Ore, Ltd. (South Africa)	1,396	29,773
Lotte Chemical Corp. (South Korea)	164	51,209
PTT Global Chemical PCL (Thailand)	22,200	48,246
Sinopec Shanghai Petrochemical Co., Ltd. (China)	30,000	18,278
		<b>375,627</b>
<b>Capital goods (0.1%)</b>		
China Railway Group, Ltd. (China)	45,000	33,955
United Tractors Tbk PT (Indonesia)	3,100	6,836
		<b>40,791</b>
<b>Communication services (0.6%)</b>		
China Mobile, Ltd. (China)	1,500	13,326
LG Uplus Corp. (South Korea)	3,203	40,235
SK Telecom Co., Ltd. (South Korea)	299	62,510
TIM Participacoes SA (Brazil)	16,300	55,430
		<b>171,501</b>
<b>Consumer cyclicals (1.1%)</b>		
Barloworld, Ltd. (South Africa)	2,704	25,411
Dongfeng Motor Group Co., Ltd. (China)	28,000	29,622
Ford Otomotiv Sanayi AS (Turkey)	1,034	13,774
Geely Automobile Holdings, Ltd. (China)	11,000	28,532
Guangzhou Automobile Group Co., Ltd. Class H (China)	10,000	9,776
Haier Electronics Group Co., Ltd. (China)	3,000	10,267
Imperial Holdings, Ltd. (South Africa)	2,240	31,953
Itausa - Investimentos Itau SA (Preference) (Brazil)	1,320	3,127
KOC Holding AS (Turkey)	2,069	6,395
Mr Price Group, Ltd. (South Africa)	2,101	34,517
Naspers, Ltd. Class N (South Africa)	72	18,247
Pou Chen Corp. (Taiwan)	3,000	3,483
Smiles Fidelidade SA (Brazil)	2,600	34,884
Wal-Mart de Mexico SAB de CV (Mexico)	25,564	67,475
Zhongsheng Group Holdings, Ltd. (China)	7,000	21,012
		<b>338,475</b>
<b>Consumer staples (0.3%)</b>		
Gruma SAB de CV Class B (Mexico)	2,418	29,532
Indofood Sukses Makmur Tbk PT (Indonesia)	25,600	11,880
LG Corp. (South Korea)	192	12,421
Turkiye Sise ve Cam Fabrikalari AS (Turkey)	6,884	6,335
Uni-President Enterprises Corp. (Taiwan)	5,000	12,693
Want Want China Holdings, Ltd. (China)	38,000	33,807
		<b>106,668</b>

COMMON STOCKS (10.4%)* cont.		
	Shares	Value
<b>Energy (0.5%)</b>		
China Petroleum & Chemical Corp. (Sinopec) (China)	80,000	\$71,480
Jastrzebska Spolka Weglowa SA (Poland) †	489	9,958
PTT PCL (Foreign depositary shares) (Thailand)	41,600	60,272
Thai Oil PCL (Thailand)	4,900	11,499
		<b>153,209</b>
<b>Financials (3.1%)</b>		
Agile Group Holdings, Ltd. (China)	20,000	34,057
Agricultural Bank of China, Ltd. (China)	124,000	58,004
Banco Santander (Brasil) S.A. (Units) (Brazil)	5,500	41,579
Bank Negara Indonesia Persero Tbk PT (Indonesia)	4,400	2,165
Bank of China, Ltd. (China)	82,000	40,657
Bank of Communications Co., Ltd. (China)	68,000	52,090
China Construction Bank Corp. (China)	119,000	109,961
Chongqing Rural Commercial Bank Co., Ltd. (China)	30,000	17,857
Country Garden Holdings co., Ltd. (China)	33,000	58,045
Country Garden Services Holdings Co, Ltd. (China) †	3,793	4,864
Fosun International, Ltd. (China)	28,500	53,617
Guangzhou R&F Properties Co., Ltd. (China)	16,400	33,111
Hana Financial Group, Inc. (South Korea)	919	35,333
Hyundai Marine & Fire Insurance Co., Ltd. (South Korea)	203	6,138
Industrial & Commercial Bank of China, Ltd. (China)	121,000	90,531
Industrial Bank of Korea (South Korea)	2,729	37,709
IRB Brasil Resseguros SA (Brazil)	1,900	23,703
Itau Unibanco Holding SA (Preference) (Brazil) †	3,400	35,388
KB Financial Group, Inc. (South Korea)	655	31,031
Old Mutual, Ltd. (South Africa) †	11,285	22,400
Public Bank Bhd (Malaysia)	6,600	38,167
Quilter PLC (United Kingdom) †	3,762	7,195
Sberbank of Russia PJSC ADR (Russia)	2,148	30,921
Shinhan Financial Group Co., Ltd. (South Korea)	483	18,765
Turkiye Garanti Bankasi AS (Turkey)	14,150	25,733
Turkiye Is Bankasi AS Class C (Turkey)	13,821	17,098
Yuanta Financial Holding Co., Ltd. (Taiwan)	67,000	30,546
		<b>956,665</b>
<b>Health care (0.3%)</b>		
China Shineway Pharmaceutical Group, Ltd. (China)	6,000	11,731
Guangzhou Baiyunshan Pharmaceutical Holdings Co., Ltd. (China)	4,000	17,640
Hypermarcas SA (Brazil)	7,782	55,437
St Shine Optical Co., Ltd. (Taiwan)	1,000	22,894
		<b>107,702</b>
<b>Technology (2.7%)</b>		
Acer, Inc. (Taiwan)	37,000	30,218
Alibaba Group Holding, Ltd. ADR (China) †	550	102,042
LG Electronics, Inc. (South Korea)	712	53,025
Radiant Opto-Electronics Corp. (Taiwan)	12,000	24,009
Samsung Electronics Co., Ltd. (South Korea)	5,237	219,207
SK Hynix, Inc. (South Korea)	1,067	82,047
Synnex Technology International Corp. (Taiwan)	12,000	18,105
Taiwan Semiconductor Manufacturing Co., Ltd. ADR (Taiwan)	2,039	74,546
Tencent Holdings, Ltd. (China)	3,000	150,581
Tianneng Power International, Ltd. (China)	10,000	15,576
Tripod Technology Corp. (Taiwan)	6,000	16,491
YY, Inc. ADR (China) †	522	52,445
		<b>838,292</b>

<b>COMMON STOCKS (10.4%)* cont.</b>	<b>Shares</b>	<b>Value</b>
<b>Transportation (0.1%)</b>		
AirAsia Bhd (Malaysia)	31,200	\$23,094
MISC Bhd (Malaysia)	3,700	5,422
		<b>28,516</b>
<b>Utilities and power (0.4%)</b>		
Cia de Saneamento Basico do Estado de Sao Paulo (Brazil)	7,600	45,670
Inter RAO UES PJSC (Russia)	335,897	21,964
Tenaga Nasional Bhd (Malaysia)	17,400	63,061
		<b>130,695</b>
<b>Total common stocks (cost \$3,007,073)</b>		<b>\$3,248,141</b>

<b>INVESTMENT COMPANIES (8.8%)*</b>	<b>Shares</b>	<b>Value</b>
Consumer Discretionary Select Sector SPDR Fund	3,824	\$417,963
Financial Select Sector SPDR Fund	10,517	798,661
Financial Select Sector SPDR Fund \$	14,447	384,146
iShares MSCI India ETF (India)	9,625	320,416
Materials Select Sector SPDR Fund \$	6,956	403,935
Technology Select Sector SPDR Fund \$	6,058	420,849
<b>Total investment companies (cost \$2,569,302)</b>		<b>\$2,745,970</b>

<b>COMMODITY LINKED NOTES (7.2%)* †††</b>	<b>Principal amount</b>	<b>Value</b>
Bank of America Corp. 144A unsub. notes 1-month LIBOR less 0.22%, 2019 (Indexed to the BofA Merrill Lynch Commodity MLBX4SX6 Excess Return Strategy multiplied by 3)	\$100,000	\$97,096
Bank of America Corp. 144A sr. unsec. unsub. notes 1-month LIBOR less 0.20%, 2019 (Indexed to the BofA Merrill Lynch Commodity MLBX4SX6 Excess Return Strategy multiplied by 3)	300,000	281,422
Citigroup Global Markets Holdings Inc. sr. notes Ser. N, 1-month USD LIBOR less 0.21%, 2019 (Indexed to the Citi Commodities F3 vs F0 — 4x Leveraged CVIC4X30 Index multiplied by 3)	257,523	247,167
UBS AG/London 144A sr. notes 1-month LIBOR less 0.25%, 2019 (Indexed to the UBSIF3AT Index multiplied by 3) (United Kingdom)	240,000	241,717
Goldman Sachs International 144A notes zero %, 2019 (Indexed to the S&P GSCI Excess Return Index multiplied by 3)	190,000	246,688
Deutsche Bank AG/London 144A sr. unsec. notes 1-month LIBOR less 0.16%, 2018 (Indexed to the S&P GSCI Total Return Index multiplied by 3) (United Kingdom)	440,000	603,420
Deutsche Bank AG/London 144A sr. unsec. notes 1-month LIBOR less 0.16%, 2018 (Indexed to the S&P GSCI Total Return Index multiplied by 3) (United Kingdom)	96,000	158,334
UBS AG/London 144A sr. notes 1-month LIBOR less 0.25%, 2019 (Indexed to the UBSIF3AT Index multiplied by 3) (United Kingdom)	349,000	361,369
<b>Total commodity Linked Notes (cost \$1,972,523)</b>		<b>\$2,237,213</b>

<b>MORTGAGE-BACKED SECURITIES (5.2%)*</b>	<b>Principal amount</b>	<b>Value</b>
<b>Agency collateralized mortgage obligations (3.6%)</b>		
Federal Home Loan Mortgage Corporation		
Ser. 4134, Class PI, IO, 3.00%, 11/15/42	\$172,615	\$20,201
Ser. 4206, Class IP, IO, 3.00%, 12/15/41	76,729	7,138
Ser. 4097, Class PI, IO, 3.50%, 11/15/40	79,982	10,150
Ser. 4099, Class BI, IO, 3.50%, 6/15/39	94,301	8,723
Ser. 4568, Class MI, IO, 4.00%, 4/15/46	84,027	17,751
Ser. 4193, Class PI, IO, 4.00%, 3/15/43	41,599	6,431

<b>MORTGAGE-BACKED SECURITIES (5.2%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Agency collateralized mortgage obligations cont.</b>		
Federal Home Loan Mortgage Corporation		
IFB Ser. 4073, Class AS, IO, ((-1 x 1 Month US LIBOR) + 6.05%), 3.977%, 8/15/38	\$127,231	\$8,959
IFB Ser. 3747, Class SA, IO, ((-1 x 1 Month US LIBOR) + 6.50%), 4.427%, 10/15/40	\$24,247	\$3,750
Federal National Mortgage Association		
Ser. 12-151, Class PI, IO, 3.00%, 1/25/43	49,364	5,433
Ser. 13-35, Class PI, IO, 3.00%, 2/25/42	185,498	13,699
Ser. 13-31, Class NI, IO, 3.00%, 6/25/41	58,913	4,069
Ser. 12-136, Class PI, IO, 3.50%, 11/25/42	45,801	4,961
Ser. 17-2, Class KI, IO, 4.00%, 2/25/47	99,371	20,542
Ser. 16-3, Class NI, IO, 6.00%, 2/25/46	61,205	14,891
IFB Ser. 17-8, Class SB, IO, ((-1 x 1 Month US LIBOR) + 6.10%), 4.009%, 2/25/47	138,306	19,942
Government National Mortgage Association		
Ser. 14-H21, Class AI, IO, 1.167%, 10/20/64 <b>W</b>	186,976	16,125
Ser. 16-H02, Class BI, IO, 1.385%, 11/20/65 <b>W</b>	298,380	27,871
Ser. 16-H04, Class KI, IO, 1.392%, 2/20/66 <b>W</b>	102,661	7,956
Ser. 16-H08, Class GI, IO, 1.421%, 4/20/66 <b>W</b>	219,114	13,087
Ser. 15-H25, Class BI, IO, 1.439%, 10/20/65 <b>W</b>	260,658	25,831
Ser. 16-H03, Class AI, IO, 1.542%, 1/20/66 <b>W</b>	143,298	13,792
Ser. 11-H15, Class AI, IO, 1.555%, 6/20/61 <b>W</b>	100,337	5,644
Ser. 15-H20, Class CI, IO, 1.587%, 8/20/65 <b>W</b>	158,614	16,877
Ser. 15-H24, Class BI, IO, 1.603%, 8/20/65 <b>W</b>	403,064	19,879
Ser. 15-H25, Class AI, IO, 1.606%, 9/20/65 <b>W</b>	269,558	21,565
Ser. 15-H10, Class EI, IO, 1.624%, 4/20/65 <b>W</b>	126,781	6,984
Ser. 15-H09, Class BI, IO, 1.689%, 3/20/65 <b>W</b>	208,304	17,389
Ser. 17-H14, Class DI, IO, 1.696%, 6/20/67 <b>W</b>	314,094	23,272
Ser. 15-H09, Class AI, IO, 1.713%, 4/20/65 <b>W</b>	204,277	17,946
Ser. 15-H26, Class GI, IO, 1.787%, 10/20/65 <b>W</b>	198,627	18,413
Ser. 15-H10, Class CI, IO, 1.803%, 4/20/65 <b>W</b>	145,355	13,956
Ser. 15-H18, Class IA, IO, 1.812%, 6/20/65 <b>W</b>	88,222	6,052
Ser. 15-H19, Class NI, IO, 1.907%, 7/20/65 <b>W</b>	178,423	17,253
Ser. 17-H11, Class NI, IO, 1.93%, 5/20/67 <b>W</b>	219,513	24,112
Ser. 15-H15, Class JI, IO, 1.943%, 6/20/65 <b>W</b>	245,975	24,548
Ser. 15-H24, Class HI, IO, 2.027%, 9/20/65 <b>W</b>	407,611	29,154
Ser. 17-H06, Class BI, IO, 2.271%, 2/20/67 <b>W</b>	114,850	14,391
Ser. 17-H02, Class BI, IO, 2.348%, 1/20/67 <b>W</b>	138,728	17,785
Ser. 15-H22, Class GI, IO, 2.572%, 9/20/65 <b>W</b>	118,112	14,929
FRB Ser. 15-H16, Class XI, IO, 1.762%, 7/20/65 <b>W</b>	92,860	9,955
FRB Ser. 16-H16, Class DI, IO, 2.869%, 6/20/66 <b>W</b>	94,365	11,324
Ser. 13-23, Class IK, IO, 3.00%, 9/20/37	53,969	5,129
Ser. 15-64, Class PI, IO, 3.50%, 5/20/45	74,426	12,463
Ser. 15-24, Class IA, IO, 3.50%, 2/20/45	69,823	10,273
Ser. 13-102, Class IP, IO, 3.50%, 6/20/43	36,865	4,733
Ser. 13-100, Class MI, IO, 3.50%, 2/20/43	35,563	5,275
Ser. 12-141, Class WI, IO, 3.50%, 11/20/41	32,364	3,931
Ser. 12-71, Class JI, IO, 3.50%, 4/16/41	25,577	1,651
Ser. 13-157, Class IA, IO, 3.50%, 4/20/40	84,094	8,436
Ser. 13-90, Class HI, IO, 3.50%, 4/20/40	22,719	1,231
Ser. 13-79, Class XI, IO, 3.50%, 11/20/39	61,936	8,341
Ser. 13-6, Class AI, IO, 3.50%, 8/20/39	150,849	20,930
Ser. 15-124, Class NI, IO, 3.50%, 6/20/39	172,380	14,229
Ser. 15-96, Class NI, IO, 3.50%, 1/20/39	67,148	6,379
Ser. 15-82, Class GI, IO, 3.50%, 12/20/38	121,789	9,759
Ser. 16-135, Class PI, IO, 4.00%, 5/20/46	205,084	44,010
Ser. 15-99, Class LI, IO, 4.00%, 7/20/45	43,648	6,506
Ser. 17-57, Class AI, IO, 4.00%, 6/20/45	88,586	16,551
Ser. 15-53, Class MI, IO, 4.00%, 4/16/45	71,061	15,755
Ser. 15-187, Class JI, IO, 4.00%, 3/20/45	100,498	18,705
Ser. 13-24, Class PI, IO, 4.00%, 11/20/42	42,541	7,376



<b>MORTGAGE-BACKED SECURITIES (5.2%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Agency collateralized mortgage obligations cont.</b>		
Government National Mortgage Association		
Ser. 14-133, Class AI, IO, 4.00%, 10/20/36	\$101,833	\$8,433
Ser. 16-37, Class IW, IO, 4.50%, 2/20/46	76,555	16,364
Ser. 15-80, Class IA, IO, 4.50%, 6/20/45	88,345	18,614
Ser. 15-167, Class BI, IO, 4.50%, 4/16/45	61,687	14,036
Ser. 13-20, Class QI, IO, 4.50%, 12/16/42	72,158	12,139
Ser. 18-59, Class ID, IO, 4.50%, 6/20/40	185,361	32,438
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	17,186	3,712
Ser. 16-150, Class I, IO, 5.00%, 11/20/46	132,754	26,577
Ser. 16-168, Class AI, IO, 5.00%, 7/20/45	54,176	5,959
Ser. 14-122, Class IC, IO, 5.00%, 8/20/44	39,037	8,559
Ser. 14-163, Class NI, IO, 5.00%, 2/20/44	47,098	9,524
Ser. 11-116, Class IB, IO, 5.00%, 10/20/40	1,494	119
Ser. 10-20, Class UI, IO, 5.00%, 2/20/40	42,320	9,540
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	60,923	13,285
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	44,284	10,082
Ser. 15-105, Class LI, IO, 5.00%, 10/20/39	66,642	14,937
Ser. 8488, Class SA, IO, 4.102%, 6/20/48 ##	164,000	23,575
IFB Ser. 10-134, Class ES, IO, ((-1 x 1 Month US LIBOR) + 6.00%), 3.916%, 11/20/39	108,029	8,713
IFB Ser. 11-17, Class S, IO, ((-1 x 1 Month US LIBOR) + 6.05%), 3.966%, 2/20/41	62,314	8,780
IFB Ser. 13-129, Class SN, IO, ((-1 x 1 Month US LIBOR) + 6.15%), 4.066%, 9/20/43	29,376	4,285
IFB Ser. 10-125, Class SD, ((-1 x 1 Month US LIBOR) + 6.68%), 4.595%, 1/16/40	276,383	34,893
	<b>1,108,957</b>	
<b>Commercial mortgage-backed securities (0.6%)</b>		
Bear Stearns Commercial Mortgage Securities Trust 144A FRB Ser. 06-PW11, Class C, 5.283%, 3/11/39 (In default) † W		
	25,000	2,500
Credit Suisse First Boston Mortgage Securities Corp. Ser. 05-C3, Class B, 4.882%, 7/15/37		
	3,778	3,816
GE Capital Commercial Mortgage Corp. FRB Ser. 05-C1, Class D, 4.562%, 6/10/48 W		
	15,909	16,130
GMAC Commercial Mortgage Securities, Inc. Trust 144A FRB Ser. 04-C3, Class X1, IO, 1.104%, 12/10/41 W		
	44,809	483
JPMBB Commercial Mortgage Securities Trust 144A FRB Ser. 13-C14, Class E, 4.717%, 8/15/46 W		
	16,000	13,016
LB-UBS Commercial Mortgage Trust FRB Ser. 06-C6, Class C, 5.482%, 9/15/39 (In default) † W		
	20,000	1,796
Merrill Lynch Mortgage Trust Ser. 04-KEY2, Class D, 5.046%, 8/12/39 W		
	4,130	4,134
ML-CFC Commercial Mortgage Trust 144A FRB Ser. 06-4, Class XC, IO, 0.71%, 12/12/49 W		
	24,163	201
UBS-Barclays Commercial Mortgage Trust 144A		
Ser. 12-C2, Class F, 5.00%, 5/10/63 W	17,000	11,438
Ser. 13-C6, Class E, 3.50%, 4/10/46	38,000	26,631
Wells Fargo Commercial Mortgage Trust 144A		
Ser. 14-LC18, Class D, 3.957%, 12/15/47 W	50,000	42,462
WF-RBS Commercial Mortgage Trust 144A		
Ser. 11-C3, Class E, 5.00%, 3/15/44 W	30,000	13,946
Ser. 12-C7, Class F, 4.50%, 6/15/45 W	100,000	62,113
	<b>198,666</b>	
<b>Residential mortgage-backed securities (non-agency) (1.0%)</b>		
Bear Stearns Alt-A Trust FRB Ser. 04-3, Class B, (1 Month US LIBOR + 2.93%), 5.016%, 4/25/34		
	18,024	18,653
Citigroup Mortgage Loan Trust FRB Ser. 07-AR5, Class 1A1A, 3.817%, 4/25/37 W		
	45,405	45,200
Countrywide Alternative Loan Trust FRB Ser. 05-27, Class 1A6, (1 Month US LIBOR + 0.82%), 2.911%, 8/25/35		
	16,765	15,004

<b>MORTGAGE-BACKED SECURITIES (5.2%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Residential mortgage-backed securities (non-agency) cont.</b>		
Countrywide Home Loans Mortgage Pass-Through Trust FRB Ser. 05-3, Class 1A1, (1 Month US LIBOR + 0.62%), 2.711%, 4/25/35		
	\$10,461	\$9,218
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C02, Class 1B, (1 Month US LIBOR + 12.25%), 14.341%, 9/25/28	59,892	88,988
Connecticut Avenue Securities FRB Ser. 15-C04, Class 1M2, (1 Month US LIBOR + 5.70%), 7.791%, 4/25/28	12,520	14,586
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2B1, (1 Month US LIBOR + 5.50%), 7.591%, 9/25/29	10,000	11,432
Connecticut Avenue Securities FRB Ser. 15-C02, Class 2M2, (1 Month US LIBOR + 4.00%), 6.091%, 5/25/25	4,180	4,519
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2M2, (1 Month US LIBOR + 3.65%), 5.741%, 9/25/29	10,000	10,898
Connecticut Avenue Securities FRB Ser. 17-C06, Class 2M2, (1 Month US LIBOR + 2.80%), 4.891%, 2/25/30	10,000	10,395
WaMu Mortgage Pass-Through Certificates Trust FRB Ser. 04-AR12, Class A2B, (1 Month US LIBOR + 0.92%), 3.011%, 10/25/44		
	24,691	24,367
Wells Fargo Mortgage Backed Securities Trust		
FRB Ser. 05-AR4, Class 1A3, 4.003%, 4/25/35 W	31,788	32,302
FRB Ser. 06-AR6, Class 7A2, 3.654%, 3/25/36 W	9,490	9,476
	<b>295,038</b>	
<b>Total mortgage-backed securities (cost \$1,671,096)</b>		<b>\$1,602,661</b>
<b>ASSET-BACKED SECURITIES (0.5%)*</b>		
loanDepot Station Place Agency Securitization Trust 144A FRB Ser. 17-LD1, Class A, (1 Month US LIBOR + 0.80%), 2.891%, 11/25/50		
	\$34,000	\$34,000
Station Place Securitization Trust 144A		
FRB Ser. 18-1, Class A, (1 Month US LIBOR + 0.90%), 2.861%, 4/24/19	65,000	65,000
FRB Ser. 18-3, Class A, (1 Month US LIBOR + 0.70%), 2.791%, 7/24/19	51,000	51,000
	<b>Total asset-backed securities (cost \$150,000)</b>	<b>\$150,000</b>
<b>FOREIGN GOVERNMENT AND AGENCY BONDS AND NOTES (0.4%)*</b>		
Buenos Aires (Province of) unsec. FRN (Argentina Deposit Rates BADLAR + 3.83%), 35.19%, 5/31/22 (Argentina) ARS		
	195,000	\$5,697
Buenos Aires (Province of) 144A sr. unsec. unsub. notes 10.875%, 1/26/21 (Argentina)		
	\$100,000	103,230
	<b>Total foreign government and agency bonds and notes (cost \$113,799)</b>	<b>\$108,927</b>
<b>CORPORATE BONDS AND NOTES (0.4%)*</b>		
Enbridge, Inc. sr. unsec. unsub. bonds 4.25%, 12/1/26 (Canada)		
	\$20,000	\$19,819
Petrobras Global Finance BV company guaranty sr. unsec. notes Ser. REGS, 5.999%, 1/27/28 (Brazil)		
	5,000	4,525
Petrobras Global Finance BV company guaranty sr. unsec. notes Ser. REGS, 5.299%, 1/27/25 (Brazil)		
	2,000	1,848
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 8.75%, 5/23/26 (Brazil)		
	15,000	16,238
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 6.25%, 3/17/24 (Brazil)		
	20,000	19,850



**CORPORATE BONDS**

<b>AND NOTES (0.4%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 6.125%, 1/17/22 (Brazil)	\$12,000	\$12,225
Petroleos de Venezuela SA company guaranty sr. unsec. unsub. notes 5.375%, 4/12/27 (Venezuela)	97,000	21,777
Petroleos Mexicanos company guaranty sr. unsec. unsub. notes 4.50%, 1/23/26 (Mexico)	39,000	36,590
<b>Total corporate bonds and notes (cost \$152,112)</b>		<b>\$132,872</b>

**PURCHASED SWAP OPTIONS OUTSTANDING(0.0%)\***

<b>Counterparty</b>	<b>Fixed right % to receive or (pay)/ Floating rate index/Maturity date</b>	<b>Expiration date/strike</b>	<b>Notional/ Contract amount</b>	<b>Value</b>
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**Bank of America N.A.**

(1.9325)/3 month USD-LIBOR-BBA/Aug-19		Aug-18/1.9325	\$143,500	\$1,462
(2.2625)/3 month USD-LIBOR-BBA/Aug-22		Aug-21/2.2625	64,600	567
2.2625/3 month USD-LIBOR-BBA/Aug-22		Aug-21/2.2625	64,600	166
1.9325/3 month USD-LIBOR-BBA/Aug-19		Aug-18/1.9325	143,500	—

**Citibank, N.A.**

2.47/3 month USD-LIBOR-BBA/Aug-19		Aug-18/2.47	57,400	2
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**Goldman Sachs International**

2.695/3 month USD-LIBOR-BBA/Oct-23		Oct-18/2.695	12,100	17
1.9175/3 month USD-LIBOR-BBA/Oct-19		Oct-18/1.9175	52,200	—

**JPMorgan Chase Bank N.A.**

(1.919)/3 month USD-LIBOR-BBA/Aug-19		Aug-18/1.919	143,500	1,481
(2.25)/3 month USD-LIBOR-BBA/Aug-22		Aug-21/2.25	64,600	572
2.25/3 month USD-LIBOR-BBA/Aug-22		Aug-21/2.25	64,600	164
(2.68)/3 month USD-LIBOR-BBA/Jul-20		Jul-18/2.68	57,400	145
1.919/3 month USD-LIBOR-BBA/Aug-19		Aug-18/1.919	143,500	—

**Total purchased swap options outstanding (cost \$3,247) \$4,576****PURCHASED OPTIONS****OUTSTANDING (0.3%)\***

<b>Counterparty</b>	<b>Expiration date/Strike price</b>	<b>Notional amount</b>	<b>Contract amount</b>	<b>Value</b>
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**Bank of America N.A.**

SPDR S&P 500 ETF Trust (Put)	May-19/240.00	\$612,008	\$2,256	\$15,558
SPDR S&P 500 ETF Trust (Put)	Apr-19/235.00	644,290	2,375	13,314

**Citibank, N.A.**

SPDR S&P 500 ETF Trust (Put)	Jan-19/250.00	623,401	2,298	13,730
SPDR S&P 500 ETF Trust (Put)	Feb-19/240.00	632,625	2,332	11,356

**JPMorgan Chase Bank N.A.**

SPDR S&P 500 ETF Trust (Put)	Mar-19/245.00	616,348	2,272	14,596
SPDR S&P 500 ETF Trust (Put)	Jun-19/245.00	426,995	1,574	13,489

**PURCHASED OPTIONS****OUTSTANDING (0.3%)\* cont.**

<b>Counterparty</b>	<b>Expiration date/Strike price</b>	<b>Notional amount</b>	<b>Contract amount</b>	<b>Value</b>
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**Barclays Bank PLC**

NOK/SEK (Put)	Jul-18/SEK 1.08	\$170,291	\$1,386,912	\$42
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**Goldman Sachs International**

NOK/SEK (Put)	Jul-18/SEK 1.08	170,291	1,386,912	42
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**HSBC Bank USA, National Association**

EUR/SEK (Put)	Aug-18/SEK 10.00	680,711	582,900	151
NOK/SEK (Put)	Jul-18/SEK 1.07	170,291	1,386,913	33

**Total purchased options outstanding (cost \$104,004) \$82,311****SHORT-TERM INVESTMENTS (72.7%)**

	<b>Principal amount/shares</b>	<b>Value</b>
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Bedford Row Funding Corp. asset backed commercial paper 2.003%, 7/10/18	\$250,000	\$249,849
Manhattan Asset Funding Co., LLC asset backed commercial paper 2.024%, 7/11/18	250,000	249,830
Regency Markets No. 1, LLC asset backed commercial paper 2.003%, 7/12/18	250,000	249,820
MetLife Short Term Funding, LLC asset backed commercial paper 2.057%, 7/16/18	250,000	249,763
Collateralized Commercial Paper Co., LLC asset backed commercial paper 2.367%, 7/18/18	250,000	249,731
Atlantic Asset Securitization, LLC asset backed commercial paper 1.983%, 7/23/18	250,000	249,657
Alpine Securitization, Ltd. asset backed commercial paper 2.056%, 7/25/18	250,000	249,624
Chariot Funding, LLC asset backed commercial paper 2.054%, 8/3/18	250,000	249,493
CRC Funding, LLC asset backed commercial paper 2.293%, 8/10/18	250,000	249,391
CAFCO, LLC asset backed commercial paper 2.275%, 9/17/18	250,000	248,766
National Australia Bank, Ltd. commercial paper 1.952%, 7/2/18	250,000	249,959
Mizuho Bank Ltd./NY commercial paper 2.022%, 7/6/18	250,000	249,906
BPCE SA commercial paper 2.002%, 7/9/18	250,000	249,866
NRW.Bank commercial paper 2.067%, 7/13/18	250,000	249,803
Bank of New York Mellon Corp. (The) commercial paper 1.953%, 7/16/18	250,000	249,769
National Bank of Canada commercial paper 2.103%, 7/16/18	250,000	249,769
Skandinaviska Enskilda Banken AB commercial paper 2.003%, 7/17/18	300,000	299,716
Toronto Dominion Holdings (U.S.A.), Inc. commercial paper 2.054%, 7/23/18	250,000	249,665
Nationwide Building Society 144A commercial paper 2.043%, 7/25/18	250,000	249,629
Societe Generale SA commercial paper 2.086%, 7/31/18	250,000	249,566
American Honda Finance Corp. commercial paper 2.046%, 8/6/18	250,000	249,463
Simon Property Group LP commercial paper 2.087%, 8/20/18	250,000	249,250
ABN AMRO Funding USA, LLC commercial paper 2.367%, 10/11/18	250,000	248,309
Export Development Canada commercial paper 2.273%, 12/7/18	250,000	247,349
Argentina (Republic of) Central bank letters with effective yields ranging from 28.01% to 29.31%, 8/15/18 (Argentina)	ARS 1,139,000	\$37,511

<b>SHORT-TERM INVESTMENTS (72.7%) cont.</b>	<b>Principal amount/shares</b>	<b>Value</b>
State Street Institutional U.S. Government Money Market Fund, Premier Class 1.82% <sup>P</sup>	Shares 310,000	\$310,000
Putnam Cash Collateral Pool, LLC 2.16% <sup>d</sup>	Shares 1,104,460	1,104,460
Putnam Short Term Investment Fund 2.04% <sup>L</sup>	Shares 6,853,923	6,853,923
Interest in \$300,000,000 joint tri-party repurchase agreement dated 6/29/18 with HSBC Bank USA, National Association due 7/2/18 — maturity value of \$7,073,243 for an effective yield of 2.110% (collateralized by various U.S. Treasury notes and bonds with coupon rates ranging from 0.875% to 4.750% and due dates ranging from 8/15/18 to 5/15/47, valued at \$306,001,251)	\$7,072,000	7,072,000
U.S. Treasury Bills 1.898%, 9/6/18 # Δ	363,000	361,750
U.S. Treasury Bills 1.849%, 8/2/18 # Δ §	280,000	279,564
U.S. Treasury Bills 1.866%, 8/9/18 # Δ §	354,000	353,319
U.S. Treasury Bills 1.893%, 9/13/18 §	5,000	4,980
U.S. Treasury Bills 1.894%, 9/20/18 §	3,000	2,987
U.S. Treasury Bills 1.835%, 7/19/18 Δ	86,000	85,930
U.S. Treasury Bills 1.897%, 8/23/18 Δ §	132,000	131,651
<b>Total short-term investments (cost \$22,660,509)</b>		<b>\$22,636,018</b>
<b>Total investments (cost \$36,371,673)</b>		<b>\$36,926,970</b>

#### Key to holding's currency abbreviations

ARS	Argentine Peso
AUD	Australian Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
EUR	Euro
GBP	British Pound
JPY	Japanese Yen
NOK	Norwegian Krone
NZD	New Zealand Dollar
SEK	Swedish Krona

#### Key to holding's abbreviations

ADR	American Depositary Receipts: represents ownership of foreign securities on deposit with a custodian bank
ETF	Exchange Traded Fund
FRB	Floating Rate Bonds: the rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.
FRN	Floating Rate Notes: the rate shown is the current interest rate or yield at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.
IFB	Inverse Floating Rate Bonds, which are securities that pay interest rates that vary inversely to changes in the market interest rates. As interest rates rise, inverse floaters produce less current income. The rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor.
IO	Interest Only
PJSC	Public Joint Stock Company
PO	Principal Only
REGS	Securities sold under Regulation S may not be offered, sold or delivered within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933.
SPDR	S&P Depository Receipts
TBA	To Be Announced Commitments

#### 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, 2018 through June 30, 2018 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC and references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures*.

- \* Percentages indicated are based on net assets of \$31,116,102.
  - ††† The value of the commodity linked notes, which are marked to market daily, may be based on a multiple of the performance of the index. The multiple (or leverage) will increase the volatility of the note's value relative to the change in the underlying index.
  - † This security is non-income-producing.
  - # This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$261,464 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 9).
  - Δ This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at period end totaled \$653,309 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 9).
  - § This security, in part or in entirety, was pledged and segregated with the custodian for collateral on the initial margin on certain centrally cleared derivative contracts at the close of the reporting period. Collateral at period end totaled \$284,359 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 9).
  - ## Forward commitment, in part or in entirety (Note 1).
  - <sup>d</sup> Affiliated company. See Notes 1 and 5 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.
  - <sup>L</sup> 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.
  - <sup>P</sup> 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 (Note 1).
  - <sup>S</sup> Security on loan, in part or in entirety, at the close of the reporting period (Note 1).
  - <sup>W</sup> The rate shown represents the weighted average coupon associated with the underlying mortgage pools. Rates may be subject to a cap or floor.
- At the close of the reporting period, the fund maintained liquid assets totaling \$2,757,159 to cover certain derivative contracts, delayed delivery securities and the settlement of certain securities.
- Unless otherwise noted, the rates quoted in Short-term investments security descriptions represent the weighted average yield to maturity.
- Debt obligations are considered secured unless otherwise indicated.
- 144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.
- See Note 1 to the financial statements regarding TBA commitments.
- The dates shown on debt obligations are the original maturity dates.

## FORWARD CURRENCY CONTRACTS at 6/30/18 (aggregate face value \$13,092,241) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>						
	Australian Dollar	Buy	7/18/18	\$193,010	\$202,401	\$(9,391)
	British Pound	Sell	9/19/18	155,208	155,326	118
	Euro	Sell	9/19/18	118,637	119,286	649
	Japanese Yen	Sell	8/16/18	180,864	183,604	2,740
	New Taiwan Dollar	Sell	8/16/18	195	1,305	1,110
	New Zealand Dollar	Sell	7/18/18	83,579	86,935	3,356
	Norwegian Krone	Buy	9/19/18	251,215	250,654	561
	Swedish Krona	Sell	9/19/18	152,616	155,307	2,691
<b>Barclays Bank PLC</b>						
	Australian Dollar	Buy	7/18/18	340,461	351,212	(10,751)
	British Pound	Buy	9/19/18	53,899	54,717	(818)
	Canadian Dollar	Sell	7/18/18	31,196	30,952	(244)
	Euro	Buy	9/19/18	85,395	85,511	(116)
	Japanese Yen	Sell	8/16/18	601	22	(579)
	Norwegian Krone	Buy	9/19/18	130,947	130,732	215
	Swedish Krona	Sell	9/19/18	105,783	108,316	2,533
<b>Citibank, N.A.</b>						
	Australian Dollar	Buy	7/18/18	162,445	168,963	(6,518)
	Brazilian Real	Buy	7/3/18	53,203	62,946	(9,743)
	Brazilian Real	Sell	7/3/18	53,203	62,891	9,688
	Canadian Dollar	Buy	7/18/18	114,967	116,718	(1,751)
	Canadian Dollar	Sell	7/18/18	114,967	113,617	(1,350)
	Euro	Sell	9/19/18	87,626	87,733	107
	Japanese Yen	Buy	8/16/18	41,175	41,975	(800)
	New Zealand Dollar	Buy	7/18/18	170,341	172,924	(2,583)
	New Zealand Dollar	Sell	7/18/18	170,341	178,675	8,334
	Norwegian Krone	Buy	9/19/18	43,341	43,264	77
	Swedish Krona	Sell	9/19/18	186,983	191,374	4,391
<b>Credit Suisse International</b>						
	Australian Dollar	Buy	7/18/18	444,120	459,145	(15,025)
	British Pound	Buy	9/19/18	8,607	8,394	213
	Canadian Dollar	Buy	7/18/18	84,685	87,379	(2,694)
	Canadian Dollar	Sell	7/18/18	84,685	87,901	3,216
	Euro	Sell	9/19/18	127,916	128,587	671
	Japanese Yen	Sell	8/16/18	126,207	127,783	1,576
	New Zealand Dollar	Sell	7/18/18	23,638	24,379	741
	Swedish Krona	Sell	9/19/18	61,096	62,198	1,102
<b>Goldman Sachs International</b>						
	Australian Dollar	Buy	7/18/18	889,934	917,911	(27,977)
	Australian Dollar	Sell	7/18/18	895,407	911,470	16,063
	Brazilian Real	Buy	7/3/18	73,999	85,848	(11,849)
	Brazilian Real	Sell	7/3/18	73,999	86,490	12,491
	British Pound	Sell	9/19/18	51,648	52,237	589
	Canadian Dollar	Sell	7/18/18	35,076	35,506	430
	Chinese Yuan (Offshore)	Buy	8/16/18	82,909	86,809	(3,900)
	Chinese Yuan (Offshore)	Sell	8/16/18	83,240	84,954	1,714
	Euro	Sell	9/19/18	42,874	42,338	(536)
	Japanese Yen	Buy	8/16/18	36,075	36,525	(450)
	New Taiwan Dollar	Sell	8/16/18	948	1,245	297
	New Zealand Dollar	Sell	7/18/18	284,737	291,985	7,248
	Norwegian Krone	Buy	9/19/18	1,033,349	1,031,738	1,611
	South African Rand	Buy	7/18/18	78,954	87,554	(8,600)

## FORWARD CURRENCY CONTRACTS at 6/30/18 (aggregate face value \$13,092,241) (Unaudited) cont.

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/(depreciation)
<b>Goldman Sachs International cont.</b>						
	South African Rand	Sell	7/18/18	\$78,954	\$85,664	\$6,710
	Swedish Krona	Sell	9/19/18	243,609	251,215	7,606
<b>HSBC Bank USA, National Association</b>						
	Australian Dollar	Buy	7/18/18	114,711	120,190	(5,479)
	British Pound	Buy	9/19/18	87,006	88,010	(1,004)
	Chinese Yuan (Offshore)	Buy	8/16/18	82,924	86,767	(3,843)
	Chinese Yuan (Offshore)	Sell	8/16/18	83,239	84,924	1,685
	Japanese Yen	Sell	8/16/18	31,173	30,481	(692)
	New Zealand Dollar	Sell	7/18/18	169,054	172,800	3,746
	Swedish Krona	Sell	9/19/18	149,820	152,583	2,763
<b>JPMorgan Chase Bank N.A.</b>						
	Australian Dollar	Buy	7/18/18	17,836	25,912	(8,076)
	British Pound	Buy	9/19/18	42,510	42,761	(251)
	Canadian Dollar	Sell	7/18/18	35,761	38,554	2,793
	Euro	Sell	9/19/18	87,391	87,247	(144)
	Japanese Yen	Sell	8/16/18	43,843	42,349	(1,494)
	New Zealand Dollar	Sell	7/18/18	152,867	162,570	9,703
	Norwegian Krone	Buy	9/19/18	239,687	239,143	544
	Russian Ruble	Buy	9/19/18	85,058	86,082	(1,024)
	Russian Ruble	Sell	9/19/18	85,058	85,641	583
	Swedish Krona	Sell	9/19/18	329,727	335,349	5,622
<b>NatWest Markets PLC</b>						
	Canadian Dollar	Buy	7/18/18	85,826	84,824	1,002
	Canadian Dollar	Sell	7/18/18	85,826	85,444	(382)
	Euro	Sell	9/19/18	84,924	84,508	(416)
	Japanese Yen	Buy	8/16/18	84,485	84,695	(210)
	Swedish Krona	Sell	9/19/18	154,873	158,723	3,850
<b>State Street Bank and Trust Co.</b>						
	Australian Dollar	Buy	7/18/18	145,201	152,980	(7,779)
	British Pound	Buy	9/19/18	15,495	15,733	(238)
	Canadian Dollar	Sell	7/18/18	21,761	20,319	(1,442)
	Euro	Sell	9/19/18	257,123	256,443	(680)
	Japanese Yen	Buy	8/16/18	897	672	225
	New Zealand Dollar	Sell	7/18/18	166,210	173,456	7,246
	Norwegian Krone	Buy	9/19/18	319,374	319,093	281
	Swedish Krona	Sell	9/19/18	442,990	452,071	9,081
<b>UBS AG</b>						
	Australian Dollar	Buy	7/18/18	30,935	32,252	(1,317)
	Canadian Dollar	Buy	7/18/18	84,609	85,343	(734)
	Canadian Dollar	Sell	7/18/18	84,609	86,848	2,239
	Euro	Sell	9/19/18	47,454	47,332	(122)
	Japanese Yen	Sell	8/16/18	83,765	84,361	596
	New Zealand Dollar	Sell	7/18/18	214,908	227,991	13,083
	Norwegian Krone	Buy	9/19/18	219,587	219,065	522
	Swedish Krona	Sell	9/19/18	128,346	132,507	4,161
<b>WestPac Banking Corp.</b>						
	Australian Dollar	Buy	7/18/18	153,491	160,310	(6,819)
	Japanese Yen	Sell	8/16/18	13,131	13,293	162
<b>Unrealized appreciation</b>						<b>168,735</b>
<b>Unrealized (depreciation)</b>						<b>(157,821)</b>
<b>Total</b>						<b>\$10,914</b>

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

<b>FUTURES CONTRACTS OUTSTANDING at 6/30/18 (Unaudited)</b>					
	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/ (depreciation)
S&P 500 Index E-Mini (Short)	31	\$4,213,474	\$4,218,480	Sep-18	\$(2,154)
S&P Mid Cap 400 Index E-Mini (Long)	13	2,537,171	2,542,930	Sep-18	(44,128)
Tokyo Price Index (Long)	5	781,687	781,511	Sep-18	(15,059)
U.S. Treasury Note 10 yr (Long)	88	10,576,500	10,576,500	Sep-18	78,230
<b>Unrealized appreciation</b>					<b>78,230</b>
<b>Unrealized (depreciation)</b>					<b>(61,341)</b>
<b>Total</b>					<b>\$16,889</b>

<b>WRITTEN SWAP OPTIONS OUTSTANDING at 6/30/18 (premiums \$4,005) (Unaudited)</b>				
Counterparty	Fixed Obligation % to receive or (pay)/ Floating rate index/ Maturity date	Expiration date/strike	Notional/ Contract amount	Value
<b>Bank of America N.A.</b>	(2.2625)/3 month USD-LIBOR-BBA/Aug-19	Aug-18/2.2625	\$64,600	\$1
	(1.9325)/3 month USD-LIBOR-BBA/Aug-20	Aug-19/1.9325	143,500	37
	2.2625/3 month USD-LIBOR-BBA/Aug-19	Aug-18/2.2625	64,600	400
	1.9325/3 month USD-LIBOR-BBA/Aug-20	Aug-19/1.9325	143,500	1,500
<b>Barclays Bank PLC</b>	2.813/3 month USD-LIBOR-BBA/Jan-21	Jan-19/2.813	192,000	920

<b>FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 6/30/18 (Unaudited)</b>					
Counterparty	Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date	Expiration date/strike	Contract amount	Premium receivable/ (payable)	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>	(2.203)/3 month USD-LIBOR-BBA/Jan-24 (Purchased)	Jun-19/2.203	\$14,400	\$(288)	\$245
	(2.647)/3 month USD-LIBOR-BBA/Jan-29 (Purchased)	Jun-24/2.647	14,400	(563)	45
	(2.5925)/3 month USD-LIBOR-BBA/Jan-27 (Purchased)	Jan-19/2.5925	8,600	(303)	(38)
	(2.785)/3 month USD-LIBOR-BBA/Jan-47 (Purchased)	Jan-27/2.785	8,600	(923)	(42)
	2.647/3 month USD-LIBOR-BBA/Jan-29 (Purchased)	Jun-24/2.647	14,400	(563)	(164)
	2.785/3 month USD-LIBOR-BBA/Jan-47 (Purchased)	Jan-27/2.785	8,600	(923)	(227)
	2.203/3 month USD-LIBOR-BBA/Jan-24 (Purchased)	Jun-19/2.203	14,400	(288)	(248)
	2.5925/3 month USD-LIBOR-BBA/Jan-27 (Purchased)	Jan-19/2.5925	8,600	(303)	(255)
	(2.7175)/3 month USD-LIBOR-BBA/Jan-47 (Written)	Jan-19/2.7175	8,600	777	614
	(2.413)/3 month USD-LIBOR-BBA/Jan-29 (Written)	Jun-19/2.413	14,400	554	451
	2.7175/3 month USD-LIBOR-BBA/Jan-47 (Written)	Jan-19/2.7175	8,600	777	215
	2.413/3 month USD-LIBOR-BBA/Jan-29 (Written)	Jun-19/2.413	14,400	554	(248)
<b>Barclays Bank PLC</b>	(2.205)/3 month USD-LIBOR-BBA/Jan-24 (Purchased)	Jun-19/2.205	14,400	(288)	244
	(2.43)/3 month USD-LIBOR-BBA/Feb-22 (Purchased)	Feb-19/2.43	8,600	(120)	22
	2.43/3 month USD-LIBOR-BBA/Feb-22 (Purchased)	Feb-19/2.43	8,600	(120)	(106)
	2.205/3 month USD-LIBOR-BBA/Jan-24 (Purchased)	Jun-19/2.205	14,400	(288)	(247)

<b>WRITTEN SWAP OPTIONS OUTSTANDING at 6/30/18 (premiums \$4,005) (Unaudited) cont.</b>				
Counterparty	Fixed Obligation % to receive or (pay)/ Floating rate index/ Maturity date	Expiration date/strike	Notional/ Contract amount	Value
<b>Citibank, N.A.</b>	(2.6325)/3 month USD-LIBOR-BBA/Aug-19	Aug-18/2.6325	\$57,400	\$6
	2.663/3 month USD-LIBOR-BBA/Jan-21	Jan-19/2.663	192,000	1,284
<b>Goldman Sachs International</b>	(2.3025)/3 month USD-LIBOR-BBA/Oct-19	Oct-18/2.3025	114,800	16
<b>JPMorgan Chase Bank N.A.</b>	(2.25)/3 month USD-LIBOR-BBA/Aug-19	Aug-18/2.25	64,600	1
	(1.919)/3 month USD-LIBOR-BBA/Aug-20	Aug-19/1.919	143,500	36
	2.25/3 month USD-LIBOR-BBA/Aug-19	Aug-18/2.25	64,600	408
	2.77/3 month USD-LIBOR-BBA/Jan-21	Jan-19/2.77	114,800	596
	1.919/3 month USD-LIBOR-BBA/Aug-20	Aug-19/1.919	143,500	1,517
<b>Total</b>				<b>\$6,722</b>

<b>WRITTEN OPTIONS OUTSTANDING at 6/30/18 (premiums \$1,367) (Unaudited)</b>				
Counterparty	Expiration date/strike price	Notional amount	Contract amount	Value
<b>Bank of America N.A.</b>	SPDR S&P 500 ETF Trust (Call)	Jul-18/\$282.00	\$715,094	\$2,636
	SPDR S&P 500 ETF Trust (Call)	Jul-18/285.00	711,567	2,623
<b>Total</b>				<b>\$607</b>

**FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.**

Counterparty Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date	Expiration date/strike	Contract amount	Premium receivable/ (payable)	Unrealized appreciation/ (depreciation)
<b>Citibank, N.A.</b>				
(2.654)/3 month USD-LIBOR-BBA/Jun-29 (Purchased)	Jun-24/2.654	\$14,400	\$(563)	\$42
2.654/3 month USD-LIBOR-BBA/Jun-29 (Purchased)	Jun-24/2.654	14,400	(563)	(163)
(2.42)/3 month USD-LIBOR-BBA/Jun-29 (Written)	Jun-19/2.42	14,400	554	450
2.42/3 month USD-LIBOR-BBA/Jun-29 (Written)	Jun-19/2.42	14,400	552	(243)
<b>Goldman Sachs International</b>				
(2.8175)/3 month USD-LIBOR-BBA/Mar-47 (Purchased)	Mar-27/2.8175	1,700	(215)	(4)
2.8175/3 month USD-LIBOR-BBA/Mar-47 (Purchased)	Mar-27/2.8175	1,700	(215)	(33)
<b>JPMorgan Chase Bank N.A.</b>				
(2.8325)/3 month USD-LIBOR-BBA/Feb-52 (Purchased)	Feb-22/2.8325	8,600	(1,201)	(212)
2.8325/3 month USD-LIBOR-BBA/Feb-52 (Purchased)	Feb-22/2.8325	8,600	(1,201)	(368)
(2.79)/3 month USD-LIBOR-BBA/Feb-49 (Written)	Feb-19/2.79	8,600	817	582
2.79/3 month USD-LIBOR-BBA/Feb-49 (Written)	Feb-19/2.79	8,600	817	308
<b>Unrealized appreciation</b>				<b>3,218</b>
<b>Unrealized (depreciation)</b>				<b>(2,598)</b>
<b>Total</b>				<b>\$620</b>

TBA SALE COMMITMENTS OUTSTANDING at 6/30/18 (proceeds receivable \$1,985,625) (Unaudited)	Principal amount	Settlement date	Value
Federal National Mortgage Association, 3.50%, 7/1/48	\$2,000,000	7/12/18	\$1,990,312
<b>Total</b>			<b>\$1,990,312</b>

**CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited)**

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$1,808,100	\$10,990	\$(375)	6/20/23	2.75% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	\$10,380
5,208,000	10,624 <sup>E</sup>	(5,503)	9/19/23	3 month USD-LIBOR-BBA — Semiannually	2.95% — Quarterly	(16,127)
296,000	1,526 <sup>E</sup>	(730)	9/19/28	3 month USD-LIBOR-BBA — Quarterly	3.00% — Semiannually	795
2,064,300	462 <sup>E</sup>	752	9/19/20	2.875% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	289
3,400	47 <sup>E</sup>	(25)	9/19/48	3 month USD-LIBOR-BBA — Quarterly	3.00% — Semiannually	21
380,100	108 <sup>E</sup>	(316)	9/19/23	2.90% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(208)
6,397,200	5,015 <sup>E</sup>	7,962	9/19/28	3 month USD-LIBOR-BBA — Quarterly	2.95% — Semiannually	12,978
AUD 3,021,000	2,927 <sup>E</sup>	(4,540)	9/19/23	6 month AUD-BBR-BBSW — Semiannually	2.55% — Semiannually	(7,467)
AUD 200,000	686 <sup>E</sup>	(171)	9/19/28	6 month AUD-BBR-BBSW — Semiannually	2.90% — Semiannually	(857)
CAD 1,726,000	1,003 <sup>E</sup>	653	9/19/23	3 month CAD-BA-CDOR — Semiannually	2.50% — Semiannually	1,656
CAD 221,000	152 <sup>E</sup>	(559)	9/19/28	3 month CAD-BA-CDOR — Semiannually	2.60% — Semiannually	(711)
CHF 829,000	982 <sup>E</sup>	(163)	9/19/23	0.05% plus 6 month CHF-LIBOR-BBA — Semiannually	—	819
CHF 889,000	4,979 <sup>E</sup>	(3,075)	9/19/28	6 month CHF-LIBOR-BBA — Semiannually	0.50% — Annually	1,904
EUR 824,000	908 <sup>E</sup>	(1,169)	9/19/23	6 month EUR-EURIBOR-REUTERS — Annually	0.30% — Semiannually	(262)
EUR 2,003,000	6,243 <sup>E</sup>	3,050	9/19/28	6 month EUR-EURIBOR-REUTERS — Semiannually	0.95% — Annually	9,293
GBP 915,000	459 <sup>E</sup>	661	9/19/23	6 month GBP-LIBOR-BBA — Semiannually	1.35% — Semiannually	1,121
GBP 661,000	12,338 <sup>E</sup>	(10,166)	9/19/28	6 month GBP-LIBOR-BBA — Semiannually	1.70% — Semiannually	2,172



CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
JPY 122,650,000	\$1,408	\$(9)	5/17/23	6 month JPY-LIBOR-BBA — Semiannually	0.134% — Semiannually	\$1,550
JPY 61,540,000	2,667	(7)	5/17/28	0.333% — Semiannually	6 month JPY-LIBOR-BBA — Semiannually	(2,888)
JPY 121,900,000	243	(9)	5/31/23	6 month JPY-LIBOR-BBA — Semiannually	0.11375% — Semiannually	317
JPY 61,200,000	834	(7)	5/31/28	0.30125% — Semiannually	6 month JPY-LIBOR-BBA — Semiannually	(971)
NOK 4,352,000	869 <sup>E</sup>	341	9/19/28	6 month NOK-NIBOR-NIBR — Semiannually	2.20% — Annually	1,210
NOK 5,534,000	1,982 <sup>E</sup>	(1,997)	9/19/23	6 month NOK-NIBOR-NIBR — Annually	1.80% — Semiannually	(14)
NZD 859,000	3,079 <sup>E</sup>	(97)	9/19/23	3 month NZD-BBR-FRA — Semiannually	2.70% — Quarterly	(3,175)
NZD 677,000	3,601 <sup>E</sup>	947	9/19/28	3 month NZD-BBR-FRA — Quarterly	3.15% — Semiannually	4,547
SEK 1,949,000	158 <sup>E</sup>	117	9/19/23	3 month SEK-STIBOR-SIDE — Annually	0.50% — Quarterly	(40)
SEK 5,001,000	1,035 <sup>E</sup>	(8)	9/19/28	3 month SEK-STIBOR-SIDE — Quarterly	1.20% — Annually	1,027
<b>Total</b>		<b>\$(14,443)</b>				<b>\$17,359</b>

<sup>E</sup> Extended effective date.

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited)

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>						
\$1,865	\$1,826	\$—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	\$(24)
1,865	1,826	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(24)
12,575,942	12,277,837	—	6/13/19	3 month USD-LIBOR-BBA minus 0.07% — Quarterly	Russell 1000 Total Return Index — Quarterly	311,045
12,579,265	12,211,800	—	6/13/19	(3 month USD-LIBOR-BBA plus 0.10%) — Quarterly	A basket (MLFCF14) of common stocks — Quarterly*	(374,668)
<b>Barclays Bank PLC</b>						
861	843	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(11)
1,958	1,909	—	1/12/38	6.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 6.50% 30 year Fannie Mae pools — Monthly	(26)
4,251	4,124	—	1/12/43	(3.50%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	95
<b>Citibank, N.A.</b>						
1,196	1,171	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(15)
46,464	44,141	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	HubSpot, Inc. — Monthly	2,375
18,885	18,651	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	ACI Worldwide, Inc. — Monthly	255

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Citibank, N.A. cont.</b>						
\$127,363	\$140,648	\$—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Kellogg Co. — Monthly	\$(13,144)
90,162	89,266	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Cerner Corp. — Monthly	996
13,456	12,666	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Electronics for Imaging, Inc. — Monthly	805
69,820	81,562	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Hanesbrands, Inc. — Monthly	(11,663)
55,595	56,193	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	ICON PLC — Monthly	(535)
19,793	18,613	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Super Micro Computer, Inc. — Monthly	1,203
67,726	61,221	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Mylan NV — Monthly	6,581
29,643	28,547	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Paylocity Holding Corp. — Monthly	1,129
102,593	100,519	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Quintiles IMS Holdings, Inc. — Monthly	2,189
73,365	86,423	—	7/5/22	1 month USD-LIBOR-BBA minus 1.30% — Monthly	Tesla, Inc. — Monthly	(13,131)
55,260	49,711	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Paycom Software, Inc. — Monthly	5,609
19,921	19,883	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Cooper Tire & Rubber Co. — Monthly	60
32,586	27,729	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Pegasystems, Inc. — Monthly	4,879
55,030	53,528	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Triumph Group, Inc. — Monthly	1,564
51,340	51,171	—	7/5/22	1 month USD-LIBOR-BBA minus 12.05% — Monthly	Ubiquiti Networks, Inc. — Monthly	(463)
52,091	55,348	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	PTC, Inc. — Monthly	(3,198)
93,000	87,110	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Varian Medical Systems, Inc. — Monthly	5,995
46,643	47,539	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Dycom Industries, Inc. — Monthly	(843)
19,039	18,881	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Diebold Nixdorf, Inc. — Monthly	162
11,885	11,763	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Under Armour, Inc. Class C — Monthly	128

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Citibank, N.A. cont.</b>						
\$37,800	\$36,707	\$—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Inogen, Inc. — Monthly	\$1,135
31,298	29,816	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Pinnacle Financial Partners, Inc. — Monthly	1,517
64,221	60,441	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	FLIR Systems, Inc. — Monthly	3,852
14,802	14,793	—	7/5/22	1 month USD-LIBOR-BBA minus 1.25% — Monthly	Ebix, Inc. — Monthly	26
27,341	29,093	—	7/5/22	1 month USD-LIBOR-BBA minus 1.85% — Monthly	B&G Foods, Inc. — Monthly	(2,281)
233,554	251,311	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Nike, Inc. Class B — Monthly	(17,497)
355,369	347,463	—	9/20/18	3 month USD-LIBOR-BBA plus 0.30% — Quarterly	MSCI Emerging Markets TR Net USD — Quarterly	8,140
74,929	78,592	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Snap-on, Inc. — Monthly	(3,579)
45,899	47,957	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	West Pharmaceutical Services — Monthly	(2,006)
22,738	22,471	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Aerojet Rocketdyne Holdings, Inc. — Monthly	292
2,690,986	2,724,625	—	11/27/18	3 month USD-LIBOR-BBA plus 0.35% — Quarterly	Russell 1000 Total Return Index — Quarterly	(27,454)
23,354	22,032	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Allscripts Healthcare Solutions, Inc. — Monthly	1,347
18,796	19,748	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Sensient Technologies Corp. — Monthly	(932)
35,232	36,634	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	LivaNova, PLC — Monthly	(1,362)
32,626	37,038	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Edgewell Personal Care — Monthly	(4,374)
79,137	104,356	—	7/5/22	1 month USD-LIBOR-BBA minus 0.65% — Monthly	Restoration Hardware Holdings, Inc. — Monthly	(25,181)
19,077	18,026	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	MINDBODY, Inc. — Monthly	1,072
769,300	758,014	—	3/19/19	3 month USD-LIBOR-BBA plus 0.20% — Quarterly	MSCI Daily TR Net Emerging Markets USD — Quarterly	11,934
40,310	44,312	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Belden, Inc. — Monthly	(3,993)
17,044	15,347	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Extreme Networks, Inc. — Monthly	1,716

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Citibank, N.A. cont.</b>						
\$24,813	\$22,694	\$—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Owens-Illinois, Inc. — Monthly	\$2,147
18,914	19,234	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Bottomline Technologies, Inc. — Monthly	(299)
57,262	61,166	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Coty, Inc. — Monthly	(3,840)
16,053	16,233	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Knowles Corp. — Monthly	(163)
12,014	12,640	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Omniceil, Inc. — Monthly	(613)
10,924,285	10,717,081	—	11/27/18	(3 month USD-LIBOR-BBA plus 0.37%) — Quarterly	A basket (CGPUTQL2) of common stocks — Quarterly*	(208,243)
1,530,498	1,549,630	—	11/27/18	3 month USD-LIBOR-BBA plus 0.35% — Quarterly	Russell 1000 Total Return Index — Quarterly	(15,630)
15,279	13,954	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	GCP Applied Technologies Inc. — Monthly	1,343
144,313	139,202	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Textron Inc — Monthly	5,230
18,931	17,280	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	GTT Communications Inc — Monthly	1,672
8,878	8,349	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Natus Medical, Inc. — Monthly	539
29,173	29,783	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Prestige Brands Holdings, Inc. — Monthly	(606)
42,478	42,620	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	PerkinElmer, Inc. — Monthly	(136)
54,122	54,568	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Oshkosh Corp. — Monthly	(439)
48,900	49,431	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	MasTec, Inc. — Monthly	(531)
<b>Credit Suisse International</b>						
211,207	211,427	—	1/12/41	4.50% (1 month USD-LIBOR) — Monthly	Synthetic MBX Index 4.50% 30 year Ginnie Mae II pools — Monthly	469
10,240	9,935	—	1/12/43	3.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	(230)
869	844	—	1/12/43	3.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	(20)
13,185	12,530	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(553)
6,118	5,814	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(257)

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Credit Suisse International cont.</b>						
\$6,027	\$5,756	\$—	1/12/45	3.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	\$(228)
7,317	7,164	—	1/12/41	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	94
1,620,110	1,677,348	—	7/26/18	3 month USD-LIBOR-BBA plus 0.09% — Quarterly	Russell 1000 Total Return Index — Quarterly	(50,406)
<b>Goldman Sachs International</b>						
171,851	171,505	—	12/15/20	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Scaled 3x Excess Return Strategy — Monthly	(369)
6,118	5,814	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(257)
6,859	6,655	—	1/12/43	(3.50%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	154
5,570	5,479	—	1/12/44	(3.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.00% 30 year Fannie Mae pools — Monthly	53
354,345	351,915	—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry US Excess Return Strategy — Monthly	(2,462)
96,158	97,450	—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry US Excess Return Strategy — Monthly	1,284
152,140	146,070	—	12/12/18	1 month USD-LIBOR-BBA plus 0.46% — Monthly	MSCI Emerging Markets TR Net USD — Monthly	6,240
165,831	165,498	—	12/15/20	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Scaled 3x Excess Return Strategy — Monthly	(367)
57,250	58,019	—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry US Excess Return Strategy — Monthly	762
948,492	939,972	—	12/15/20	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Scaled 3x Excess Return Strategy — Monthly	(8,710)
173,431	172,242	—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry US Series 69 Excess Return Strategy — Monthly	(1,212)
8,218,606	8,059,200	—	12/15/20	(1 month USD-LIBOR-BBA plus 0.44%) — Monthly	A basket (GSCBPUR1) of common stocks — Monthly*	(161,499)
1,058,134	1,029,241	—	12/15/20	(0.20%) — Monthly	Goldman Sachs Cross Asset Trend Series 7 Excess Return Strategy — Monthly	(28,987)
9,164,093	8,951,158	—	12/15/20	(1 month USD-LIBOR-BBA plus 0.50%) — Monthly	A basket (GSGLPWDL) of common stocks — Monthly*	(207,365)
8,659,742	8,482,909	—	12/15/20	1 month USD-LIBOR-BBA minus 0.15% — Monthly	A basket (GSGLPWDS) of common stocks — Monthly*	170,635
95,722	95,529	—	12/15/20	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Scaled 3x Excess Return Strategy — Monthly	(212)
350,824	347,672	—	12/15/20	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Series 85 Excess Return Strategy — Monthly	(3,221)

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/18 (Unaudited) cont.

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
<b>Goldman Sachs International cont.</b>						
\$125,517	\$124,656	\$—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry Series 69 Excess Return Strategy — Monthly	\$(877)
63,253	64,103	—	12/15/20	(0.30%) — Monthly	Goldman Sachs Volatility Carry Excess Return Strategy — Monthly	842
9,267,484	8,999,735	—	12/15/20	1 month USD-LIBOR-BBA minus 0.15% — Monthly	A basket (GSGLPW2S) of common stocks — Monthly*	264,512
9,300,335	8,971,926	—	12/15/20	(1 month USD-LIBOR-BBA plus 0.45%) — Monthly	A basket (GSGLPW2L) of common stocks — Monthly*	(321,856)
<b>JPMorgan Chase Bank N.A.</b>						
1,530	1,498	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(20)
867,332	894,421	—	3/25/19	(1 month USD-LIBOR-BBA plus 0.30%) — Monthly	Energy Select Sector SPDR — Monthly	26,858
8,252,499	8,039,924	—	4/8/19	1 month USD-LIBOR-BBA minus 0.50% — Monthly	A basket (JPCMPTSH) of common stocks — Monthly*	207,903
<b>JPMorgan Securities LLC</b>						
7,626	7,247	—	1/12/45	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	320
17,794	16,910	—	1/12/45	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	746
<b>UBS AG</b>						
2,421,233	2,395,847	—	8/21/18	1 month USD-LIBOR-BBA plus 0.25% — Monthly	MSCI Emerging Markets TR Net USD — Monthly	26,331
12,261	12,132	—	8/21/18	1 month USD-LIBOR-BBA plus 0.25% — Monthly	MSCI Emerging Markets TR Net USD — Monthly	133
<b>Upfront premium received</b>		—		<b>Unrealized appreciation</b>		<b>1,094,368</b>
<b>Upfront premium (paid)</b>		—		<b>Unrealized (depreciation)</b>		<b>(1,526,012)</b>
<b>Total</b>		<b>\$—</b>		<b>Total</b>		<b>\$(431,644)</b>

\* The 50 largest components, and any individual component greater than 1% of basket value, are shown below.

**ABASKET (MLFCF14) OF COMMON STOCKS**

Common stocks	Sector	Shares	Value	Percentage value
Alphabet, Inc. Class A	Information Technology	447	\$504,747	4.13%
JPMorgan Chase & Co.	Financials	3,309	344,843	2.82%
Verizon Communications, Inc.	Telecommunication Services	5,300	266,623	2.18%
Citigroup, Inc.	Financials	3,984	266,580	2.18%
Cisco Systems, Inc.	Information Technology	6,124	263,510	2.16%
Boeing Co. (The)	Industrials	769	257,902	2.11%
Apple, Inc.	Information Technology	1,360	251,693	2.06%
Home Depot, Inc. (The)	Consumer Discretionary	1,271	247,964	2.03%
NVIDIA Corp.	Information Technology	1,002	237,492	1.94%
Amazon.com, Inc.	Consumer Discretionary	115	195,930	1.60%
Microsoft Corp.	Information Technology	1,802	177,738	1.46%
PepsiCo, Inc.	Consumer Staples	1,582	172,250	1.41%
Facebook, Inc. Class A	Information Technology	872	169,487	1.39%
Valero Energy Corp.	Energy	1,459	161,649	1.32%



**ABASKET (MLFCF14) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Oracle Corp.	Information Technology	3,623	\$159,636	1.31%
Johnson & Johnson	Health Care	1,167	141,656	1.16%
Coca-Cola Co. (The)	Consumer Staples	3,131	137,327	1.12%
ConocoPhillips	Energy	1,818	126,542	1.04%
Occidental Petroleum Corp.	Energy	1,458	122,010	1.00%
Anthem, Inc.	Health Care	497	118,398	0.97%
Walt Disney Co. (The)	Consumer Discretionary	1,071	112,286	0.92%
Merck & Co., Inc.	Health Care	1,794	108,871	0.89%
Intuit, Inc.	Information Technology	517	105,707	0.87%
Northrop Grumman Corp.	Industrials	342	105,192	0.86%
Halliburton Co.	Energy	2,310	104,071	0.85%
Bristol-Myers Squibb Co.	Health Care	1,821	100,763	0.83%
Morgan Stanley	Financials	2,111	100,038	0.82%
Amgen, Inc.	Health Care	538	99,222	0.81%
IBM Corp.	Information Technology	703	98,166	0.80%
Eli Lilly & Co.	Health Care	1,141	97,372	0.80%
Honeywell International, Inc.	Industrials	645	92,932	0.76%
Mondelez International, Inc. Class A	Consumer Staples	2,248	92,171	0.75%
Ford Motor Co.	Consumer Discretionary	8,144	90,158	0.74%
Delta Air Lines, Inc.	Industrials	1,739	86,160	0.71%
E*Trade Financial Corp.	Financials	1,344	82,209	0.67%
Walgreens Boots Alliance, Inc.	Consumer Staples	1,314	78,845	0.65%
Sysco Corp.	Consumer Staples	1,154	78,791	0.65%
Ross Stores, Inc.	Consumer Discretionary	910	77,142	0.63%
NetApp, Inc.	Information Technology	980	76,993	0.63%
Humana, Inc.	Health Care	258	76,883	0.63%
Cigna Corp.	Health Care	451	76,685	0.63%
Cognizant Technology Solutions Corp. Class A	Information Technology	914	72,189	0.59%
Automatic Data Processing, Inc.	Information Technology	525	70,374	0.58%
Palo Alto Networks, Inc.	Information Technology	341	70,138	0.57%
Kinder Morgan, Inc.	Energy	3,955	69,887	0.57%
Regions Financial Corp.	Financials	3,927	69,830	0.57%
Lockheed Martin Corp.	Industrials	236	69,732	0.57%
McKesson Corp.	Health Care	519	69,236	0.57%
Williams Cos., Inc. (The)	Energy	2,536	68,743	0.56%
U.S. Bancorp	Financials	1,367	68,387	0.56%

**ABASKET (CGPUTQL2) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
JPMorgan Chase & Co.	Financials	2,796	\$291,316	2.72%
Alphabet, Inc. Class A	Information Technology	237	267,261	2.49%
Apple, Inc.	Information Technology	1,231	227,791	2.13%
Intuit, Inc.	Information Technology	1,093	223,307	2.08%
Texas Instruments, Inc.	Information Technology	1,843	203,169	1.90%
McDonald's Corp.	Consumer Discretionary	1,278	200,186	1.87%
Occidental Petroleum Corp.	Energy	2,390	200,020	1.87%
American Express Co.	Financials	2,007	196,702	1.84%
Humana, Inc.	Health Care	656	195,328	1.82%
Danaher Corp.	Health Care	1,911	188,616	1.76%
Raytheon Co.	Industrials	968	187,078	1.75%
Cognizant Technology Solutions Corp. Class A	Information Technology	2,349	185,563	1.73%
Northrop Grumman Corp.	Industrials	594	182,689	1.70%
Constellation Brands, Inc. Class A	Consumer Staples	831	181,809	1.70%
TJX Cos., Inc. (The)	Consumer Discretionary	1,910	181,750	1.70%
Exxon Mobil Corp.	Energy	2,172	179,678	1.68%
eBay, Inc.	Information Technology	4,748	172,152	1.61%

**ABASKET (CGPUTQL2) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
PNC Financial Services Group, Inc. (The)	Financials	1,274	\$172,096	1.61%
Pfizer, Inc.	Health Care	4,550	165,075	1.54%
Lowe's Cos., Inc.	Consumer Discretionary	1,701	162,554	1.52%
American Electric Power Co., Inc.	Utilities	2,318	160,521	1.50%
Honeywell International, Inc.	Industrials	1,050	151,219	1.41%
Baxter International, Inc.	Health Care	1,899	140,246	1.31%
Kimberly-Clark Corp.	Consumer Staples	1,286	135,435	1.26%
Johnson & Johnson	Health Care	1,079	130,972	1.22%
Norfolk Southern Corp.	Industrials	851	128,378	1.20%
Microsoft Corp.	Information Technology	1,297	127,939	1.19%
Duke Energy Corp.	Utilities	1,567	123,888	1.16%
NetApp, Inc.	Information Technology	1,553	121,994	1.14%
Facebook, Inc. Class A	Information Technology	627	121,845	1.14%
F5 Networks, Inc.	Information Technology	692	119,418	1.11%
Walt Disney Co. (The)	Consumer Discretionary	1,136	119,114	1.11%
Allstate Corp. (The)	Financials	1,295	118,172	1.10%
Fidelity National Information Services, Inc.	Information Technology	1,113	117,959	1.10%
Marathon Petroleum Corp.	Energy	1,634	114,659	1.07%
HP, Inc.	Information Technology	4,914	111,490	1.04%
Verizon Communications, Inc.	Telecommunication Services	2,161	108,742	1.01%
Sysco Corp.	Consumer Staples	1,571	107,288	1.00%
General Dynamics Corp.	Industrials	525	97,808	0.91%
Ross Stores, Inc.	Consumer Discretionary	1,111	94,151	0.88%
Kinder Morgan, Inc.	Energy	5,315	93,915	0.88%
Red Hat, Inc.	Information Technology	680	91,381	0.85%
Valero Energy Corp.	Energy	816	90,478	0.84%
Applied Materials, Inc.	Information Technology	1,874	86,574	0.81%
Harris Corp.	Industrials	597	86,341	0.81%
Exelon Corp.	Utilities	1,983	84,458	0.79%
UnitedHealth Group, Inc.	Health Care	342	83,850	0.78%
Merck & Co., Inc.	Health Care	1,376	83,537	0.78%
Waste Management, Inc.	Industrials	1,024	83,328	0.78%
Fiserv, Inc.	Information Technology	1,119	82,929	0.77%

**ABASKET (GSCBPUR1) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Becton Dickinson and Co.	Health Care	725	\$173,707	2.16%
Kraft Heinz Co. (The)	Consumer Staples	2,562	160,931	2.00%
Danaher Corp.	Health Care	1,603	158,218	1.96%
Bank of America Corp.	Financials	5,254	148,119	1.84%
SunTrust Banks, Inc.	Financials	2,358	155,670	1.93%
Boston Scientific Corp.	Health Care	4,611	150,792	1.87%
BlackRock, Inc.	Financials	299	148,980	1.85%
Invesco, Ltd.	Financials	5,055	134,260	1.67%
PepsiCo, Inc.	Consumer Staples	1,222	133,056	1.65%
Visa, Inc. Class A	Information Technology	1,041	137,910	1.71%
Intuitive Surgical, Inc.	Health Care	274	131,045	1.63%
Honeywell International, Inc.	Industrials	848	122,181	1.52%
Molson Coors Brewing Co. Class B	Consumer Staples	1,651	112,338	1.39%
Jazz Pharmaceuticals PLC	Health Care	604	104,154	1.29%
Raytheon Co.	Industrials	569	109,889	1.36%
Intercontinental Exchange, Inc.	Financials	1,387	102,034	1.27%
Amazon.com, Inc.	Consumer Discretionary	62	105,398	1.31%
McCormick & Co., Inc. (non-voting shares)	Consumer Staples	906	105,195	1.31%
Dr. Pepper Snapple Group, Inc.	Consumer Staples	786	95,878	1.19%
Bio-Rad Laboratories, Inc. Class A	Health Care	326	94,100	1.17%

**ABASKET (GSCBPUR1) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Fortive Corp.	Industrials	1,195	\$92,135	1.14%
Roper Technologies, Inc.	Industrials	289	79,741	0.99%
Alphabet, Inc. Class C	Information Technology	66	73,188	0.91%
O'Reilly Automotive, Inc.	Consumer Discretionary	250	68,273	0.85%
TJX Cos., Inc. (The)	Consumer Discretionary	710	67,540	0.84%
Assured Guaranty, Ltd.	Financials	1,853	66,193	0.82%
DowDuPont, Inc.	Materials	1,065	70,237	0.87%
NRG Energy, Inc.	Utilities	2,286	70,192	0.87%
Costco Wholesale Corp.	Consumer Staples	335	69,931	0.87%
Pinnacle Foods, Inc.	Consumer Staples	991	64,448	0.80%
Northrop Grumman Corp.	Industrials	223	68,706	0.85%
Vertex Pharmaceuticals, Inc.	Health Care	400	67,921	0.84%
Dentsply Sirona, Inc.	Health Care	1,406	61,552	0.76%
KKR & Co., Inc.	Financials	2,624	65,201	0.81%
Burlington Stores, Inc.	Consumer Discretionary	427	64,347	0.80%
Fortune Brands Home & Security, Inc.	Industrials	1,077	57,845	0.72%
Ares Capital Corp.	Financials	3,365	55,362	0.69%
Norfolk Southern Corp.	Industrials	358	54,069	0.67%
ON Semiconductor Corp.	Information Technology	2,354	52,333	0.65%
American Financial Group, Inc.	Financials	523	56,163	0.70%
Mastercard, Inc. Class A	Information Technology	281	55,293	0.69%
Investors Bancorp, Inc.	Financials	4,074	52,102	0.65%
Kimberly-Clark Corp.	Consumer Staples	451	47,530	0.59%
Chevron Corp.	Energy	369	46,622	0.58%
AMETEK, Inc.	Industrials	695	50,131	0.62%
Agilent Technologies, Inc.	Health Care	753	46,560	0.58%
Hartford Financial Services Group, Inc. (The)	Financials	898	45,937	0.57%
Texas Instruments, Inc.	Information Technology	435	48,001	0.60%
Anadarko Petroleum Corp.	Energy	594	43,523	0.54%
Suncor Energy, Inc. (Canada)	Energy	1,069	43,500	0.54%

**ABASKET (GSGLPWDL) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Amgen, Inc.	Health Care	371	\$68,471	0.76%
Exelon Corp.	Utilities	1,590	67,727	0.76%
CA, Inc.	Information Technology	1,812	64,597	0.72%
NextEra Energy, Inc.	Utilities	386	64,519	0.72%
Repsol SA (Spain)	Energy	3,256	63,756	0.71%
Amphenol Corp. Class A	Information Technology	728	63,410	0.71%
Citrix Systems, Inc.	Information Technology	602	63,144	0.71%
Toronto-Dominion Bank (Canada)	Financials	1,090	63,109	0.71%
Bank of Montreal (Canada)	Financials	813	62,857	0.70%
National Bank of Canada (Canada)	Financials	1,300	62,439	0.70%
Swiss Life Holding AG (Switzerland)	Financials	179	62,304	0.70%
Eni SpA (Italy)	Energy	3,321	61,695	0.69%
Canadian Imperial Bank of Commerce (Canada)	Financials	705	61,351	0.69%
Royal Bank of Canada (Canada)	Financials	814	61,260	0.68%
Valero Energy Corp.	Energy	552	61,131	0.68%
Sun Life Financial, Inc. (Canada)	Financials	1,489	59,822	0.67%
Manulife Financial Corp. (Canada)	Financials	3,307	59,410	0.66%
Allianz SE (Germany)	Financials	285	59,005	0.66%
Bank of Nova Scotia (The) (Canada)	Financials	1,021	57,813	0.65%
Rio Tinto PLC (United Kingdom)	Materials	1,041	57,703	0.64%
AGNC Investment Corp. <sup>R</sup>	Financials	3,099	57,604	0.64%
Pfizer, Inc.	Health Care	1,582	57,387	0.64%
Honeywell International, Inc.	Industrials	389	56,055	0.63%

**ABASKET (GSGLPWDL) OF COMMON STOCKS cont.**

Common stocks	Sector	Shares	Value	Percentage value
Chevron Corp.	Energy	440	\$55,632	0.62%
Royal Dutch Shell PLC Class A (United Kingdom)	Energy	1,589	55,121	0.62%
Phillips 66	Energy	490	54,997	0.61%
Ageas (Belgium)	Financials	1,081	54,559	0.61%
Muenchener Rueckversicherungs-Gesellschaft AG in Muenchen (Germany)	Financials	254	53,695	0.60%
Avery Dennison Corp.	Materials	517	52,763	0.59%
NTT DoCoMo, Inc. (Japan)	Telecommunication Services	2,042	52,068	0.58%
UGI Corp.	Utilities	1,000	52,059	0.58%
Cheung Kong Property Holdings, Ltd. (Hong Kong)	Real Estate	6,484	51,487	0.58%
Danaher Corp.	Health Care	512	50,513	0.56%
NN Group NV (Netherlands)	Financials	1,222	49,737	0.56%
ANSYS, Inc.	Information Technology	282	49,092	0.55%
Procter & Gamble Co. (The)	Consumer Staples	625	48,776	0.54%
AMETEK, Inc.	Industrials	674	48,664	0.54%
Enagas SA (Spain)	Energy	1,649	48,217	0.54%
WEC Energy Group, Inc.	Utilities	744	48,088	0.54%
Persimmon PLC (United Kingdom)	Consumer Discretionary	1,429	47,757	0.53%
TOTAL SA (France)	Energy	762	46,485	0.52%
CGI Group, Inc. Class A (Canada)	Information Technology	720	45,617	0.51%
Church & Dwight Co., Inc.	Consumer Staples	854	45,424	0.51%
Eaton Corp. PLC	Industrials	601	44,938	0.50%
Robert Half International, Inc.	Industrials	688	44,790	0.50%
Waste Management, Inc.	Industrials	550	44,758	0.50%
Boliden AB (Sweden)	Materials	1,363	44,223	0.49%
Sun Hung Kai Properties, Ltd. (Hong Kong)	Real Estate	2,872	43,337	0.48%
Walt Disney Co. (The)	Consumer Discretionary	412	43,148	0.48%
HeidelbergCement AG (Germany)	Materials	507	42,674	0.48%

**ABASKET (GSGLPWDS) OF COMMON STOCKS**

Common stocks	Sector	Shares	Value	Percentage value
Vornado Realty Trust <sup>R</sup>	Real Estate	890	\$65,760	0.78%
Anheuser-Busch InBev SA/NV (Belgium)	Consumer Staples	640	64,651	0.76%
Nestle SA (Switzerland)	Consumer Staples	780	60,571	0.71%
U.S. Bancorp	Financials	1,172	58,608	0.69%
Novartis AG (Switzerland)	Health Care	762	57,950	0.68%
Danone SA (France)	Consumer Staples	787	57,762	0.68%
Mitsubishi Estate Co., Ltd. (Japan)	Real Estate	3,188	55,773	0.66%
Huntington Bancshares, Inc.	Financials	3,707	54,722	0.65%
Telefonica SA (Spain)	Telecommunication Services	6,338	53,876	0.64%
Brookfield Asset Management, Inc. (Canada)	Financials	1,321	53,572	0.63%
JPMorgan Chase & Co.	Financials	513	53,502	0.63%
Nordea Bank AB (Sweden)	Financials	5,428	52,289	0.62%
AstraZeneca PLC (United Kingdom)	Health Care	752	52,136	0.61%
Melrose Industries PLC (United Kingdom)	Industrials	18,522	51,994	0.61%
Cincinnati Financial Corp.	Financials	776	51,906	0.61%
Unilever NV ADR (Netherlands)	Consumer Staples	928	51,761	0.61%
Prudential PLC (United Kingdom)	Financials	2,260	51,743	0.61%
DowDuPont, Inc.	Materials	738	48,651	0.57%
Svenska Handelsbanken AB (Sweden)	Financials	4,336	48,198	0.57%
Kraft Heinz Co. (The)	Consumer Staples	761	47,833	0.56%
Boston Properties, Inc. <sup>R</sup>	Real Estate	370	46,367	0.55%
Daimler AG (Registered Shares) (Germany)	Consumer Discretionary	719	46,274	0.55%
LafargeHolcim, Ltd. (Switzerland)	Materials	939	45,893	0.54%
Camden Property Trust <sup>R</sup>	Real Estate	503	45,870	0.54%
Aeon Co., Ltd. (Japan)	Consumer Staples	2,120	45,371	0.53%

**ABASKET (GSGLPWDS) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Ferrovial SA (Spain)	Industrials	2,198	\$45,106	0.53%
Willis Towers Watson PLC	Financials	293	44,462	0.52%
salesforce.com, Inc.	Information Technology	319	43,541	0.51%
ABB, Ltd. (Switzerland)	Industrials	1,954	42,827	0.50%
TransCanada Corp. (Canada)	Energy	989	42,773	0.50%
Southern Co. (The)	Utilities	918	42,518	0.50%
Invitation Homes, Inc. <sup>R</sup>	Real Estate	1,817	41,893	0.49%
AvalonBay Communities, Inc. <sup>R</sup>	Real Estate	239	41,166	0.49%
Microsoft Corp.	Information Technology	413	40,680	0.48%
Akzo Nobel NV (Netherlands)	Materials	475	40,656	0.48%
NiSource, Inc.	Utilities	1,544	40,569	0.48%
Johnson Controls International PLC	Industrials	1,209	40,440	0.48%
BlackRock, Inc.	Financials	81	40,200	0.47%
Continental AG (Germany)	Consumer Discretionary	175	40,074	0.47%
Sumitomo Realty & Development Co., Ltd. (Japan)	Real Estate	1,077	39,766	0.47%
American Tower Corp. <sup>R</sup>	Real Estate	272	39,272	0.46%
Panasonic Corp. (Japan)	Consumer Discretionary	2,902	39,147	0.46%
Simon Property Group, Inc. <sup>R</sup>	Real Estate	226	38,386	0.45%
SoftBank Corp. (Japan)	Telecommunication Services	532	38,293	0.45%
Deere & Co.	Industrials	274	38,250	0.45%
Nutrien, Ltd. (Canada)	Materials	698	37,983	0.45%
Berkshire Hathaway, Inc. Class B	Financials	203	37,897	0.45%
Pembina Pipeline Corp. (Canada)	Energy	1,094	37,876	0.45%
Reckitt Benckiser Group PLC (United Kingdom)	Consumer Staples	458	37,752	0.45%
American Airlines Group, Inc.	Industrials	982	37,280	0.44%

**ABASKET (GSGLPW2S) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
UBS Group AG (Switzerland)	Financials	5,975	\$92,210	1.02%
Telefonica SA (Spain)	Telecommunication Services	10,783	91,644	1.02%
AstraZeneca PLC (United Kingdom)	Health Care	1,321	91,604	1.02%
Air Liquide SA (France)	Materials	727	91,446	1.02%
HSBC Holdings PLC (United Kingdom)	Financials	9,659	90,634	1.01%
Credit Suisse Group AG (Switzerland)	Financials	6,019	90,621	1.01%
Akzo Nobel NV (Netherlands)	Materials	1,052	90,041	1.00%
Investor AB Class B (Sweden)	Financials	2,195	89,546	0.99%
Singapore Telecommunications, Ltd. (Singapore)	Telecommunication Services	39,272	88,711	0.99%
Nordea Bank AB (Sweden)	Financials	9,041	87,192	0.97%
Givaudan SA (Switzerland)	Materials	38	85,397	0.95%
Melrose Industries PLC (United Kingdom)	Industrials	29,543	82,961	0.92%
Nippon Steel & Sumitomo Metal Corp. (Japan)	Materials	4,134	81,191	0.90%
Royal Dutch Shell PLC Class A (United Kingdom)	Energy	2,175	75,483	0.84%
Royal Bank of Scotland Group PLC (United Kingdom)	Financials	22,009	74,414	0.83%
Assicurazioni Generali SpA (Italy)	Financials	4,306	72,251	0.80%
Danone SA (France)	Consumer Staples	983	72,135	0.80%
Svenska Handelsbanken AB (Sweden)	Financials	6,262	69,692	0.77%
Aeon Co., Ltd. (Japan)	Consumer Staples	3,150	67,391	0.75%
Nissan Motor Co., Ltd. (Japan)	Consumer Discretionary	6,888	67,040	0.74%
Anheuser-Busch InBev SA/NV (Belgium)	Consumer Staples	661	66,760	0.74%
Transurban Group (Units) (Australia)	Industrials	7,477	66,131	0.73%
RSA Insurance Group PLC (United Kingdom)	Financials	7,158	64,205	0.71%
QBE Insurance Group, Ltd. (Australia)	Financials	8,903	64,070	0.71%
ASML Holding NV (Netherlands)	Information Technology	321	63,625	0.71%
Credit Agricole SA (France)	Financials	4,755	63,484	0.71%
Samsung Engineering Co., Ltd. (South Korea)	Industrials	4,436	62,289	0.69%
Iberdrola SA (Spain)	Utilities	8,025	62,065	0.69%

**ABASKET (GSGLPW2S) OF COMMON STOCKS cont.**

Common stocks	Sector	Shares	Value	Percentage value
Galenica AG (Switzerland)	Health Care	387	\$61,866	0.69%
Toray Industries, Inc. (Japan)	Materials	7,831	61,788	0.69%
Siemens AG (Germany)	Industrials	465	61,500	0.68%
LafargeHolcim, Ltd. (Switzerland)	Materials	1,245	60,665	0.67%
Standard Chartered PLC (United Kingdom)	Financials	6,549	59,884	0.67%
Deutsche Wohnen AG (Germany)	Real Estate	1,225	59,210	0.66%
Mitsubishi Estate Co., Ltd. (Japan)	Real Estate	3,381	59,119	0.66%
SAP AG (Germany)	Information Technology	510	58,911	0.65%
Ferrovial SA (Spain)	Industrials	2,864	58,759	0.65%
Prudential PLC (United Kingdom)	Financials	2,565	58,742	0.65%
Compagnie Financiere Richemont SA (Switzerland)	Consumer Discretionary	693	58,688	0.65%
Essilor International CIE Generale D'Optique SA (France)	Health Care	413	58,268	0.65%
Vivendi SA (France)	Consumer Discretionary	2,364	57,952	0.64%
Solvay SA (Belgium)	Materials	455	57,396	0.64%
Alstom SA (France)	Industrials	1,232	56,625	0.63%
Origin Energy, Ltd. (Australia)	Energy	7,606	56,366	0.63%
Unilever PLC (United Kingdom)	Consumer Staples	1,018	56,334	0.63%
Secom Co., Ltd. (Japan)	Industrials	730	56,078	0.62%
JGC Corp. (Japan)	Industrials	2,770	55,835	0.62%
AlA Group, Ltd. (Hong Kong)	Financials	6,295	55,040	0.61%
Henkel AG & Co. KGaA (Preference) (Germany)	Consumer Staples	430	55,005	0.61%
Accor SA (France)	Consumer Discretionary	1,120	54,949	0.61%

**ABASKET (GSGLPW2L) OF COMMON STOCKS**

Common stocks	Sector	Shares	Value	Percentage value
Roche Holding AG (Switzerland)	Health Care	445	\$98,910	1.10%
Eni SpA (Italy)	Energy	5,180	96,206	1.07%
Sandvik AB (Sweden)	Industrials	5,270	93,657	1.04%
Aviva PLC (United Kingdom)	Financials	13,836	92,064	1.03%
Covestro AG (Germany)	Materials	1,030	91,876	1.02%
Aena SME SA (Spain)	Industrials	504	91,442	1.02%
Central Japan Railway Co. (Japan)	Industrials	441	91,395	1.02%
Legal & General Group PLC (United Kingdom)	Financials	25,985	91,257	1.02%
BASF SE (Germany)	Materials	928	88,712	0.99%
Rio Tinto PLC (United Kingdom)	Materials	1,599	88,661	0.99%
Peugeot SA (France)	Consumer Discretionary	3,882	88,656	0.99%
Hitachi, Ltd. (Japan)	Information Technology	12,537	88,463	0.99%
Equinor ASA (Norway)	Energy	3,269	86,796	0.97%
ABB, Ltd. (Switzerland)	Industrials	3,963	86,653	0.97%
Woolworths Group, Ltd. (Australia)	Consumer Staples	3,792	85,499	0.95%
Swedbank AB Class A (Sweden)	Financials	3,863	82,824	0.92%
Allianz SE (Germany)	Financials	388	80,093	0.89%
TOTAL SA (France)	Energy	1,302	79,350	0.88%
ORIX Corp. (Japan)	Financials	5,014	79,315	0.88%
Daiwa Securities Group, Inc. (Japan)	Financials	13,477	78,269	0.87%
Taisei Corp. (Japan)	Industrials	1,377	75,949	0.85%
Cheung Kong Property Holdings, Ltd. (Hong Kong)	Real Estate	9,468	75,183	0.84%
Swisscom AG (Switzerland)	Telecommunication Services	167	74,702	0.83%
Boliden AB (Sweden)	Materials	2,279	74,038	0.83%
Marubeni Corp. (Japan)	Industrials	9,467	72,233	0.81%
West Japan Railway Co. (Japan)	Industrials	940	69,256	0.77%
Partners Group Holding AG (Switzerland)	Financials	93	68,232	0.76%
Persimmon PLC (United Kingdom)	Consumer Discretionary	2,003	66,974	0.75%
Nomura Holdings, Inc. (Japan)	Financials	13,296	64,602	0.72%
Asahi Kasei Corp. (Japan)	Materials	5,029	63,932	0.71%
Koninklijke Ahold Delhaize NV (Netherlands)	Consumer Staples	2,663	63,749	0.71%



**ABASKET (GSGLPW2L) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Fresenius Medical Care AG & Co., KGaA (Germany)	Health Care	630	\$63,500	0.71%
Shionogi & Co., Ltd. (Japan)	Health Care	1,229	63,123	0.70%
SKF AB Class B (Sweden)	Industrials	3,379	62,968	0.70%
Endesa SA (Spain)	Utilities	2,849	62,847	0.70%
Taylor Wimpey PLC (United Kingdom)	Consumer Discretionary	26,229	61,950	0.69%
Astellas Pharma, Inc. (Japan)	Health Care	4,050	61,759	0.69%
Aegon NV (Netherlands)	Financials	10,245	61,432	0.68%
Pearson PLC (United Kingdom)	Consumer Discretionary	5,216	60,949	0.68%
Hermes International (France)	Consumer Discretionary	99	60,285	0.67%
Lloyds Banking Group PLC (United Kingdom)	Financials	72,066	59,989	0.67%
Compagnie Generale des Etablissements Michelin SCA (France)	Consumer Discretionary	492	59,927	0.67%
Tokyo Gas Co., Ltd. (Japan)	Utilities	2,248	59,689	0.67%
KDDI Corp. (Japan)	Telecommunication Services	2,174	59,498	0.66%
Resona Holdings, Inc. (Japan)	Financials	10,964	58,657	0.65%
ACS Actividades de Construccion y Servicios SA (Spain)	Industrials	1,436	58,181	0.65%
Volvo AB (Sweden)	Industrials	3,589	57,443	0.64%
ABN AMRO Group NV GDR (Netherlands)	Financials	2,184	56,664	0.63%
Mitsui & Co., Ltd. (Japan)	Industrials	3,327	55,484	0.62%
ArcelorMittal SA (France)	Materials	1,891	55,453	0.62%

**ABASKET (JPCMPTSH) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Medtronic PLC	Health Care	2,022	\$173,083	2.15%
CME Group, Inc.	Financials	991	162,519	2.02%
Thermo Fisher Scientific, Inc.	Health Care	765	158,424	1.97%
Netflix, Inc.	Consumer Discretionary	390	152,517	1.90%
Estee Lauder Cos., Inc. (The) Class A	Consumer Staples	1,049	149,723	1.86%
3M Co.	Industrials	739	145,379	1.81%
U.S. Bancorp	Financials	2,353	117,704	1.46%
Abbott Laboratories	Health Care	1,826	111,339	1.38%
Fiserv, Inc.	Information Technology	1,493	110,642	1.38%
Hill-Rom Holdings, Inc.	Health Care	1,219	106,481	1.32%
T Rowe Price Group, Inc.	Financials	903	104,802	1.30%
Exxon Mobil Corp.	Energy	1,229	101,639	1.26%
General Electric Co.	Industrials	7,331	99,780	1.24%
Franklin Resources, Inc.	Financials	3,049	97,716	1.22%
Kohl's Corp.	Consumer Discretionary	1,239	90,343	1.12%
Kellogg Co.	Consumer Staples	1,236	86,394	1.07%
Target Corp.	Consumer Discretionary	1,133	86,274	1.07%
Stryker Corp.	Health Care	496	83,690	1.04%
STERIS PLC (United Kingdom)	Health Care	793	83,247	1.04%
NVIDIA Corp.	Information Technology	350	82,959	1.03%
WestRock Co.	Materials	1,428	81,438	1.01%
Xcel Energy, Inc.	Utilities	1,779	81,244	1.01%
Clorox Co. (The)	Consumer Staples	582	78,648	0.98%
WEC Energy Group, Inc.	Utilities	1,122	72,562	0.90%
Coca-Cola Co. (The)	Consumer Staples	1,648	72,285	0.90%
Travelers Cos., Inc. (The)	Financials	590	72,136	0.90%
Aflac, Inc.	Financials	1,613	69,412	0.86%
Baker Hughes a GE Co.	Energy	2,051	67,746	0.84%
Intel Corp.	Information Technology	1,283	63,768	0.79%
Duke Energy Corp.	Utilities	804	63,604	0.79%
Lockheed Martin Corp.	Industrials	215	63,543	0.79%
PerkinElmer, Inc.	Health Care	858	62,809	0.78%
Textron, Inc.	Industrials	949	62,543	0.78%

**ABASKET (JPCMPTSH) OF COMMON STOCKS cont.**

Common stocks	Sector	Shares	Value	Percentage value
Progressive Corp. (The)	Financials	1,046	\$61,849	0.77%
Commerce Bancshares, Inc./MO	Financials	948	61,367	0.76%
Advanced Micro Devices, Inc.	Information Technology	4,082	61,192	0.76%
Invitation Homes, Inc.*	Real Estate	2,644	60,964	0.76%
Consolidated Edison, Inc.	Utilities	761	59,322	0.74%
Dominion Energy, Inc.	Utilities	854	58,196	0.72%
Seattle Genetics, Inc.	Health Care	857	56,920	0.71%
IBM Corp.	Information Technology	386	53,961	0.67%
Altria Group, Inc.	Consumer Staples	948	53,824	0.67%
Brown-Forman Corp. Class B	Consumer Staples	1,012	49,589	0.62%
United Parcel Service, Inc. Class B	Industrials	464	49,251	0.61%
FedEx Corp.	Industrials	211	47,977	0.60%
Home Depot, Inc. (The)	Consumer Discretionary	243	47,436	0.59%
Ecolab, Inc.	Materials	337	47,300	0.59%
Bank of New York Mellon Corp. (The)	Financials	874	47,129	0.59%
IDEXX Laboratories, Inc.	Health Care	215	46,921	0.58%
Tapestry, Inc.	Consumer Discretionary	975	45,550	0.57%

**OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/18 (Unaudited)**

Swap counterparty/ Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>							
CMBX NA BBB-.6 Index	BBB-/P	\$68	\$1,000	\$104	5/11/63	300 bp — Monthly	\$(35)
CMBX NA BBB-.6 Index	BBB-/P	121	2,000	207	5/11/63	300 bp — Monthly	(86)
CMBX NA BBB-.6 Index	BBB-/P	247	4,000	415	5/11/63	300 bp — Monthly	(166)
CMBX NA BBB-.6 Index	BBB-/P	228	4,000	415	5/11/63	300 bp — Monthly	(185)
<b>Barclays Bank PLC</b>							
CMBX NA BBB-.6 Index	BBB-/P	887	8,000	830	5/11/63	300 bp — Monthly	61
CMBX NA BBB-.7 Index	BBB-/P	141	25,000	1,770	1/17/47	300 bp — Monthly	(1,617)
<b>Citigroup Global Markets, Inc.</b>							
CMBX NA BBB-.6 Index	BBB-/P	815	6,000	622	5/11/63	300 bp — Monthly	196
CMBX NA BBB-.6 Index	BBB-/P	1,387	13,000	1,348	5/11/63	300 bp — Monthly	45
CMBX NA BBB-.6 Index	BBB-/P	13,423	95,000	9,852	5/11/63	300 bp — Monthly	3,619
<b>Credit Suisse International</b>							
CMBX NA A.6 Index	A/P	449	9,000	48	5/11/63	200 bp — Monthly	404
CMBX NA A.6 Index	A/P	2,233	44,000	233	5/11/63	200 bp — Monthly	2,014
CMBX NA BBB-.6 Index	BBB-/P	760	6,000	622	5/11/63	300 bp — Monthly	141
CMBX NA BBB-.6 Index	BBB-/P	802	7,000	726	5/11/63	300 bp — Monthly	80
CMBX NA BBB-.6 Index	BBB-/P	2,065	18,000	1,867	5/11/63	300 bp — Monthly	207
CMBX NA BBB-.6 Index	BBB-/P	3,807	35,000	3,630	5/11/63	300 bp — Monthly	195
CMBX NA BBB-.6 Index	BBB-/P	24,378	228,000	23,644	5/11/63	300 bp — Monthly	848
CMBX NA BBB-.7 Index	BBB-/P	3,952	50,000	3,540	1/17/47	300 bp — Monthly	437
CMBX NA BBB-.7 Index	BBB-/P	15,818	214,000	15,151	1/17/47	300 bp — Monthly	774
<b>Goldman Sachs International</b>							
CMBX NA A.6 Index	A/P	309	6,000	32	5/11/63	200 bp — Monthly	279
CMBX NA A.6 Index	A/P	419	8,000	42	5/11/63	200 bp — Monthly	379
CMBX NA A.6 Index	A/P	1,476	29,000	154	5/11/63	200 bp — Monthly	1,332
CMBX NA A.6 Index	A/P	3,977	62,000	329	5/11/63	200 bp — Monthly	3,669
CMBX NA A.7 Index	A-/P	353	7,000	28	1/17/47	200 bp — Monthly	383
CMBX NA BBB-.6 Index	BBB-/P	260	3,000	311	5/11/63	300 bp — Monthly	(50)
CMBX NA BBB-.6 Index	BBB-/P	259	3,000	311	5/11/63	300 bp — Monthly	(51)
CMBX NA BBB-.6 Index	BBB-/P	422	5,000	519	5/11/63	300 bp — Monthly	(94)
CMBX NA BBB-.6 Index	BBB-/P	661	6,000	622	5/11/63	300 bp — Monthly	42
CMBX NA BBB-.6 Index	BBB-/P	365	7,000	726	5/11/63	300 bp — Monthly	(357)
CMBX NA BBB-.6 Index	BBB-/P	591	7,000	726	5/11/63	300 bp — Monthly	(132)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/18 (Unaudited) cont.

Swap counterparty/ Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
<b>Goldman Sachs International cont.</b>							
CMBX NA BBB-.6 Index	BBB-/P	\$633	\$8,000	\$830	5/11/63	300 bp — Monthly	\$(193)
CMBX NA BBB-.6 Index	BBB-/P	435	9,000	933	5/11/63	300 bp — Monthly	(493)
CMBX NA BBB-.6 Index	BBB-/P	990	9,000	933	5/11/63	300 bp — Monthly	62
CMBX NA BBB-.6 Index	BBB-/P	1,218	10,000	1,037	5/11/63	300 bp — Monthly	186
CMBX NA BBB-.6 Index	BBB-/P	1,160	14,000	1,452	5/11/63	300 bp — Monthly	(285)
CMBX NA BBB-.6 Index	BBB-/P	1,671	15,000	1,556	5/11/63	300 bp — Monthly	123
CMBX NA BBB-.6 Index	BBB-/P	1,090	16,000	1,659	5/11/63	300 bp — Monthly	(561)
CMBX NA BBB-.6 Index	BBB-/P	2,221	16,000	1,659	5/11/63	300 bp — Monthly	570
CMBX NA BBB-.6 Index	BBB-/P	878	18,000	1,867	5/11/63	300 bp — Monthly	(980)
CMBX NA BBB-.6 Index	BBB-/P	2,923	27,000	2,800	5/11/63	300 bp — Monthly	137
CMBX NA BBB-.6 Index	BBB-/P	3,376	36,000	3,733	5/11/63	300 bp — Monthly	(339)
CMBX NA BBB-.6 Index	BBB-/P	4,360	58,000	6,015	5/11/63	300 bp — Monthly	(1,626)
CMBX NA BBB-.7 Index	BBB-/P	695	8,000	566	1/17/47	300 bp — Monthly	133
CMBX NA BBB-.7 Index	BBB-/P	1,448	17,000	1,204	1/17/47	300 bp — Monthly	253
CMBX NA BBB-.7 Index	BBB-/P	1,478	20,000	1,416	1/17/47	300 bp — Monthly	72
<b>JPMorgan Securities LLC</b>							
CMBX NA BBB-.6 Index	BBB-/P	1,189	8,000	830	5/11/63	300 bp — Monthly	364
CMBX NA A.6 Index	A/P	145	3,000	16	5/11/63	200 bp — Monthly	130
CMBX NA A.6 Index	A/P	253	5,000	27	5/11/63	200 bp — Monthly	228
CMBX NA A.6 Index	A/P	307	6,000	32	5/11/63	200 bp — Monthly	278
CMBX NA A.6 Index	A/P	501	11,000	58	5/11/63	200 bp — Monthly	446
CMBX NA BBB-.6 Index	BBB-/P	131	1,000	104	5/11/63	300 bp — Monthly	28
CMBX NA BBB-.6 Index	BBB-/P	375	3,000	311	5/11/63	300 bp — Monthly	65
CMBX NA BBB-.6 Index	BBB-/P	364	3,000	311	5/11/63	300 bp — Monthly	54
CMBX NA BBB-.6 Index	BBB-/P	747	5,000	519	5/11/63	300 bp — Monthly	231
CMBX NA BBB-.6 Index	BBB-/P	645	6,000	622	5/11/63	300 bp — Monthly	26
CMBX NA BBB-.6 Index	BBB-/P	645	6,000	622	5/11/63	300 bp — Monthly	26
CMBX NA BBB-.6 Index	BBB-/P	660	6,000	622	5/11/63	300 bp — Monthly	41
CMBX NA BBB-.6 Index	BBB-/P	945	8,000	830	5/11/63	300 bp — Monthly	120
CMBX NA BBB-.6 Index	BBB-/P	1,554	10,000	1,037	5/11/63	300 bp — Monthly	522
CMBX NA BBB-.6 Index	BBB-/P	2,952	20,000	2,074	5/11/63	300 bp — Monthly	888
CMBX NA BBB-.6 Index	BBB-/P	3,242	23,000	2,385	5/11/63	300 bp — Monthly	869
CMBX NA BBB-.6 Index	BBB-/P	2,837	25,000	2,593	5/11/63	300 bp — Monthly	257
CMBX NA BBB-.6 Index	BBB-/P	2,966	27,000	2,800	5/11/63	300 bp — Monthly	179
CMBX NA BBB-.6 Index	BBB-/P	3,028	27,000	2,800	5/11/63	300 bp — Monthly	242
CMBX NA BBB-.6 Index	BBB-/P	6,782	48,000	4,978	5/11/63	300 bp — Monthly	1,828
CMBX NA BBB-.6 Index	BBB-/P	6,108	51,000	5,289	5/11/63	300 bp — Monthly	844
CMBX NA BBB-.6 Index	BBB-/P	6,641	55,000	5,704	5/11/63	300 bp — Monthly	965
CMBX NA BBB-.6 Index	BBB-/P	12,194	88,000	9,126	5/11/63	300 bp — Monthly	3,112
CMBX NA BBB-.6 Index	BBB-/P	13,423	95,000	9,852	5/11/63	300 bp — Monthly	3,619
CMBX NA BBB-.6 Index	BBB-/P	38,177	217,000	22,503	5/11/63	300 bp — Monthly	15,785
<b>Merrill Lynch International</b>							
CMBX NA BBB-.6 Index	BBB-/P	28,025	191,000	19,807	5/11/63	300 bp — Monthly	8,312
<b>Morgan Stanley &amp; Co. International PLC</b>							
CMBX NA BBB-.6 Index	BBB-/P	5,256	38,000	3,941	5/11/63	300 bp — Monthly	1,335
CMBX NA BBB-.6 Index	BBB-/P	229	2,000	207	5/11/63	300 bp — Monthly	23
<b>Upfront premium received</b>		<b>245,570</b>					<b>57,458</b>
<b>Upfront premium (paid)</b>		<b>—</b>					<b>(7,250)</b>
<b>Total</b>		<b>\$245,570</b>					<b>\$50,208</b>

\* Payments related to the referenced debt are made upon a credit default event.

\*\* Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

\*\*\* Ratings for an underlying index represent the average of the ratings of all the securities included in that index. The Moody's, Standard & Poor's or Fitch ratings are believed to be the most recent ratings available at June 30, 2018. Securities rated by Fitch are indicated by "/F." Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 6/30/18 (Unaudited)

Swap counterparty/ Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
<b>Citigroup Global Markets, Inc.</b>						
CMBX NA BB.7 Index	\$(327)	\$2,000	\$291	1/17/47	(500 bp) — Monthly	\$(37)
CMBX NA BB.9 Index	(928)	6,000	1,004	9/17/58	(500 bp) — Monthly	71
CMBX NA BB.9 Index	(924)	6,000	1,004	9/17/58	(500 bp) — Monthly	75
CMBX NA BB.9 Index	(470)	3,000	502	9/17/58	(500 bp) — Monthly	30
<b>Credit Suisse International</b>						
CMBX NA BB.7 Index	(1,447)	82,000	15,752	5/11/63	(500 bp) — Monthly	14,237
CMBX NA BB.7 Index	(1,480)	9,000	1,310	1/17/47	(500 bp) — Monthly	(178)
CMBX NA BB.9 Index	(1,437)	9,000	1,507	9/17/58	(500 bp) — Monthly	62
<b>Goldman Sachs International</b>						
CMBX NA BB.6 Index	(5,422)	53,000	10,181	5/11/63	(500 bp) — Monthly	4,715
CMBX NA BB.7 Index	(757)	5,000	728	1/17/47	(500 bp) — Monthly	(33)
CMBX NA BB.6 Index	(2,776)	19,000	3,650	5/11/63	(500 bp) — Monthly	858
CMBX NA BB.7 Index	(10,482)	62,000	9,021	1/17/47	(500 bp) — Monthly	(1,513)
CMBX NA BB.7 Index	(3,286)	18,000	2,619	1/17/47	(500 bp) — Monthly	(682)
CMBX NA BB.7 Index	(1,638)	10,000	1,455	1/17/47	(500 bp) — Monthly	(192)
<b>JPMorgan Securities LLC</b>						
CMBX NA BB.7 Index	(775)	4,000	582	1/17/47	(500 bp) — Monthly	(197)
CMBX NA BB.6 Index	(281)	2,000	384	5/11/63	(500 bp) — Monthly	101
CMBX NA BB.7 Index	(3,322)	18,000	2,619	1/17/47	(500 bp) — Monthly	(718)
CMBX NA BB.7 Index	(1,299)	8,000	1,164	1/17/47	(500 bp) — Monthly	(142)
CMBX NA BB.7 Index	(1,096)	7,000	1,019	1/17/47	(500 bp) — Monthly	(83)
CMBX NA BB.7 Index	(785)	5,000	728	1/17/47	(500 bp) — Monthly	(62)
CMBX NA BBB-.7 Index	(14,260)	130,000	9,204	1/17/47	(300 bp) — Monthly	(5,118)
CMBX NA BBB-.7 Index	(2,567)	23,000	1,628	1/17/47	(300 bp) — Monthly	(950)
CMBX NA BBB-.7 Index	(592)	11,000	779	1/17/47	(300 bp) — Monthly	182
CMBX NA BBB-.7 Index	(1,048)	10,000	708	1/17/47	(300 bp) — Monthly	(345)
CMBX NA BBB-.7 Index	(441)	6,000	425	1/17/47	(300 bp) — Monthly	(20)
CMBX NA BBB-.7 Index	(441)	6,000	425	1/17/47	(300 bp) — Monthly	(20)
CMBX NA BBB-.7 Index	(271)	3,000	212	1/17/47	(300 bp) — Monthly	(60)
<b>Merrill Lynch International</b>						
CMBX NA BB.9 Index	(466)	3,000	502	9/17/58	(500 bp) — Monthly	33
CMBX NA BB.9 Index	(462)	3,000	502	9/17/58	(500 bp) — Monthly	37
<b>Morgan Stanley &amp; Co. International PLC</b>						
CMBX NA BBB-.7 Index	(3,873)	38,000	2,690	1/17/47	(300 bp) — Monthly	(1,200)
<b>Upfront premium received</b>	<b>—</b>					<b>Unrealized appreciation</b>
						<b>20,401</b>
<b>Upfront premium (paid)</b>	<b>(63,353)</b>					<b>Unrealized (depreciation)</b>
						<b>(11,550)</b>
<b>Total</b>	<b>\$(63,353)</b>					<b>Total</b>
						<b>\$8,851</b>

\* Payments related to the referenced debt are made upon a credit default event.

\*\* Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

CENTRALLY CLEARED CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/18 (Unaudited)

Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
NA HY Series 30 Index	B+/P	\$(136,906)	\$2,080,000	\$122,283	6/20/23	500 bp — Quarterly	\$(11,444)
<b>Total</b>		<b>\$(136,906)</b>					<b>\$(11,444)</b>

\* Payments related to the referenced debt are made upon a credit default event.

\*\* Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

\*\*\* Ratings are presented for credit default contracts in which the fund has sold protection on the underlying referenced debt. Ratings for an underlying index represent the average of the ratings of all the securities included in that index. The Moody's, Standard & Poor's or Fitch ratings are believed to be the most recent ratings available at June 30, 2018. Securities rated by Fitch are indicated by "/F." Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

CENTRALLY CLEARED CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 6/30/18 (Unaudited)

Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
NA HY Series 30 Index	\$113,504	\$1,819,000	\$106,939	6/20/23	(500 bp) — Quarterly	\$3,785
<b>Total</b>	<b>\$113,504</b>					<b>\$3,785</b>

\* Payments related to the referenced debt are made upon a credit default event.

\*\* Upfront premium is based on the difference between the original spread on issue and the market spread on day of execution.

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*:			
Basic materials	\$287,569	\$88,058	\$—
Capital goods	40,791	—	—
Communication services	171,501	—	—
Consumer cyclicals	208,178	130,297	—
Consumer staples	100,333	6,335	—
Energy	143,251	9,958	—
Financials	882,913	73,752	—
Health care	107,702	—	—
Technology	838,292	—	—
Transportation	28,516	—	—
Utilities and power	130,695	—	—
<b>Total common stocks</b>	<b>2,939,741</b>	<b>308,400</b>	<b>—</b>
Asset-backed securities	—	150,000	—
Commodity linked notes	—	2,237,213	—
Corporate bonds and notes	—	132,872	—
Foreign government and agency bonds and notes	—	108,927	—
Investment companies	2,745,970	—	—
Mortgage-backed securities	—	1,579,086	23,575
Purchased options outstanding	—	82,311	—
Purchased swap options outstanding	—	4,576	—
U.S. government and agency mortgage obligations	—	3,978,281	—
Short-term investments	7,163,923	15,472,095	—
<b>Totals by level</b>	<b>\$12,849,634</b>	<b>\$24,053,761</b>	<b>\$23,575</b>

Other financial instruments:	Valuation inputs		
	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$10,914	\$—
Futures contracts	16,889	—	—
Written options outstanding	—	(607)	—
Written swap options outstanding	—	(6,722)	—
Forward premium swap option contracts	—	620	—
TBA sale commitments	—	(1,990,312)	—
Interest rate swap contracts	—	31,802	—
Total return swap contracts	—	(431,644)	—
Credit default contracts	—	(107,415)	—
<b>Totals by level</b>	<b>\$16,889</b>	<b>\$(2,493,364)</b>	<b>\$—</b>

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

During the reporting period, transfers within the fair value hierarchy, if any (other than certain transfers involving non-U.S. equity securities as described in Note 1), did not represent, in the aggregate, more than 1% of the fund's net assets measured as of the end of the period. Transfers are accounted for using the end of period pricing valuation method.

At the start and close of the reporting period, Level 3 investments in securities represented less than 1% of the fund's net assets and were not considered a significant portion of the fund's portfolio.

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

# Statement of assets and liabilities

6/30/18 (Unaudited)

## Assets

Investment in securities, at value, including \$1,080,842 of securities on loan (Notes 1 and 9):	
Unaffiliated issuers (identified cost \$21,341,290)	\$21,896,587
Affiliated issuers (identified cost \$7,958,383) (Notes 1 and 5)	7,958,383
Repurchase agreements (identified cost \$7,072,000)	7,072,000
Cash	1,228
Foreign currency (cost \$4,147) (Note 1)	3,120
Dividends, interest and other receivables	70,427
Receivable for shares of the fund sold	151,277
Receivable for investments sold	12,000
Receivable for sales of delayed delivery securities (Note 1)	1,987,764
Receivable for variation margin on futures contracts (Note 1)	3,712
Receivable for variation margin on centrally cleared swap contracts (Note 1)	9,960
Unrealized appreciation on forward premium swap option contracts (Note 1)	3,218
Unrealized appreciation on forward currency contracts (Note 1)	168,735
Unrealized appreciation on OTC swap contracts (Note 1)	1,172,227
Premium paid on OTC swap contracts (Note 1)	63,353
Receivable from Manager (Note 2)	42,545
Prepaid assets	286
<b>Total assets</b>	<b>40,616,822</b>

## Liabilities

Payable for investments purchased	2,882
Payable for purchases of delayed delivery securities (Note 1)	3,996,357
Payable for shares of the fund repurchased	19,869
Payable for custodian fees (Note 2)	43,367
Payable for investor servicing fees (Note 2)	3,667
Payable for Trustee compensation and expenses (Note 2)	3,145
Payable for administrative services (Note 2)	117
Payable for distribution fees (Note 2)	6,414
Payable for variation margin on centrally cleared swap contracts (Note 1)	10,145
Unrealized depreciation on OTC swap contracts (Note 1)	1,544,812
Premium received on OTC swap contracts (Note 1)	245,570
Unrealized depreciation on forward premium swap option contracts (Note 1)	2,598
Unrealized depreciation on forward currency contracts (Note 1)	157,821
Written options outstanding, at value (premiums \$5,372) (Note 1)	7,329
TBA sale commitments, at value (proceeds receivable \$1,985,625) (Note 1)	1,990,312
Collateral on securities loaned, at value (Note 1)	1,104,460
Collateral on certain derivative contracts, at value (Notes 1 and 9)	310,000
Other accrued expenses	51,855
<b>Total liabilities</b>	<b>9,500,720</b>

## Net assets

**\$31,116,102**

## Represented by

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$31,128,254
Undistributed net investment income (Note 1)	224,379
Accumulated net realized loss on investments and foreign currency transactions (Note 1)	(449,600)
Net unrealized appreciation of investments and assets and liabilities in foreign currencies	213,069
<b>Total — Representing net assets applicable to capital shares outstanding</b>	<b>\$31,116,102</b>

## Computation of net asset value Class IA

Net assets	\$19,499
Number of shares outstanding	1,915
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$10.18

## Computation of net asset value Class IB

Net assets	\$31,096,603
Number of shares outstanding	3,094,644
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$10.05

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

## Statement of operations

Six months ended 6/30/18 (Unaudited)

### Investment income

Interest (including interest income of \$60,668 from investments in affiliated issuers) (Note 5)	\$258,357
Dividends (net of foreign tax of \$5,627)	71,277
Securities lending (net of expenses) (Notes 1 and 5)	1,521
<b>Total investment income</b>	<b>331,155</b>

### Expenses

Compensation of Manager (Note 2)	113,680
Investor servicing fees (Note 2)	11,108
Custodian fees (Note 2)	42,818
Trustee compensation and expenses (Note 2)	890
Distribution fees (Note 2)	39,327
Legal	17,974
Administrative services (Note 2)	347
Auditing and tax fees	41,746
Other	11,093
Fees waived and reimbursed by Manager (Note 2)	(97,869)
<b>Total expenses</b>	<b>181,114</b>
Expense reduction (Note 2)	(158)
<b>Net expenses</b>	<b>180,956</b>
<b>Net investment income</b>	<b>150,199</b>

### Realized and unrealized gain (loss)

#### Net realized gain (loss) on:

Securities from unaffiliated issuers (Notes 1 and 3)	(147,339)
Foreign currency transactions (Note 1)	(3,365)
Forward currency contracts (Note 1)	(100,419)
Futures contracts (Note 1)	(23,184)
Swap contracts (Note 1)	(67,549)
Written options (Note 1)	81,873
<b>Total net realized loss</b>	<b>(259,983)</b>

#### Change in net unrealized appreciation (depreciation) on:

Securities from unaffiliated issuers and TBA sale commitments	(338,381)
Assets and liabilities in foreign currencies	(1,234)
Forward currency contracts	67,523
Futures contracts	5,104
Swap contracts	(282,417)
Written options	(41,329)
<b>Total change in net unrealized depreciation</b>	<b>(590,734)</b>
<b>Net loss on investments</b>	<b>(850,717)</b>
<b>Net decrease in net assets resulting from operations</b>	<b>\$(700,518)</b>



## Statement of changes in net assets

	Six months ended 6/30/18*	Year ended 12/31/17
<b>Increase (decrease) in net assets</b>		
<b>Operations:</b>		
Net investment income	\$150,199	\$249,776
Net realized gain (loss) on investments and foreign currency transactions	(259,983)	1,941,951
Net unrealized appreciation (depreciation) of investments and assets and liabilities in foreign currencies	(590,734)	20,557
<b>Net increase (decrease) in net assets resulting from operations</b>	<b>(700,518)</b>	<b>2,212,284</b>
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(123)	—
Class IB	(117,258)	—
From net realized long-term gain on investments		
Class IA	(739)	—
Class IB	(1,211,667)	—
Decrease from capital share transactions (Note 4)	(94,204)	(16,614)
<b>Total increase (decrease) in net assets</b>	<b>(2,124,509)</b>	<b>2,195,670</b>
<b>Net assets:</b>		
Beginning of period	33,240,611	31,044,941
<b>End of period</b> (including undistributed net investment income of \$224,379 and \$191,561, respectively)	<b>\$31,116,102</b>	<b>\$33,240,611</b>

\* Unaudited.

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	From return of capital	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>b,d,e</sup>	Ratio of net investment income (loss) to average net assets (%) <sup>e</sup>	Portfolio turnover (%)
<b>Class IA</b>														
6/30/18†	\$10.88	.06	(.29)	(.23)	(.07)	(.40)	—	(.47)	\$10.18	(2.09)*	\$19	.45*	.61*	238 <sup>f</sup>
12/31/17	10.15	.10	.63	.73	—	—	—	—	10.88	7.19	20	.90	.98	576 <sup>f</sup>
12/31/16	10.46	.09	—	.09	(.38)	—	(.02)	(.40)	10.15	.93	11	.90	.86	503 <sup>f</sup>
12/31/15	10.78	.06	(.08)	(.02)	(.04)	(.26)	—	(.30)	10.46	(.22)	21	.90	.58	520 <sup>f</sup>
12/31/14	10.49	.05	.38	.43	(.14)	—	—	(.14)	10.78	4.12	11	.90	.46	317 <sup>f</sup>
12/31/13	10.07	.01	.44	.45	(.03)	—	—	(.03)	10.49	4.46	10	.90	.12	208 <sup>g</sup>
<b>Class IB</b>														
6/30/18†	\$10.73	.05	(.29)	(.24)	(.04)	(.40)	—	(.44)	10.05	(2.19)*	\$31,097	.57*	.47*	238 <sup>f</sup>
12/31/17	10.03	.08	.62	.70	—	—	—	—	10.73	6.98	33,221	1.15	.76	576 <sup>f</sup>
12/31/16	10.35	.06	(.01)	.05	(.35)	—	(.02)	(.37)	10.03	.60	31,034	1.15	.61	503 <sup>f</sup>
12/31/15	10.67	.03	(.07)	(.04)	(.02)	(.26)	—	(.28)	10.35	(.44)	33,818	1.15	.33	520 <sup>f</sup>
12/31/14	10.41	.02	.38	.40	(.14)	—	—	(.14)	10.67	3.86	25,220	1.15	.22	317 <sup>f</sup>
12/31/13	10.03	— <sup>h</sup>	.41	.41	(.03)	—	—	(.03)	10.41	4.08	21,681	1.15	(.04)	208 <sup>g</sup>

\* Not annualized.

† Unaudited.

<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 and brokerage/service arrangements, if any (Note 2). Also excludes acquired fund fees and expenses, if any.

<sup>e</sup> Reflects an involuntary contractual expense limitation in effect during the period. As a result of such limitation and/or waivers, the expenses of each class reflect a reduction of the following amounts (Note 2):

	Percentage of average net assets
6/30/18	0.31%
12/31/17	0.45
12/31/16	0.51
12/31/15	0.44
12/31/14	0.50
12/31/13	0.45

<sup>f</sup> Portfolio turnover includes TBA purchase and sale commitments.

<sup>g</sup> Portfolio turnover excludes TBA purchase and sale commitments. Including TBA purchase and sale commitments to conform with current year presentation, the portfolio turnover would have been the following:

	Portfolio turnover %
December 31, 2013	280%

<sup>h</sup> Amount represents less than \$0.01 per share.

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

## Notes to financial statements 6/30/18 (Unaudited)

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, 2018 through June 30, 2018.

Putnam VT Multi-Asset Absolute Return Fund (formerly known as Putnam VT Absolute Return 500 Fund) (the fund) is a 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 positive total return. The fund is designed to pursue a consistent absolute return by combining two independent investment strategies — a *beta* strategy, which provides broad exposure to investment markets, and an *alpha* strategy, which seeks returns from active trading. The *beta* strategy seeks to balance risk and to provide positive total return by investing, without limit, in many different asset classes, including U.S., international, and emerging markets equity securities (growth or value stocks or both) and fixed-income securities; mortgage- and asset-backed securities; below-investment-grade securities (sometimes referred to as “junk bonds”); inflation-protected securities; commodities; and real estate investment trusts (REITs). The *alpha* strategy involves the potential use of active trading strategies designed to provide additional total return through active security selection, tactical asset allocation, currency transactions and options transactions. In pursuing a consistent absolute return, the fund’s strategies are also generally intended to produce lower volatility over a reasonable period of time than has been historically associated with traditional asset classes that have earned similar levels of return over long historical periods. These traditional asset classes might include, for example, equities or equity-like investments.

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 equity investments, and, among other factors, credit, interest rate and prepayment risks when deciding whether to buy or sell fixed-income investments. Putnam Management may also take into account general market conditions when making investment decisions. The fund typically uses derivatives, such as futures, options, certain foreign currency transactions, warrants and swap contracts, to a significant extent for hedging purposes and to increase the fund’s exposure to the asset classes and strategies mentioned above, which may create investment leverage.

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 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.

**Joint trading account** Pursuant to an exemptive order from the SEC, the fund may transfer uninvested cash balances into a joint trading account along with the cash of other registered investment companies and certain other accounts managed by Putnam Management. These balances may be invested in issues of short-term investments having maturities of up to 90 days.

**Repurchase agreements** The fund, or any joint trading account, through its custodian, receives delivery of the underlying securities, the fair value of which at the time of purchase is required to be in an amount at least equal to the resale price, including accrued interest. Collateral for certain tri-party repurchase agreements, which totaled \$7,213,469, is held at the counterparty's custodian in a segregated account for the benefit of the fund and the counterparty. Putnam Management is responsible for determining that the value of these underlying securities is at all times at least equal to the resale price, including accrued interest. In the event of default or bankruptcy by the other party to the agreement, retention of the collateral may be subject to legal proceedings.

**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, 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.

All premiums/discounts are amortized/accreted on a yield-to-maturity basis.

Securities purchased or sold on a forward commitment or delayed delivery basis may be settled at a future date beyond customary settlement time; interest income is accrued based on the terms of the securities. Losses may arise due to changes in the fair value of the underlying securities or if the counterparty does not perform under the contract.

**Stripped securities** The fund may invest in stripped securities which represent a participation in securities that may be structured in classes with rights to receive different portions of the interest and principal. Interest-only securities receive all of the interest and principal-only securities receive all of the principal. If the interest-only securities experience greater than anticipated prepayments of principal, the fund may fail to recoup fully its initial investment in these securities. Conversely, principal-only securities increase in value if prepayments are greater than anticipated and decline if prepayments are slower than anticipated. The fair value of these securities is highly sensitive to changes in interest rates.

**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 hedge against changes in values of securities it owns, owned or expects to own, 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 floor contract.

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

**Futures contracts** The fund uses futures contracts to manage exposure to market risk, to hedge prepayment risk, to hedge interest rate risk, to gain exposure to interest rates, for hedging treasury term structure risk, for yield curve positioning and to equitize cash.

The potential risk to the fund is that the change in value of futures 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. With futures, there is minimal counterparty credit risk to the fund since futures are exchange traded and the exchange's clearinghouse, as counterparty to all exchange traded futures, guarantees the futures against default. Risks may exceed amounts recognized on the Statement of assets and liabilities. When the contract is closed, 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.

Futures contracts are valued at the quoted daily settlement prices established by the exchange on which they trade. The fund and the broker agree to exchange an amount of cash equal to the daily fluctuation in the value of the futures contract. Such receipts or payments are known as "variation margin."

Futures 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 and to gain exposure to currencies.

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.

**Interest rate swap contracts** The fund entered into OTC and/or centrally cleared interest rate swap contracts, which are arrangements between two parties to exchange cash flows based on a notional principal amount, to hedge interest rate

risk, to gain exposure on interest rates, for hedging term structure risk, for yield curve positioning, for gaining exposure to rates in various countries and to hedge prepayment risk.

An OTC and centrally cleared interest rate swap can be purchased or sold with an upfront premium. For OTC interest rate swap contracts, an upfront payment received by the fund is recorded as a liability on the fund's books. An upfront payment made by the fund is recorded as an asset on the fund's books. OTC and centrally cleared interest rate swap contracts are marked to market daily based upon quotations from an independent pricing service or market makers. Any change is recorded as an unrealized gain or loss on OTC interest rate swaps. Daily fluctuations in the value of centrally cleared interest rate swaps are settled through a central clearing agent and are recorded in variation margin on the Statement of assets and liabilities and recorded as unrealized gain or loss. Payments, including upfront premiums, received or made are recorded as realized gains or losses at the reset date or the closing of the contract. Certain OTC and centrally cleared interest rate swap contracts may include extended effective dates. Payments related to these swap contracts are accrued based on the terms of the contract.

The fund could be exposed to credit or market risk due to unfavorable changes in the fluctuation of interest rates or if the counterparty defaults, in the case of OTC interest rate contracts, or the central clearing agency or a clearing member defaults, in the case of centrally cleared interest rate swap contracts, on its respective obligation to perform under the contract. The fund's maximum risk of loss from counterparty risk or central clearing risk is the fair value of the contract. This risk may be mitigated for OTC interest rate swap contracts by having a master netting arrangement between the fund and the counterparty and for centrally cleared interest rate swap contracts through the daily exchange of variation margin. There is minimal counterparty risk with respect to centrally cleared interest rate swap contracts due to the clearinghouse guarantee fund and other resources that are available in the event of a clearing member default. Risk of loss may exceed amounts recognized on the Statement of assets and liabilities.

OTC and centrally cleared interest rate swap contracts outstanding, including their respective notional amounts at period end, if any, are listed after the fund's portfolio.

**Total return swap contracts** The fund entered into OTC and/or centrally cleared total return swap contracts, which are arrangements to exchange a market-linked return for a periodic payment, both based on a notional principal amount, to hedge sector exposure, for gaining exposure to specific sectors, for hedging inflation, for gaining exposure to inflation, to manage exposure to specific sectors or industries, to manage exposure to specific securities, to gain exposure to a basket of securities, to manage exposure to credit risk, to gain exposure to specific markets or countries, to gain exposure to specific sectors or industries, to gain exposure to rates of inflation in specific regions or countries and to hedge inflation in specific regions or countries.

To the extent that the total return of the security, index or other financial measure underlying the transaction exceeds or falls short of the offsetting interest rate obligation, the fund will receive a payment from or make a payment to the counterparty. OTC and/or centrally cleared total return swap contracts are marked to market daily based upon quotations from an independent pricing service or market maker. Any change is recorded as an unrealized gain or loss on OTC total return swaps. Daily fluctuations in the value of centrally cleared total return swaps are settled through a central clearing agent and are recorded in variation margin on the Statement of assets and liabilities and recorded as unrealized gain or loss. Payments received or made are recorded as realized gains or losses. Certain OTC and/or centrally cleared total return swap contracts may include extended effective dates. Payments related to these swap contracts are accrued based on the terms of the contract. The fund could be exposed to credit or market risk due to unfavorable changes in the fluctuation of interest rates or in the price of the underlying security or index, the possibility that there is no liquid market for these agreements or that the counterparty may default on its obligation to perform. The fund's maximum risk of loss from counterparty risk or central clearing risk is the fair value of the contract. This risk may be mitigated for OTC total return swap contracts by having a master netting arrangement between the fund and the counterparty and for centrally cleared total return swap contracts through the daily exchange of variation margin. There is minimal counterparty risk with respect to centrally cleared total return swap contracts due to the clearinghouse guarantee fund and other resources that are available in the event of a clearing member default. Risk of loss may exceed amounts recognized on the Statement of assets and liabilities.

OTC and/or centrally cleared total return swap contracts outstanding, including their respective notional amounts at period end, if any, are listed after the fund's portfolio.

**Credit default contracts** The fund entered into OTC and/or centrally cleared credit default contracts to hedge credit risk, for gaining liquid exposure to individual names, to hedge market risk, for gaining exposure to specific sectors and to gain exposure on individual names and/or baskets of securities.

In OTC and centrally cleared credit default contracts, the protection buyer typically makes a periodic stream of payments to a counterparty, the protection seller, in exchange for the right to receive a contingent payment upon the occurrence of a credit event on the reference obligation or all other equally ranked obligations of the reference entity. Credit events are contract specific but may include bankruptcy, failure to pay, restructuring and obligation acceleration. For OTC credit default contracts, an upfront payment received by the fund is recorded as a liability on the fund's books. An upfront payment made by the fund is recorded as an asset on the fund's books. Centrally cleared credit default contracts provide the same rights to the protection buyer and seller except the payments between parties, including upfront premiums, are settled through a central clearing agent through variation margin payments. Upfront and periodic payments received or paid by the fund for OTC and centrally cleared credit default contracts are recorded as realized gains or losses at the reset date or close of the contract. The OTC and centrally cleared credit default contracts are marked to market daily based upon quotations from an independent pricing service or market makers. Any change in value of OTC credit default contracts is recorded as an unrealized gain or loss. Daily fluctuations in the value of centrally cleared credit default contracts are recorded in variation margin on the Statement of assets and liabilities and recorded as unrealized gain or loss. Upon the occurrence of a credit event, the difference between the par value and fair value of the reference obligation, net of any proportional amount of the upfront payment, is recorded as a realized gain or loss.

In addition to bearing the risk that the credit event will occur, the fund could be exposed to market risk due to unfavorable changes in interest rates or in the price of the underlying security or index or the possibility that the fund may be unable to close out its position at the same time or at the same price as if it had purchased the underlying reference obligations. In certain circumstances, the fund may enter into offsetting OTC and centrally cleared credit default contracts which would mitigate its risk of loss. Risks of loss may exceed amounts recognized on the Statement of assets and liabilities. The fund's maximum risk of loss from counterparty risk, either as the protection seller or as the protection buyer, is the fair value of the contract. This risk may be mitigated for OTC credit default contracts by having a master netting arrangement between the fund and the counterparty and for centrally cleared credit default contracts through the daily exchange of variation margin. Counterparty risk is further mitigated with respect to centrally cleared credit default swap contracts due to the clearinghouse guarantee fund and other resources that are available in the event of a clearing member default. Where the fund is a seller of protection, the maximum potential amount of future payments the fund may be required to make is equal to the notional amount.

OTC and centrally cleared credit default contracts outstanding, including their respective notional amounts at period end, if any, are listed after the fund's portfolio.

**TBA commitments** The fund may enter into TBA (to be announced) commitments to purchase securities for a fixed unit price at a future date beyond customary settlement time. Although the unit price and par amount have been established, the actual securities have not been specified. However, it is anticipated that the amount of the commitments will not significantly differ from the principal amount. The fund holds, and maintains until settlement date, cash or high-grade debt obligations in an amount sufficient to meet the purchase price, or the fund may enter into offsetting contracts for the forward sale of other securities it owns. Income on the securities will not be earned until settlement date.

The fund may also enter into TBA sale commitments to hedge its portfolio positions, to sell mortgage-backed securities it owns under delayed delivery arrangements or to take a short position in mortgage-backed securities. Proceeds of TBA sale commitments are not received until the contractual settlement date. During the time a TBA sale commitment is outstanding, either equivalent deliverable securities or an offsetting TBA purchase commitment deliverable on or before the sale commitment date are held as "cover" for the transaction, or other liquid assets in an amount equal to the notional value of the TBA sale commitment are segregated. If the TBA sale commitment is closed through the acquisition of an offsetting TBA purchase commitment, the fund realizes a gain or loss. If the fund delivers securities under the commitment, the fund realizes a gain or a loss from the sale of the securities based upon the unit price established at the date the commitment was entered into.

TBA commitments, which are accounted for as purchase and sale transactions, may be considered securities themselves, and involve a risk of loss due to changes



in the value of the security prior to the settlement date as well as the risk that the counterparty to the transaction will not perform its obligations. Counterparty risk is mitigated by having a master agreement between the fund and the counterparty.

Unsettled TBA commitments are valued at their fair value according to the procedures described under "Security valuation" above. The contract is marked to market daily and the change in fair value is recorded by the fund as an unrealized gain or loss. Based on market circumstances, Putnam Management will determine whether to take delivery of the underlying securities or to dispose of the TBA commitments prior to settlement.

TBA purchase commitments outstanding at period end, if any, are listed within the fund's portfolio and TBA sale commitments 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 that govern OTC derivative and foreign exchange contracts and Master Securities Forward Transaction Agreements that govern transactions involving mortgage-backed and other asset-backed securities that may result in delayed delivery (Master Agreements) with certain counterparties 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 posted to the fund which cannot be sold or repledged totaled \$111,929 at the close of the reporting period.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

With respect to ISDA Master Agreements, 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 or 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 \$789,122 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$653,309 and may include amounts related to unsettled 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 received cash collateral of \$1,104,460 and the value of securities loaned amounted to \$1,080,842.

**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 LIBOR 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 0.04% of the committed line of credit plus a \$25,000 flat fee 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. 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 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.

The aggregate identified cost on a tax basis is \$34,303,770, resulting in gross unrealized appreciation and depreciation of \$2,443,278 and \$2,296,553, respectively, or net unrealized appreciation of \$146,725.

**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. Dividend sources are estimated at the time of declaration. Actual results may vary. Any non-taxable return of capital cannot be determined until final tax calculations are completed after the end of the fund's fiscal year. 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.

**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 59.2% 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:

0.880%	of the first \$5 billion,
0.830%	of the next \$5 billion,
0.780%	of the next \$10 billion,
0.730%	of the next \$10 billion,
0.680%	of the next \$50 billion,
0.660%	of the next \$50 billion,
0.650%	of the next \$100 billion and
0.645%	of any excess thereafter.

For the reporting period, the management fee represented an effective rate (excluding the impact from any expense waivers in effect) of 0.358% of the fund’s average net assets.

Putnam Management has contractually agreed to waive fees (and, to the extent necessary, bear other expenses) of the fund through April 30, 2020, to the extent that total expenses of the fund (excluding brokerage, interest, taxes, investment-related expenses, payments under distribution plan, extraordinary expenses and acquired fund fees and expenses) would exceed an annual rate of 0.90% of the fund’s average net assets. During the reporting period, the fund’s expenses were reduced by \$14,618 as a result of this limit.

Putnam Management has also contractually agreed, through April 30, 2020, 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 reduced by \$83,251 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. 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	\$7
Class IB	11,101
Total	\$11,108

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 \$158 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$24, 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, including TBA commitments (Long-term)	\$29,720,889	\$29,449,848
U.S. government securities (Long-term)	—	—
<b>Total</b>	<b>\$29,720,889</b>	<b>\$29,449,848</b>

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			
	Six months ended 6/30/18		Year ended 12/31/17		Six months ended 6/30/18		Year ended 12/31/17	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	—	\$—	755	\$8,055	187,456	\$1,930,938	1,030,038	\$10,629,005
Shares issued in connection with reinvestment of distributions	85	862	—	—	133,025	1,328,925	—	—
	85	862	755	8,055	320,481	3,259,863	1,030,038	10,629,005
Shares repurchased	(6)	(65)	(3)	(29)	(322,680)	(3,354,864)	(1,026,459)	(10,653,645)
<b>Net increase (decrease)</b>	<b>79</b>	<b>\$797</b>	<b>752</b>	<b>\$8,026</b>	<b>(2,199)</b>	<b>\$(95,001)</b>	<b>3,579</b>	<b>\$(24,640)</b>

At the close of the reporting period, Putnam Investments, LLC owned the following shares of the fund:

	Shares owned	Percentage of ownership	Value
Class IA	1,134	59.22%	\$11,544

#### 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 12/31/17	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 6/30/18
<b>Short-term investments</b>					
Putnam Cash Collateral Pool, LLC*	\$708,475	\$10,001,620	\$9,605,635	\$7,291	\$1,104,460
Putnam Short Term Investment Fund**	5,958,161	1,895,762	1,000,000	60,668	6,853,923
<b>Total Short-term investments</b>	<b>\$6,666,636</b>	<b>\$11,897,382</b>	<b>\$10,605,635</b>	<b>\$67,959</b>	<b>\$7,958,383</b>

\*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.

\*\*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 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 may invest in higher-yielding, lower-rated bonds that may have a higher rate of default.

The fund may invest a significant portion of its assets in securitized debt instruments, including mortgage-backed and asset-backed investments. The yields and values of these investments are sensitive to changes in interest rates, the rate of principal payments on the underlying assets and the market's perception of the issuers. The market for these investments may be volatile and limited, which may make them difficult to buy or sell.

**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)	\$6,000
Purchased currency options (contract amount)	\$1,300,000
Purchased swap option contracts (contract amount)	\$940,000
Written equity option contracts (contract amount)	\$3,000
Written currency options (contract amount)	\$160,000
Written swap option contracts (contract amount)	\$1,000,000
Futures contracts (number of contracts)	50
Forward currency contracts (contract amount)	\$9,600,000
Centrally cleared interest rate swap contracts (notional)	\$15,300,000
OTC total return swap contracts (notional)	\$44,600,000
OTC credit default contracts (notional)	\$1,600,000
Centrally cleared credit default contracts (notional)	\$1,600,000
Warrants (number of warrants)	10,000

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**

Derivatives not accounted for as hedging instruments under ASC 815	Asset derivatives		Liability derivatives	
	Statement of assets and liabilities location	Fair value	Statement of assets and liabilities location	Fair value
Credit contracts	Receivables, Net assets — Unrealized appreciation	\$197,696*	Payables, Net assets — Unrealized depreciation	\$305,111*
Foreign exchange contracts	Investments, Receivables	169,003	Payables	157,821
Equity contracts	Investments, Receivables, Net assets — Unrealized appreciation	1,174,480	Payables, Net assets — Unrealized depreciation	1,586,295*
Interest rate contracts	Investments, Receivables, Net assets — Unrealized appreciation	141,689*	Payables, Net assets — Unrealized depreciation	32,917*
<b>Total</b>		<b>\$1,682,868</b>		<b>\$2,082,144</b>

\*Includes cumulative appreciation/depreciation of futures contracts and/or centrally cleared swaps as reported in the fund's portfolio. Only current day's variation margin is reported within the Statement of assets and liabilities.

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	Futures	Forward currency contracts	Swaps	Total
Credit contracts	\$—	\$—	\$—	\$—	\$(34,946)	\$(34,946)
Foreign exchange contracts	—	(9,807)	—	(100,419)	—	(110,226)
Equity contracts	(1,428)	(103,271)	159,078	—	63,015	117,394
Interest rate contracts	—	32,588	(182,262)	—	(95,618)	(245,292)
<b>Total</b>	<b>\$(1,428)</b>	<b>\$(80,490)</b>	<b>\$(23,184)</b>	<b>\$(100,419)</b>	<b>\$(67,549)</b>	<b>\$(273,070)</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	Warrants	Options	Futures	Forward currency contracts	Swaps	Total
Credit contracts	\$—	\$—	\$—	\$—	\$86,705	\$86,705
Foreign exchange contracts	—	(2,841)	—	67,523	—	64,682
Equity contracts	(1,136)	18,741	(95,162)	—	(386,247)	(462,590)
Interest rate contracts	—	(38,043)	100,266	—	17,125	79,348
<b>Total</b>	<b>\$(1,136)</b>	<b>\$(22,143)</b>	<b>\$5,104</b>	<b>\$67,523</b>	<b>\$(282,417)</b>	<b>\$(233,069)</b>

**Note 8 — New accounting pronouncements**

In March 2017, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2017-08, *Receivables—Nonrefundable Fees and Other Costs* (Subtopic 310-20): *Premium Amortization on Purchased Callable Debt Securities*. The amendments in the ASU shorten the amortization period for certain callable debt securities held at a premium, to be amortized to the earliest call date. The ASU is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. Management is currently evaluating the impact, if any, of applying this provision.

### Note 9 — 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	Barclays Capital, Inc. (clearing broker)	Citibank, N.A.	Citigroup Global Markets, Inc.	Credit Suisse International	Goldman Sachs International	HSBC Bank USA, National Association
<b>Assets:</b>								
Centrally cleared interest rate swap contracts <sup>§</sup>	\$—	\$—	\$9,960	\$—	\$—	\$—	\$—	\$—
OTC Total return swap contracts* <sup>#</sup>	311,045	95	—	75,892	—	563	444,482	—
OTC Credit default contracts — protection sold* <sup>#</sup>	—	—	—	—	—	—	30	—
OTC Credit default contracts — protection purchased* <sup>#</sup>	—	—	—	—	2,788	18,485	27,514	—
Centrally cleared credit default contracts <sup>§</sup>	—	—	—	—	—	—	—	—
Futures contracts <sup>§</sup>	—	—	—	—	—	—	—	—
Forward currency contracts <sup>#</sup>	11,225	2,748	—	22,597	—	7,519	54,759	8,194
Forward premium swap option contracts <sup>#</sup>	1,570	266	—	492	—	—	—	—
Purchased swap options** <sup>#</sup>	2,195	—	—	2	—	—	17	—
Purchased options** <sup>#</sup>	28,872	42	—	25,086	—	—	42	184
Repurchase agreements**	—	—	—	—	—	—	—	7,072,000
<b>Total Assets</b>	<b>\$354,907</b>	<b>\$3,151</b>	<b>\$9,960</b>	<b>\$124,069</b>	<b>\$2,788</b>	<b>\$26,567</b>	<b>\$526,844</b>	<b>\$7,080,378</b>
<b>Liabilities:</b>								
Centrally cleared interest rate swap contracts <sup>§</sup>	—	—	9,964	—	—	—	—	—
OTC Total return swap contracts* <sup>#</sup>	374,716	37	—	362,151	—	51,694	737,394	—
OTC Credit default contracts — protection sold* <sup>#</sup>	1,136	2,584	—	—	11,765	49,164	31,239	—
OTC Credit default contracts — protection purchased* <sup>#</sup>	—	—	—	—	—	—	—	—
Centrally cleared credit default contracts <sup>§</sup>	—	—	181	—	—	—	—	—
Futures contracts <sup>§</sup>	—	—	—	—	—	—	—	—
Forward currency contracts <sup>#</sup>	9,391	12,508	—	22,745	—	17,719	53,312	11,018
Forward premium swap option contracts <sup>#</sup>	1,222	353	—	406	—	—	37	—
Written swap options <sup>#</sup>	1,938	920	—	1,290	—	—	16	—
Written options <sup>#</sup>	607	—	—	—	—	—	—	—
<b>Total Liabilities</b>	<b>\$389,010</b>	<b>\$16,402</b>	<b>\$10,145</b>	<b>\$386,592</b>	<b>\$11,765</b>	<b>\$118,577</b>	<b>\$821,998</b>	<b>\$11,018</b>
<b>Total Financial and Derivative Net Assets</b>	<b>\$(34,103)</b>	<b>\$(13,251)</b>	<b>\$(185)</b>	<b>\$(262,523)</b>	<b>\$(8,977)</b>	<b>\$(92,010)</b>	<b>\$(295,154)</b>	<b>\$7,069,360</b>
Total collateral received (pledged) <sup>†##</sup>	\$—	\$—	\$—	\$(221,385)	\$—	\$(92,010)	\$(295,154)	\$7,069,360
Net amount	\$(34,103)	\$(13,251)	\$(185)	\$(41,138)	\$(8,977)	\$—	\$—	\$—
<i>Controlled collateral received (including TBA commitments)**</i>	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
<i>Uncontrolled collateral received</i>	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$7,213,469
<i>Collateral (pledged) (including TBA commitments)**</i>	\$—	\$—	\$—	\$(221,385)	\$—	\$(110,775)	\$(321,149)	\$—

\* Excludes premiums, if any. Included in unrealized appreciation and depreciation on OTC swap contracts on the Statement of assets and liabilities.

\*\* Included with Investments in securities on the Statement of assets and liabilities.

† Additional collateral may be required from certain brokers based on individual agreements.

# Covered by master netting agreement (Note 1).

## 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.	JPMorgan Securities LLC	Merrill Lynch International	Merrill Lynch, Pierce, Fenner & Smith, Inc.	Morgan Stanley & Co. International PLC	NatWest Markets PLC	State Street Bank and Trust Co.	UBS AG	WestPac Banking Corp.	Total
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$9,960
234,761	1,066	—	—	—	—	—	26,464	—	1,094,368
—	—	—	—	—	—	—	—	—	30
—	19,746	998	—	2,673	—	—	—	—	72,204
—	—	—	—	—	—	—	—	—	—
—	—	—	3,712	—	—	—	—	—	3,712
19,245	—	—	—	—	4,852	16,833	20,601	162	168,735
890	—	—	—	—	—	—	—	—	3,218
2,362	—	—	—	—	—	—	—	—	4,576
28,085	—	—	—	—	—	—	—	—	82,311
—	—	—	—	—	—	—	—	—	7,072,000
<b>\$285,343</b>	<b>\$20,812</b>	<b>\$998</b>	<b>\$3,712</b>	<b>\$2,673</b>	<b>\$4,852</b>	<b>\$16,833</b>	<b>\$47,065</b>	<b>\$162</b>	<b>\$8,511,114</b>
—	—	—	—	—	—	—	—	—	9,964
20	—	—	—	—	—	—	—	—	1,526,012
—	75,664	19,713	—	4,127	—	—	—	—	195,392
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	181
—	—	—	—	—	—	—	—	—	—
10,989	—	—	—	—	1,008	10,139	2,173	6,819	157,821
580	—	—	—	—	—	—	—	—	2,598
2,558	—	—	—	—	—	—	—	—	6,722
—	—	—	—	—	—	—	—	—	607
<b>\$14,147</b>	<b>\$75,664</b>	<b>\$19,713</b>	<b>\$—</b>	<b>\$4,127</b>	<b>\$1,008</b>	<b>\$10,139</b>	<b>\$2,173</b>	<b>\$6,819</b>	<b>\$1,899,297</b>
<b>\$271,196</b>	<b>\$(54,852)</b>	<b>\$(18,715)</b>	<b>\$3,712</b>	<b>\$(1,454)</b>	<b>\$3,844</b>	<b>\$6,694</b>	<b>\$44,892</b>	<b>\$(6,657)</b>	<b>\$6,611,817</b>
\$271,196	\$—	\$—	\$—	\$—	\$—	\$—	\$44,892	\$—	
\$—	\$(54,852)	\$(18,715)	\$3,712	\$(1,454)	\$3,844	\$6,694	\$—	\$(6,657)	
\$310,000	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$310,000
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$111,929	\$—	\$7,325,398
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$(653,309)

<sup>9</sup> Includes current day's variation margin only as reported on the Statement of assets and liabilities, which is not collateralized. Cumulative appreciation/(depreciation) for futures contracts and centrally cleared swap contracts is represented in the tables listed after the fund's portfolio. Collateral pledged for initial margin on futures contracts and centrally cleared swap contracts, which is not included in the table above, amounted to \$261,464, and \$284,359, respectively.

## Trustee approval of management contract

### General conclusions

The Board of Trustees of The Putnam Funds oversees the management of each fund and, as required by law, determines annually whether to approve the continuance of your fund's management contract with Putnam Investment Management, LLC ("Putnam Management"), the sub-management contract with respect to your fund between Putnam Management and its affiliate, Putnam Investments Limited ("PIL"), and the sub-advisory contract among Putnam Management, PIL, and another affiliate, The Putnam Advisory Company ("PAC"). The Board, with the assistance of its Contract Committee, requests and evaluates all information it deems reasonably necessary under the circumstances in connection with its annual contract review. The Contract Committee consists solely of Trustees who are not "interested persons" (as this term is defined in the Investment Company Act of 1940, as amended (the "1940 Act")) of The Putnam Funds ("Independent Trustees").

At the outset of the review process, members of the Board's independent staff and independent legal counsel discussed with representatives of Putnam Management the annual contract review materials furnished to the Contract Committee during the course of the previous year's review, identifying possible changes in these materials that might be necessary or desirable for the coming year. Following these discussions and in consultation with the Contract Committee, the Independent Trustees' independent legal counsel requested that Putnam Management and its affiliates furnish specified information, together with any additional information that Putnam Management considered relevant, to the Contract Committee. Over the course of several months ending in June 2018, the Contract Committee met on a number of occasions with representatives of Putnam Management, and separately in executive session, to consider the information that Putnam Management provided. Throughout this process, the Contract Committee was assisted by the members of the Board's independent staff and by independent legal counsel for The Putnam Funds and the Independent Trustees.

In May 2018, the Contract Committee met in executive session to discuss and consider its recommendations with respect to the continuance of the contracts. At the Trustees' June 2018 meeting, the Contract Committee met in executive session with the other Independent Trustees to review a summary of the key financial, performance and other data that the Contract Committee considered in the course of its review. The Contract Committee then presented its written report, which summarized the key factors that the Committee had considered and set forth its recommendations. The Contract Committee recommended, and the Independent Trustees approved, the continuance of your fund's management, sub-management and sub-advisory contracts, effective July 1, 2018. (Because PIL and PAC are affiliates of Putnam Management and Putnam Management remains fully responsible for all services provided by PIL and PAC, the Trustees have not attempted to evaluate PIL or PAC as separate entities, and all subsequent references to Putnam Management below should be deemed to include reference to PIL and PAC as necessary or appropriate in the context.)

The Independent Trustees' approval was based on the following conclusions:

- That the fee schedule in effect for your fund represented reasonable compensation in light of the nature and quality of the services being provided to the fund, the fees paid by competitive funds, the costs incurred by Putnam Management in providing services to the fund, and the application of certain reductions and waivers noted below; and

- That the fee schedule in effect for your fund represented an appropriate sharing between fund shareholders and Putnam Management of such economies of scale as may exist in the management of the fund at current asset levels.

These conclusions were based on a comprehensive consideration of all information provided to the Trustees and were not the result of any single factor. Some of the factors that figured particularly in the Trustees' deliberations and how the Trustees considered these factors are described below, although individual Trustees may have evaluated the information presented differently, giving different weights to various factors. It is also important to recognize that the management arrangements for your fund and the other Putnam funds are the result of many years of review and discussion between the Independent Trustees and Putnam Management, that some aspects of the arrangements may receive greater scrutiny in some years than others, and that the Trustees' conclusions may be based, in part, on their consideration of fee arrangements in previous years. For example, with some minor exceptions, the funds' current fee arrangements under the management contracts were first implemented at the beginning of 2010 following extensive review by the Contract Committee and discussions with representatives of Putnam Management, as well as approval by shareholders.

### Management fee schedules and total expenses

The Trustees reviewed the management fee schedules in effect for all Putnam funds, including fee levels and breakpoints. The Trustees also reviewed the total expenses of each Putnam fund, recognizing that in most cases management fees represented the major, but not the sole, determinant of total costs to fund shareholders. (In a few instances, funds have implemented so-called "all-in" management fees covering substantially all routine fund operating costs.)

In reviewing fees and expenses, the Trustees generally focus their attention on material changes in circumstances — for example, changes in assets under management, changes in a fund's investment strategy, changes in Putnam Management's operating costs or profitability, or changes in competitive practices in the mutual fund industry — that suggest that consideration of fee changes might be warranted. The Trustees concluded that the circumstances did not indicate that changes to the management fee structure for your fund would be appropriate at this time.

Under its management contract, your fund has the benefit of breakpoints in its management fee schedule that provide shareholders with economies of scale in the form of reduced fee rates as assets under management in the Putnam family of funds increase. The Trustees concluded that the fee schedule in effect for your fund represented an appropriate sharing of economies of scale between fund shareholders and Putnam Management.

As in the past, the Trustees also focused on the competitiveness of each fund's total expense ratio. In order to support the effort to have fund expenses meet competitive standards, the Trustees and Putnam Management have implemented certain expense limitations that were in effect during your fund's fiscal year ending in 2017. These expense limitations were: (i) a contractual expense limitation applicable to all open-end funds of 25 basis points on investor servicing fees and expenses and (ii) a contractual expense limitation applicable to specified open-end funds, including your fund, of 20 basis points on so-called "other expenses" (i.e., all expenses exclusive of management fees, distribution fees, investor

servicing fees, investment-related expenses, interest, taxes, brokerage commissions, acquired fund fees and expenses and extraordinary expenses). These expense limitations attempt to maintain competitive expense levels for the funds. Most funds had sufficiently low expenses that these expense limitations were not operative. However, in the case of your fund, the second of the expense limitations applied during its fiscal year ending in 2017. Putnam Management has agreed to maintain these expense limitations until at least April 30, 2020. In addition, effective through at least April 30, 2020, Putnam Management will waive fees and/or reimburse expenses of your fund to the extent that expenses of the fund (excluding payments under the fund's distribution plans, brokerage, interest, taxes, investment-related expenses, extraordinary expenses, and acquired fund fees and expenses) would exceed an annual rate of 0.90% of its average net assets. Putnam Management's support for these expense limitation arrangements was an important factor in the Trustees' decision to approve the continuance of your fund's management, sub-management and sub-advisory contracts.

The Trustees reviewed comparative fee and expense information for a custom group of competitive funds selected by Broadridge Financial Solutions, Inc. ("Broadridge"). This comparative information included your fund's percentile ranking for effective management fees and total expenses (excluding any applicable 12b-1 fee), which provides a general indication of your fund's relative standing. In the custom peer group, your fund ranked in the first quintile in effective management fees (determined for your fund and the other funds in the custom peer group based on fund asset size and the applicable contractual management fee schedule) and in the first quintile in total expenses (excluding any applicable 12b-1 fees) as of December 31, 2017. The first quintile represents the least expensive funds and the fifth quintile the most expensive funds. The fee and expense data reported by Broadridge as of December 31, 2017 reflected the most recent fiscal year-end data available in Broadridge's database at that time.

In connection with their review of fund management fees and total expenses, the Trustees also reviewed the costs of the services provided and the profits realized by Putnam Management and its affiliates from their contractual relationships with the funds. This information included trends in revenues, expenses and profitability of Putnam Management and its affiliates relating to the investment management, investor servicing and distribution services provided to the funds. In this regard, the Trustees also reviewed an analysis of Putnam Management's revenues, expenses and profitability, allocated on a fund-by-fund basis, with respect to the funds' management, distribution, and investor servicing contracts. For each fund, the analysis presented information about revenues, expenses and profitability for each of the agreements separately and for the agreements taken together on a combined basis. The Trustees concluded that, at current asset levels, the fee schedules in place represented reasonable compensation for the services being provided and represented an appropriate sharing between fund shareholders and Putnam Management of such economies of scale as may exist in the management of the Putnam funds at that time.

The information examined by the Trustees in connection with their annual contract review for the Putnam funds included information regarding fees charged by Putnam Management and its affiliates to institutional clients, including defined benefit pension and profit-sharing plans and sub-advised mutual funds. This information included, in cases where an institutional product's investment strategy corresponds with a fund's strategy, comparisons of those fees with fees charged to the Putnam funds, as well as an assessment of the differences in the services

provided to these different types of clients as compared to the services provided to the Putnam funds. The Trustees observed that the differences in fee rates between these clients and the Putnam funds are by no means uniform when examined by individual asset sectors, suggesting that differences in the pricing of investment management services to these types of clients may reflect, among other things, historical competitive forces operating in separate markets. The Trustees considered the fact that in many cases fee rates across different asset classes are higher on average for mutual funds than for institutional clients, as well as the differences between the services that Putnam Management provides to the Putnam funds and those that it provides to its other clients. The Trustees did not rely on these comparisons to any significant extent in concluding that the management fees paid by your fund are reasonable.

### **Investment performance**

The quality of the investment process provided by Putnam Management represented a major factor in the Trustees' evaluation of the quality of services provided by Putnam Management under your fund's management contract. The Trustees were assisted in their review of the Putnam funds' investment process and performance by the work of the investment oversight committees of the Trustees and the full Board of Trustees, which meet on a regular basis with the funds' portfolio teams and with the Chief Investment Officers and other senior members of Putnam Management's Investment Division throughout the year. The Trustees concluded that Putnam Management generally provides a high-quality investment process — based on the experience and skills of the individuals assigned to the management of fund portfolios, the resources made available to them, and in general Putnam Management's ability to attract and retain high-quality personnel — but also recognized that this does not guarantee favorable investment results for every fund in every time period.

The Trustees considered that 2017 was a strong year for the performance of the Putnam funds, with generally favorable results for most asset classes, including U.S. equity, international and global equity, taxable and tax exempt fixed income, and global asset allocation Funds. In this regard, the Trustees considered that, for the one-year period ended December 31, 2017, the Putnam open-end Funds' performance, on an asset-weighted basis, ranked in the 32nd percentile of their Lipper peers (excluding those Putnam funds that are evaluated based on their total returns and/or comparisons of those returns versus selected investment benchmarks or targeted annual returns). The Trustees observed that this strong performance has continued a positive trend that began in mid-year 2016 across most Putnam funds. They noted that the longer-term performance of the Putnam funds continued to be strong, exemplified by the fact that the Putnam funds were ranked by the Barron's/Lipper Fund Families survey as the 7th-best performing mutual fund complex out of 55 complexes for the five-year period ended December 31, 2017 and the 9th-best performing mutual fund complex out of 50 complexes for the ten-year period ended 2017. In addition, the survey ranked the Putnam funds 7th out of 59 mutual fund complexes for the one-year period ended 2017; the Putnam funds have ranked 1st or 2nd in the survey for the one-year period three times since 2009 (most recently in 2013). They also noted, however, the disappointing investment performance of some funds for periods ended December 31, 2017 and considered information provided by Putnam Management regarding the factors contributing to the underperformance and actions being taken to improve the performance of these particular funds. The Trustees indicated their intention to continue to monitor closely the performance of those funds, including the effectiveness of any efforts Putnam Management has undertaken to



address underperformance and whether additional actions to address areas of underperformance are warranted.

For purposes of the Trustees' evaluation of the Putnam Funds' investment performance, the Trustees generally focus on a competitive industry ranking of each fund's total net return over a one-year, three-year and five-year period. For a number of Putnam funds with relatively unique investment mandates for which Putnam Management informed the Trustees that meaningful competitive performance rankings are not considered to be available, the Trustees evaluated performance based on their total gross and net returns and, in most cases, comparisons of those returns with the returns of selected investment benchmarks. In the case of your fund, the Trustees considered information about your fund's total return, its performance relative to its benchmark and its targeted return over the one-year, three-year and five-year periods ended December 31, 2017. Your fund's class IA shares' return net of fees and expenses was positive and exceeded the return of its benchmark over the one-year, three-year and five-year periods ended December 31, 2017. Your fund's class IA shares' return net of fees and expenses exceeded the fund's targeted annual return, which is the return of its benchmark plus 500 basis points, over the one-year period and trailed its targeted annual return over the three-year and five-year periods. (When considering performance information, shareholders should be mindful that past performance is not a guarantee of future results.)

The Trustees considered Putnam Management's continued efforts to support fund performance through initiatives including structuring compensation for portfolio managers and research analysts to enhance accountability for fund performance, emphasizing accountability in the portfolio management process, and affirming its commitment to a fundamental-driven approach to investing. The Trustees noted further that Putnam Management continued to strengthen its fundamental research capabilities by adding new investment personnel.

### **Brokerage and soft-dollar allocations; investor servicing**

The Trustees considered various potential benefits that Putnam Management may receive in connection with the services it provides under the management contract with your fund. These include benefits related to brokerage allocation and the use of soft dollars, whereby a portion of the commissions paid by a fund for brokerage may be used to acquire research services that are expected to be useful to Putnam Management in managing the assets of the fund and of other clients. Subject to policies established by the Trustees, soft dollars generated by these means are used predominantly to acquire brokerage and research services (including third-party research and market data) that enhance Putnam Management's investment capabilities and supplement Putnam Management's internal research efforts. However, the Trustees noted that a portion of available soft dollars continues to be used to pay fund expenses. The Trustees indicated their continued intent to monitor regulatory and industry developments in this area with the assistance of their Brokerage Committee. The Trustees also indicated their continued intent to monitor the allocation of the Putnam funds' brokerage in order to ensure that the principle of seeking best price and execution remains paramount in the portfolio trading process.

Putnam Management may also receive benefits from payments that the funds make to Putnam Management's affiliates for investor or distribution services. In conjunction with the annual review of your fund's management, sub-management and sub-advisory contracts, the Trustees reviewed your fund's investor servicing agreement with Putnam Investor Services, Inc. ("PSERV") and its distributor's contracts and distribution plans with Putnam Retail Management Limited Partnership ("PRM"), both of which are affiliates of Putnam Management. The Trustees concluded that the fees payable by the funds to PSERV and PRM, as applicable, for such services are fair and reasonable in relation to the nature and quality of such services, the fees paid by competitive funds, and the costs incurred by PSERV and PRM, as applicable, in providing such services. Furthermore, the Trustees were of the view that the services provided were required for the operation of the funds, and that they were of a quality at least equal to those provided by other providers.

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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, 2018, 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

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 Form N-Q on the SEC's website at www.sec.gov. In addition, the fund's Form 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-Advisors

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

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

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George Putnam, III  
Robert L. Reynolds  
Manoj P. Singh

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.

