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# Putnam Variable Trust

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

**Semiannual report**

**6 | 30 | 21**

# Message from the Trustees

August 12, 2021

Dear Shareholder:

The U.S. economy is much improved from a year ago, or even six months ago. Gross domestic product is growing at a pre-pandemic pace. Stock prices are high and interest rates are low. More and more workers are finding jobs, with millions still open. At the same time, vaccinations in many areas have not yet reached enough people to stop the spread of Covid-19. U.S. and global infection rates have recently risen.

While it is too soon to declare the pandemic over, it is worth taking stock of the economy's transition. Some changes accelerated by the pandemic could be lasting. Dynamic, well-managed companies have adapted to seize new, more sustainable growth opportunities.

An active investment philosophy is well suited to this time. Putnam's research teams are analyzing the fundamentals of what has stayed the same and what has changed to uncover valuable investment insights or potential risks.

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 investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political, or financial market conditions; investor sentiment and market perceptions; government actions; geopolitical events or changes; and factors related to a specific issuer, asset class, geography, industry, or sector. These and other factors may 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 generally greater for longer-term bonds, and credit risk is generally 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, which means 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. The fund may have to invest the proceeds from prepaid investments, including mortgage- and asset-backed investments, in other investments with less attractive terms and yields. 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. Our investment techniques, analyses, and judgments may not produce the outcome we intend. The investments we select for the fund may not perform as well as other securities that we do not select for the fund. We, or the fund's other service providers, may experience disruptions or operating errors that could negatively impact the fund. The fund is not intended to outperform stocks and bonds during strong market rallies. The fund's prospectus lists additional risks. You can lose money by investing in the fund.

## Performance summary (as of 6/30/21)

### Investment objective

Positive total return

### Net asset value June 30, 2021

Class IA: \$9.51

Class IB: \$9.33

### Total return at net asset value

(as of 6/30/21)	Class IA shares*	Class IB shares*	ICE BofA U.S. Treasury Bill Index	Bloomberg Barclays U.S. Aggregate Bond Index	S&P 500 Index
6 months	0.63%	0.43%	0.03%	-1.60%	15.25%
1 year	-0.73	-0.96	0.10	-0.33	40.79
5 years	-0.88	-1.98	6.10	16.08	125.36
Annualized	-0.18	-0.40	1.19	3.03	17.65
10 years	9.45	6.87	6.74	39.62	298.93
Annualized	0.91	0.67	0.65	3.39	14.84
Life	8.14	5.48	6.76	41.03	287.84
Annualized	0.77	0.53	0.65	3.44	14.26

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

Before April 30, 2018, the fund was managed with a materially different investment strategy and may have achieved materially different performance results under its current investment strategy from that shown for periods before this date.

\* Class inception date: May 2, 2011.

The ICE BofA (Intercontinental Exchange Bank of America) 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.

The S&P 500 Index is an unmanaged index of common stock performance.

All Bloomberg Barclays indices provided by Bloomberg Index Services Limited.

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**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	19.9%
U.S. stocks	19.6%
Commodities	13.2%
Agency pass-throughs	9.1%
Commercial mortgage-backed securities	7.9%
High-yield corporate bonds	3.9%
Agency collateralized mortgage obligations	3.9%
Emerging-market stocks	2.6%
International stocks	2.3%
Residential mortgage-backed securities (non-agency)	1.0%
Asset-backed securities	0.6%
Investment-grade corporate bonds	0.1%
Emerging-market bonds	-6.8%
Cash and net other assets	22.6%

Allocations are shown as a percentage of the fund's net assets. Cash and net other assets, if any, represent the market value weights of cash, derivatives, short-term securities, and other unclassified assets in the portfolio. Summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities, any interest accruals, the use of different classifications of securities for presentation purposes, and rounding. Negative weights may result from timing differences between trade and settlement dates of securities, such as TBAs, or by the use of derivatives. Holdings and allocations may vary over time.

## 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 1/1/21 to 6/30/21. They also show how much a \$1,000 investment would be worth at the close of the period, *assuming actual returns and expenses*. To estimate the ongoing expenses you paid over the period, divide your account value by \$1,000, then multiply the result by the number in the first line for the class of shares you own.

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

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

### Expense ratios

	Class IA	Class IB
Net expenses for the fiscal year ended 12/31/20*	0.94%	1.19%
Total annual operating expenses for the fiscal year ended 12/31/20	1.55%	1.80%
Annualized expense ratio for the six-month period ended 6/30/21	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 4/30/23.

### Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 6/30/21		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 6/30/21	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$4.48	\$5.72	\$4.51	\$5.76
Ending value (after expenses)	\$1,006.30	\$1,004.30	\$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 6/30/21. The expense ratio may differ for each share class.

†Expenses based on actual returns are calculated by multiplying the expense ratio by the average account value for the period; then multiplying the result by the number of days in the period (181); and then dividing that result by the number of days in the year (365). Expenses based on a hypothetical 5% return are calculated by multiplying the expense ratio by the average account value for the six-month period; then multiplying the result by the number of days in the six-month period (181); and then dividing that result by the number of days in the year (365).

## Your fund's managers



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

Robert J. Schoen, Brett S. Goldstein, CFA, Jason R. Vaillancourt, CFA, and Adrian H. Chan, CFA, are also Portfolio Managers of the fund.

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.

## 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 6/30/21 (Unaudited)

### U.S. GOVERNMENT AND AGENCY

#### MORTGAGE OBLIGATIONS (26.3%)\*

	Principal amount	Value
<b>U.S. Government Agency Mortgage Obligations (26.3%)</b>		
Uniform Mortgage-Backed Securities		
4.00%, TBA, 7/1/51	\$1,000,000	\$1,064,766
3.50%, TBA, 7/1/51	1,000,000	1,052,500
3.00%, TBA, 7/1/51	1,000,000	1,042,500
2.50%, TBA, 7/1/51	2,000,000	2,068,594
2.00%, TBA, 7/1/51	1,000,000	1,010,405
	<b>6,238,765</b>	

#### Total U.S. government and agency mortgage obligations (cost \$6,248,575)

**\$6,238,765**

### COMMON STOCKS (11.5%)\*

	Shares	Value
<b>Basic materials (1.4%)</b>		
Anglo American Platinum, Ltd. (South Africa)	382	\$44,123
Anhui Conch Cement Co., Ltd. Class H (China)	6,000	31,838
Kossan Rubber Industries (Malaysia)	9,700	7,524
Kumba Iron Ore, Ltd. (South Africa)	167	7,491
Kumho Petrochemical Co., Ltd. (South Korea)	188	36,560
MMC Norilsk Nickel PJSC ADR (Russia)	1,399	47,664
POSCO (South Korea)	38	11,743
Southern Copper Corp. (Peru)	836	53,772
Vale SA ADR (Brazil)	3,862	88,092
	<b>328,807</b>	

#### Capital goods (0.3%)

Haitian International Holdings, Ltd. (China)	8,000	26,841
Hartalega Holdings Bhd (Malaysia)	4,700	8,321
Sri Trang Gloves Thailand PCL (Thailand)	31,200	40,643
	<b>75,805</b>	

#### Communication services (0.1%)

Hellenic Telecommunications Organization SA (Greece)	907	15,218
KT Corp. (South Korea)	236	6,664
	<b>21,882</b>	

#### Consumer cyclicals (0.8%)

Com7 PCL (Thailand)	8,300	18,063
Kia Corp. (South Korea)	742	59,033
Lite-On Technology Corp. (Taiwan)	7,000	14,471
NICE Information Service Co., Ltd. (South Korea)	216	4,814
OPAP SA (Greece)	1,106	16,668
Sinotruk Hong Kong, Ltd. (China)	5,500	11,787
Top Glove Corp. Bhd (Malaysia)	3,000	3,013
Xinyi Glass Holdings, Ltd. (China)	8,000	32,611
Zhongsheng Group Holdings, Ltd. (China)	4,000	33,281
	<b>193,741</b>	

#### Consumer staples (1.5%)

Ambev SA (Brazil)	10,500	36,036
Charoen Pokphand Foods PCL (Thailand)	45,100	37,290
China Feihe, Ltd. (China)	16,000	34,538
Coca-Cola Icecek AS (Turkey)	771	6,885
Indofood Sukses Makmur Tbk PT (Indonesia)	13,000	5,536
JD.com, Inc. ADR (China) †	882	70,392
Marfrig Global Foods SA (Brazil)	2,900	11,160
Vipshop Holdings, Ltd. ADR (China) †	2,691	54,035
Want Want China Holdings, Ltd. (China)	55,000	38,960
Yum China Holdings, Inc. (China)	945	62,606
	<b>357,438</b>	

### COMMON STOCKS (11.5%)\* cont.

	Shares	Value
<b>Energy (0.4%)</b>		
China Shenhua Energy Co., Ltd. (China)	24,500	\$48,026
Lukoil PJSC ADR (Russia)	425	39,364
		<b>87,390</b>

#### Financials (2.2%)

Agile Group Holdings, Ltd. (China)	20,000	25,913
Banco Bradesco SA (Brazil) †	8,470	43,816
Banco Macro SA ADR (Argentina) †	544	8,176
Banco Santander (Brasil) S.A. (Units) (Brazil)	6,187	50,379
Bursa Malaysia Bhd (Malaysia)	4,400	8,405
Chailease Holding Co., Ltd. (Taiwan)	4,720	34,304
China Merchants Bank Co., Ltd. Class H (China)	500	4,266
China Minsheng Banking Corp., Ltd. Class H (China)	43,500	20,842
CTBC Financial Holding Co., Ltd. (Taiwan)	16,000	13,035
Fubon Financial Holding Co., Ltd. (Taiwan)	4,000	10,609
Hana Financial Group, Inc. (South Korea)	1,350	55,204
Hong Leong Bank Bhd (Malaysia)	1,100	4,960
Hopson Development Holdings, Ltd. (China)	800	3,668
KB Financial Group, Inc. (South Korea)	1,177	58,320
KWG Property Holdings, Ltd. (China)	1,500	2,009
Logan Group Co., Ltd. (China)	7,000	10,476
Ping An Insurance (Group) Co. of China, Ltd. Class H (China)	8,000	78,359
Qualitas Controladora SAB de CV (Mexico)	588	2,754
RHB Bank Bhd (Malaysia)	16,300	21,202
Ruentex Development Co., Ltd. (Taiwan)	1,500	3,047
Shinhan Financial Group Co., Ltd. (South Korea)	195	7,030
TCS Group Holding PLC GDR 144A (Cyprus)	424	37,100
Tisco Financial Group PCL (Thailand)	3,400	9,388
		<b>513,262</b>

#### Health care (0.4%)

China Medical System Holdings, Ltd. (China)	13,000	34,240
CSPC Pharmaceutical Group, Ltd. (China)	24,000	34,744
Hypera SA (Brazil)	2,382	16,508
Seegene, Inc. (South Korea)	140	10,281
		<b>95,773</b>

#### Technology (4.1%)

Alibaba Group Holding, Ltd. (China) †	6,728	190,637
LG Electronics, Inc. (South Korea)	398	57,784
Meituan Dianping Class B (China) †	300	12,380
Novatek Microelectronics Corp. (Taiwan)	2,000	35,819
Parade Technologies, Ltd. (Taiwan)	1,000	49,708
Quanta Computer, Inc. (Taiwan)	8,000	25,123
Realtek Semiconductor Corp. (Taiwan)	2,000	36,249
Samsung Electro-Mechanics Co., Ltd. (South Korea)	23	3,615
Samsung Electronics Co., Ltd. (South Korea)	2,919	209,176
Taiwan Semiconductor Manufacturing Co., Ltd. ADR (Taiwan)	1,407	169,065
Tencent Holdings, Ltd. (China)	1,600	120,346
United Microelectronics Corp. (Taiwan)	32,000	60,985
		<b>970,887</b>

#### Transportation (0.3%)

COSCO SHIPPING Holdings Co., Ltd. Class H (China) †	14,500	36,529
Evergreen Marine Corp. Taiwan, Ltd. (Taiwan) †	6,000	42,423
		<b>78,952</b>

#### Utilities and power (—%)

Glow Energy PCL (Thailand) † ‡	700	—
		<b>—</b>

#### Total common stocks (cost \$1,875,114)

**\$2,723,937**

COMMODITY LINKED NOTES (10.7%)* †††	Principal amount	Value
Bank of America Corp. 144A sr. unsec. unsub. notes 1-month LIBOR less 0.13%, 2021 (Indexed to the BofA Merrill Lynch Commodity MLBX4SX6 Excess Return Strategy multiplied by 3)	\$49,000	\$54,130
Bank of America Corp. 144A sr. unsec. unsub. notes 1-month LIBOR less 0.11%, 2022 (Indexed to the BofA Merrill Lynch Commodity MLBX4SX6 Excess Return Strategy multiplied by 3)	340,000	346,734
Citigroup Global Markets Holdings, Inc. sr. notes Ser. N, 1-month USD LIBOR less 0.06%, 2022 (Indexed to the Citi Commodities F3 vs F0-4x Leveraged Index multiplied by 3)	386,000	411,821
Citigroup Global Markets Holdings, Inc. 144A sr. notes, 2021 (Indexed to the Citi Cross-Asset Trend 10% Vol Index multiplied by 3)	319,000	429,723
Citigroup Global Markets Holdings, Inc. sr. notes Ser. N, 1-month USD LIBOR less 0.05%, 2022 (Indexed to the S&P GSCI Light Energy Excess Return Index multiplied by 3)	80,000	122,182
Goldman Sachs International 144A notes zero %, 2022 (Indexed to the S&P GSCI Light Energy Excess Return Index multiplied by 3)	505,000	774,293
Citigroup Global Markets Holdings, Inc. sr. notes Ser. N, 1-month USD LIBOR less 0.06%, 2022 (Indexed to the S&P GSCI Light Energy Excess Return Index multiplied by 3)	332,000	401,000
<b>Total commodity linked notes (cost \$2,011,000)</b>		<b>\$2,539,883</b>

INVESTMENT COMPANIES (10.5%)*	Shares	Value
Communication Services Select Sector SPDR Fund	4,583	\$371,086
Consumer Staples Select Sector SPDR Fund	5,352	374,479
Financial Select Sector SPDR Fund	19,189	704,044
iShares MSCI India ETF (India) <sup>§</sup>	7,698	340,637
Materials Select Sector SPDR Fund <sup>§</sup>	8,507	700,211
<b>Total investment companies (cost \$2,091,126)</b>		<b>\$2,490,457</b>

MORTGAGE-BACKED SECURITIES (5.1%)*	Principal amount	Value
<b>Agency collateralized mortgage obligations (3.7%)</b>		
Federal Home Loan Mortgage Corporation		
REMICs IFB Ser. 4752, Class PS, IO, ((-1 x 1 Month US LIBOR) + 6.20%), 6.127%, 11/15/47	\$39,740	\$5,910
REMICs Ser. 4964, Class IA, IO, 4.50%, 3/25/50	84,159	16,699
REMICs Ser. 4193, Class PI, IO, 4.00%, 3/15/43	18,400	2,441
REMICs Ser. 4097, Class PI, IO, 3.50%, 11/15/40	8,075	35
REMICs Ser. 5082, Class IQ, IO, 3.00%, 3/25/51	207,083	25,109
REMICs Ser. 5053, Class IB, IO, 3.00%, 12/25/50	341,073	41,491
REMICs Ser. 4801, Class IG, IO, 3.00%, 6/15/48	21,226	1,794
REMICs Ser. 4134, Class PI, IO, 3.00%, 11/15/42	74,057	7,332
REMICs Ser. 4206, Class IP, IO, 3.00%, 12/15/41	30,598	2,056
Federal National Mortgage Association		
REMICs IFB Ser. 13-130, Class SD, IO, ((-1 x 1 Month US LIBOR) + 6.60%), 6.509%, 1/25/44	41,470	9,508
REMICs Ser. 18-51, Class IO, IO, 6.50%, 7/25/48	111,179	19,544
REMICs IFB Ser. 17-108, Class SA, IO, ((-1 x 1 Month US LIBOR) + 6.15%), 6.059%, 1/25/48	64,755	12,701
REMICs IFB Ser. 17-8, Class SB, IO, ((-1 x 1 Month US LIBOR) + 6.10%), 6.009%, 2/25/47	82,673	16,885
REMICs IFB Ser. 16-65, Class CS, IO, ((-1 x 1 Month US LIBOR) + 6.10%), 6.009%, 9/25/46	52,963	10,050
REMICs Ser. 16-3, Class NI, IO, 6.00%, 2/25/46	34,114	7,297
REMICs IFB Ser. 20-16, Class SG, IO, ((-1 x 1 Month US LIBOR) + 6.05%), 5.959%, 3/25/50	75,918	12,884
REMICs IFB Ser. 16-88, Class SK, IO, ((-1 x 1 Month US LIBOR) + 6.00%), 5.909%, 12/25/46	82,555	16,305

MORTGAGE-BACKED SECURITIES (5.1%)* cont.	Principal amount	Value
<b>Agency collateralized mortgage obligations cont.</b>		
Federal National Mortgage Association		
REMICs IFB Ser. 17-74, Class SA, IO, ((-1 x 1 Month US LIBOR) + 5.75%), 5.659%, 10/25/47	\$224,690	\$40,772
REMICs Ser. 16-3, Class MI, IO, 5.50%, 2/25/46	134,205	24,325
REMICs Ser. 15-30, IO, 5.50%, 5/25/45	116,343	21,524
REMICs Ser. 17-32, Class IP, IO, 4.50%, 5/25/47	60,376	12,273
REMICs Ser. 20-47, Class ID, IO, 4.00%, 7/25/50	138,353	18,181
REMICs Ser. 12-136, Class PI, IO, 3.50%, 11/25/42	11,203	611
REMICs Ser. 20-85, Class IP, IO, 3.00%, 12/25/50	259,370	37,212
REMICs Ser. 12-151, Class PI, IO, 3.00%, 1/25/43	23,200	2,242
REMICs Ser. 13-35, Class PI, IO, 3.00%, 2/25/42	51,820	1,963
REMICs Ser. 13-31, Class NI, IO, 3.00%, 6/25/41	12,473	274
Government National Mortgage Association		
IFB Ser. 10-125, Class SD, ((-1 x 1 Month US LIBOR) + 6.68%), 6.605%, 1/16/40	129,952	19,558
IFB Ser. 10-68, Class SD, IO, ((-1 x 1 Month US LIBOR) + 6.58%), 6.487%, 6/20/40	57,054	12,370
IFB Ser. 18-91, Class SJ, IO, ((-1 x 1 Month US LIBOR) + 6.25%), 6.157%, 7/20/48	78,992	12,513
IFB Ser. 18-104, Class SD, IO, ((-1 x 1 Month US LIBOR) + 6.20%), 6.107%, 8/20/48	52,814	7,790
IFB Ser. 13-129, Class SN, IO, ((-1 x 1 Month US LIBOR) + 6.15%), 6.057%, 9/20/43	13,470	2,514
IFB Ser. 20-33, Class SA, IO, ((-1 x 1 Month US LIBOR) + 6.10%), 6.007%, 3/20/50	155,843	25,066
IFB Ser. 19-121, Class DS, IO, ((-1 x 1 Month US LIBOR) + 6.10%), 6.007%, 8/20/49	64,046	9,378
IFB Ser. 16-51, Class MS, IO, ((-1 x 1 Month US LIBOR) + 6.05%), 5.957%, 4/20/46	60,576	11,629
IFB Ser. 11-17, Class S, IO, ((-1 x 1 Month US LIBOR) + 6.05%), 5.957%, 2/20/41	28,667	5,317
Ser. 14-184, Class DI, IO, 5.00%, 12/16/44	106,001	21,971
Ser. 16-150, Class I, IO, 5.00%, 11/20/46	63,352	11,085
Ser. 18-127, Class ID, IO, 5.00%, 7/20/45	28,616	4,192
Ser. 14-146, Class EI, IO, 5.00%, 10/20/44	30,284	5,539
Ser. 14-163, Class NI, IO, 5.00%, 2/20/44	21,245	3,235
Ser. 11-116, Class IB, IO, 5.00%, 10/20/40	142	12
Ser. 10-20, Class UI, IO, 5.00%, 2/20/40	20,185	3,686
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	29,140	5,436
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	21,259	3,914
Ser. 15-105, Class LI, IO, 5.00%, 10/20/39	30,869	5,600
Ser. 18-153, Class AI, IO, 4.50%, 9/16/45	163,291	25,514
Ser. 15-80, Class IA, IO, 4.50%, 6/20/45	40,619	6,870
Ser. 18-127, Class IB, IO, 4.50%, 6/20/45	44,824	4,568
Ser. 15-167, Class BI, IO, 4.50%, 4/16/45	33,509	6,437
Ser. 13-20, Class QI, IO, 4.50%, 12/16/42	34,807	4,564
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	7,719	1,277
Ser. 15-99, Class LI, IO, 4.00%, 7/20/45	9,711	833
Ser. 15-53, Class MI, IO, 4.00%, 4/16/45	40,552	7,299
Ser. 15-187, Class JI, IO, 4.00%, 3/20/45	44,279	6,039
Ser. 13-24, Class PI, IO, 4.00%, 11/20/42	17,090	2,045
Ser. 14-133, Class AI, IO, 4.00%, 10/20/36	20,285	270
Ser. 18-127, Class IE, IO, 3.50%, 1/20/46	22,851	2,203
Ser. 16-75, Class EI, IO, 3.50%, 8/20/45	22,453	1,718
Ser. 15-24, Class IA, IO, 3.50%, 2/20/45	26,880	2,554
Ser. 13-102, Class IP, IO, 3.50%, 6/20/43	4,805	92
Ser. 13-100, Class MI, IO, 3.50%, 2/20/43	9,587	572
Ser. 12-141, Class WI, IO, 3.50%, 11/20/41	4,599	72
Ser. 13-157, Class IA, IO, 3.50%, 4/20/40	22,195	622
Ser. 13-79, Class XI, IO, 3.50%, 11/20/39	21,152	982
Ser. 13-6, Class AI, IO, 3.50%, 8/20/39	65,438	5,193

<b>MORTGAGE-BACKED SECURITIES (5.1%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Agency collateralized mortgage obligations cont.</b>		
Government National Mortgage Association		
Ser. 15-124, Class NI, IO, 3.50%, 6/20/39	\$23,708	\$683
Ser. 15-96, Class NI, IO, 3.50%, 1/20/39	14,420	254
Ser. 13-23, Class IK, IO, 3.00%, 9/20/37	20,037	1,052
Ser. 20-173, Class MI, IO, 2.50%, 11/20/50	237,662	29,411
Ser. 17-H02, Class BI, IO, 2.441%, 1/20/67	108,743	8,253
Ser. 18-H05, Class AI, IO, 2.389%, 2/20/68 <b>W</b>	102,286	9,525
Ser. 17-H06, Class BI, IO, 2.366%, 2/20/67 <b>W</b>	86,442	6,681
FRB Ser. 15-H16, Class XI, IO, 2.273%, 7/20/65 <b>W</b>	69,477	5,649
Ser. 15-H20, Class CI, IO, 2.197%, 8/20/65 <b>W</b>	130,125	10,657
Ser. 15-H24, Class HI, IO, 2.057%, 9/20/65 <b>W</b>	261,590	9,990
FRB Ser. 16-H16, Class DI, IO, 2.01%, 6/20/66 <b>W</b>	69,880	5,401
Ser. 15-H25, Class BI, IO, 1.964%, 10/20/65 <b>W</b>	187,087	13,994
Ser. 15-H15, Class JI, IO, 1.951%, 6/20/65 <b>W</b>	204,151	16,250
Ser. 15-H19, Class NI, IO, 1.902%, 7/20/65 <b>W</b>	140,060	10,112
FRB Ser. 15-H11, Class CI, IO, 1.856%, 5/20/65 <b>W</b>	273,960	17,491
Ser. 16-H02, Class BI, IO, 1.854%, 11/20/65 <b>W</b>	236,604	18,999
Ser. 15-H18, Class IA, IO, 1.823%, 6/20/65 <b>W</b>	55,719	2,792
Ser. 15-H10, Class CI, IO, 1.797%, 4/20/65 <b>W</b>	119,670	8,042
Ser. 15-H26, Class GI, IO, 1.791%, 10/20/65 <b>W</b>	151,465	10,194
Ser. 16-H03, Class AI, IO, 1.758%, 1/20/66 <b>W</b>	111,491	6,949
Ser. 15-H09, Class AI, IO, 1.711%, 4/20/65 <b>W</b>	153,287	9,444
Ser. 17-H14, Class DI, IO, 1.70%, 6/20/67 <b>W</b>	220,106	11,357
Ser. 15-H09, Class BI, IO, 1.677%, 3/20/65 <b>W</b>	153,755	9,216
Ser. 14-H21, Class AI, IO, 1.667%, 10/20/64 <b>W</b>	143,446	9,143
Ser. 15-H25, Class AI, IO, 1.608%, 9/20/65 <b>W</b>	205,706	12,918
Ser. 15-H10, Class EI, IO, 1.602%, 4/20/65 <b>W</b>	74,489	2,910
Ser. 15-H24, Class BI, IO, 1.59%, 8/20/65 <b>W</b>	260,030	8,658
Ser. 11-H15, Class AI, IO, 1.528%, 6/20/61 <b>W</b>	60,017	2,638
Ser. 16-H04, Class KI, IO, 1.527%, 2/20/66 <b>W</b>	74,972	3,780
Ser. 16-H08, Class GI, IO, 1.421%, 4/20/66 <b>W</b>	150,056	6,802

**Commercial mortgage-backed securities (0.3%) 887,192**

GS Mortgage Securities Trust 144A FRB		
Ser. 14-GC24, Class D, 4.669%, 9/10/47 <b>W</b>	27,000	16,740
JPMBB Commercial Mortgage Securities Trust 144A		
FRB Ser. 13-C14, Class E, 4.723%, 8/15/46 <b>W</b>	16,000	10,109
JPMorgan Chase Commercial Mortgage Securities Trust Ser. 06-LDP9, Class AMS, 5.337%, 5/15/47		
	10,006	8,640
ML-CFC Commercial Mortgage Trust 144A FRB		
Ser. 06-4, Class XC, IO, 1.391%, 12/12/49 <b>W</b>	667	2
UBS-Barclays Commercial Mortgage Trust 144A		
Ser. 12-C2, Class F, 5.00%, 5/10/63 <b>W</b>	17,000	1,156
WF-RBS Commercial Mortgage Trust 144A		
Ser. 11-C3, Class E, 5.00%, 3/15/44 <b>W</b>	30,000	4,359
Ser. 12-C7, Class F, 4.50%, 6/15/45 <b>W</b>	100,000	21,260

**Residential mortgage-backed securities (non-agency) (1.1%) 62,266**

Citigroup Mortgage Loan Trust, Inc. FRB		
Ser. 07-AR5, Class 1A1A, 2.887%, 4/25/37 <b>W</b>	23,720	23,702
Countrywide Home Loans Mortgage Pass-Through Trust FRB Ser. 05-3, Class 1A1, (1 Month US LIBOR + 0.62%), 0.712%, 4/25/35		
	5,895	5,122
Federal Home Loan Mortgage Corporation 144A		
Seasoned Credit Risk Transfer Trust Ser. 19-4, Class M, 4.50%, 2/25/59 <b>W</b>	29,000	30,428
Structured Agency Credit Risk Trust REMICs FRB		
Ser. 20-HQA2, Class M2, (1 Month US LIBOR + 3.10%), 3.192%, 3/25/50	17,000	17,254

<b>MORTGAGE-BACKED SECURITIES (5.1%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Residential mortgage-backed securities (non-agency) cont.</b>		
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C02, Class 1B, (1 Month US LIBOR + 12.25%), 12.342%, 9/25/28	\$59,602	\$74,151
Connecticut Avenue Securities FRB Ser. 15-C04, Class 1M2, (1 Month US LIBOR + 5.70%), 5.792%, 4/25/28	11,114	11,774
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2B1, (1 Month US LIBOR + 5.50%), 5.592%, 9/25/29	10,000	10,873
Connecticut Avenue Securities FRB Ser. 15-C02, Class 2M2, (1 Month US LIBOR + 4.00%), 4.092%, 5/25/25	607	613
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2M2, (1 Month US LIBOR + 3.65%), 3.742%, 9/25/29	30,948	32,043
Connecticut Avenue Securities FRB Ser. 17-C03, Class 1M2, (1 Month US LIBOR + 3.00%), 3.092%, 10/25/29	14,262	14,700
Connecticut Avenue Securities FRB Ser. 17-C06, Class 2M2, (1 Month US LIBOR + 2.80%), 2.892%, 2/25/30	6,106	6,240
Connecticut Avenue Securities FRB Ser. 18-C05, Class 1M2, (1 Month US LIBOR + 2.35%), 2.442%, 1/25/31	7,751	7,841
Federal National Mortgage Association 144A		
Connecticut Avenue Securities Trust FRB Ser. 20-R01, Class 1B1, (1 Month US LIBOR + 3.25%), 3.342%, 1/25/40	10,000	10,021
WaMu Mortgage Pass-Through Certificates Trust		
FRB Ser. 04-AR12, Class A2B, (1 Month US LIBOR + 0.92%), 1.012%, 10/25/44	11,639	11,445

**Total mortgage-backed securities (cost \$1,392,236) \$1,205,665**

<b>WARRANTS (1.3%)* †</b>	<b>Expiration date</b>	<b>Strike price</b>	<b>Warrants</b>	<b>Value</b>
Bank of Shanghai Co., Ltd. (China)	12/30/21	\$0.00	7,100	\$9,017
Focus Media Information Technology Co., Ltd. (China)	4/12/23	0.00	2,300	3,352
Foshan Haitian Flavouring & Food Co., Ltd. (China)	5/11/22	0.00	910	18,173
Frontken Corp. Bhd (Malaysia)	5/3/26	0.00	1,650	111
Jiangsu Hengli Hydraulic Co., Ltd. 144A Class A (China)	3/23/22	0.00	1,300	17,298
Jiangsu Hengrui Medicine Co., Ltd. (China)	4/12/22	0.00	620	6,526
Maxscend Microelectronics Co., Ltd. 144A (China)	7/29/22	0.00	300	24,972
Offcn Education Technology Co., Ltd. (China)	4/12/22	0.00	5,600	18,117
RiseSun Real Estate Development Co., Ltd. 144A Class A (China)	11/2/21	0.00	19,000	16,596

<b>WARRANTS (1.3%)* †</b>	<b>Expiration date</b>	<b>Strike price</b>	<b>Warrants</b>	<b>Value</b>
Sany Heavy Industry Co., Ltd. 144A Class A (China)	1/17/22	\$0.00	11,500	\$51,774
Seazen Holdings Co., Ltd. (China)	6/3/22	0.00	1,700	10,952
Shaanxi Coal Industry Co., Ltd. 144A (China)	7/29/22	0.00	5,700	10,460
Shandong Buchang Pharmaceuticals Co., Ltd. 144A Class A, (China)	12/2/21	0.00	3,340	11,633
Shenzhen Mindray Bio-Medical Electronics Co., Ltd. (China)	12/10/21	0.00	700	52,042
Suofeiya Home Collection 144A (China)	6/10/22	0.00	5,400	20,238
Youngor Group Co., Ltd. 144A (China)	7/29/22	0.00	34,700	35,414
Zhuzhou Kibing Group Co., Ltd. 144A (China)	7/29/22	0.00	3,800	10,922
<b>Total warrants (cost \$314,507)</b>				<b>\$317,597</b>

<b>FOREIGN GOVERNMENT AND AGENCY BONDS AND NOTES (0.6%)*</b>	<b>Principal amount</b>	<b>Value</b>
Buenos Aires (Province of) 144A sr. unsec. unsub. notes 10.875%, 1/26/22 (Argentina) (In default) †	\$33,333	\$16,403
Mexico (Government of) sr. unsec. bonds 5.55%, 1/21/45 (Mexico)	44,000	53,130
Uruguay (Oriental Republic of) sr. unsec. unsub. notes 4.375%, 10/27/27 (Uruguay)	70,000	80,325
Venezuela (Republic of) sr. unsec. notes 7.65%, 4/21/25 (Venezuela) (In default) †	12,000	1,230
<b>Total foreign government and agency bonds and notes (cost \$156,946)</b>		<b>\$151,088</b>

<b>ASSET-BACKED SECURITIES (0.6%)*</b>	<b>Principal amount</b>	<b>Value</b>
1Sharpe Mortgage Trust 144A FRB Ser. 20-1, Class NOTE, (BBA LIBOR USD 3 Month + 2.90%), 3.047%, 7/25/24	\$25,000	\$25,000
Mello Warehouse Securitization Trust 144A FRB Ser. 20-1, Class A, (1 Month US LIBOR + 0.90%), 0.992%, 10/25/53	25,000	25,000
FRB Ser. 20-2, Class A, (1 Month US LIBOR + 0.80%), 0.892%, 11/25/53	25,000	25,000
Station Place Securitization Trust 144A FRB Ser. 20-15, Class A, (1 Month US LIBOR + 1.37%), 1.461%, 12/10/21	25,000	25,000
FRB Ser. 21-6, Class A, (1 Month US LIBOR + 0.80%), 0.891%, 4/25/22	25,000	25,000
FRB Ser. 21-10, Class A, (1 Month US LIBOR + 0.75%), 0.854%, 8/8/22	25,000	25,000
<b>Total asset-backed securities (cost \$150,000)</b>		<b>\$150,000</b>

<b>CORPORATE BONDS AND NOTES (0.4%)*</b>	<b>Principal amount</b>	<b>Value</b>
Enbridge, Inc. sr. unsec. unsub. bonds 4.25%, 12/1/26 (Canada)	\$20,000	\$22,543
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 8.75%, 5/23/26 (Brazil)	10,000	12,845
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 6.25%, 3/17/24 (Brazil)	21,000	23,704

<b>CORPORATE BONDS AND NOTES (0.4%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 5.999%, 1/27/28 (Brazil)	\$15,000	\$17,231
Petroleos de Venezuela SA company guaranty sr. unsec. unsub. notes 5.375%, 4/12/27 (Venezuela) (In default) †	26,000	1,073
Petroleos Mexicanos company guaranty sr. unsec. notes 6.375%, 1/23/45 (Mexico)	10,000	8,600
Petroleos Mexicanos company guaranty sr. unsec. unsub. notes 6.50%, 3/13/27 (Mexico)	18,000	19,195
<b>Total corporate bonds and notes (cost \$104,946)</b>		<b>\$105,191</b>

<b>PURCHASED OPTIONS OUTSTANDING (0.0%)*</b>	<b>Expiration date/ strike price</b>	<b>Notional amount</b>	<b>Contract amount</b>	<b>Value</b>
<b>Goldman Sachs International</b>				
EUR/USD (Put)	Aug-21/\$1.18	1,319,384	EUR 1,112,700	\$7,602
<b>Morgan Stanley &amp; Co. International PLC</b>				
GBP/USD (Put)	Aug-21/1.37	658,036	GBP 475,700	3,862
<b>Total purchased options outstanding (cost \$7,858)</b>				<b>\$11,464</b>

<b>SHORT-TERM INVESTMENTS (63.6%)*</b>	<b>Principal amount/ shares</b>	<b>Value</b>
Putnam Cash Collateral Pool, LLC 0.09% <sup>d</sup>	Shares 704,750	704,750
Putnam Short Term Investment Fund Class P 0.09% <sup>L</sup>	Shares 9,910,234	9,910,234
Barclays Bank PLC CCP asset backed commercial paper 0.170%, 7/22/21	\$250,000	\$249,986
FMS Wertmanagement commercial paper 0.100%, 10/4/21	250,000	249,931
Lloyds Bank PLC commercial paper 0.140%, 7/1/21	250,000	250,000
Manhattan Asset Funding Co., LLC asset backed commercial paper 0.140%, 7/1/21	250,000	249,999
Matchpoint Finance PLC asset backed commercial paper 0.110%, 9/20/21	250,000	249,934
Mitsubishi UFJ Trust & Banking Corp./NY commercial paper 0.200%, 8/5/21	250,000	249,980
NRW.Bank commercial paper 0.090%, 7/26/21	250,000	249,986
Old Line Funding, LLC asset backed commercial paper 0.040%, 7/26/21	250,000	249,984
Skandinaviska Enskilda Banken AB commercial paper 0.070%, 9/8/21	250,000	249,958
Societe Generale SA commercial paper 0.110%, 8/24/21	250,000	249,971
Sumitomo Mitsui Trust Bank Ltd. commercial paper 0.100%, 9/2/21	250,000	249,969
Swedbank AB commercial paper 0.090%, 9/7/21	250,000	249,960
Victory Receivables Corp. asset backed commercial paper 0.070%, 7/20/21	250,000	249,988
U.S. Treasury Bills 0.026%, 10/14/21 # Δ \$	600,000	599,917
U.S. Treasury Bills 0.023%, 7/20/21 # Δ \$	200,000	199,995
U.S. Treasury Bills 0.024%, 8/5/21 # Δ \$	200,000	199,991
U.S. Treasury Cash Management Bills 0.028%, 10/5/21 Δ \$	100,000	99,988
U.S. Treasury Cash Management Bills 0.023%, 9/28/21 # Δ \$	100,000	99,990
<b>Total short-term investments (cost \$15,064,525)</b>		<b>\$15,064,511</b>
<b>Total investments (cost \$29,416,833)</b>		<b>\$30,998,558</b>

### Key to holding's currency abbreviations

AUD	Australian Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
EUR	Euro
GBP	British Pound
NOK	Norwegian Krone
NZD	New Zealand Dollar
SEK	Swedish Krona

### Key to holding's abbreviations

ADR	American Depository 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.
GDR	Global Depository Receipts: represents ownership of foreign securities on deposit with a custodian bank
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
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, 2021 through June 30 2021 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect 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 \$23,690,847.

††† 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 \$313,946 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

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 \$607,939 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

§ 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 \$232,981 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

d 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.

F This security is valued by Putnam Management at fair value following procedures approved by the Trustees. Securities are classified as Level 3 for ASC 820 based on the securities' valuation inputs (Note 1).

L Affiliated company (Note 5). The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.

S Security on loan, in part or in entirety, at the close of the reporting period (Note 1).

W 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 \$9,867,288 to cover certain derivative contracts and delayed delivery 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 6/30/21 (aggregate face value \$14,654,870) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>						
	British Pound	Buy	9/15/21	\$39,569	\$40,465	\$(896)
	Canadian Dollar	Sell	7/21/21	125,362	125,980	618
	Euro	Buy	9/15/21	278,957	289,780	(10,823)
	Hong Kong Dollar	Sell	8/18/21	11,567	11,564	(3)
	Japanese Yen	Sell	8/18/21	65,675	66,843	1,168
	Swedish Krona	Buy	9/15/21	44,573	44,951	(378)
<b>Barclays Bank PLC</b>						
	Australian Dollar	Buy	7/21/21	130,654	135,140	(4,486)
	British Pound	Buy	9/15/21	4,289	5,872	(1,583)
	Canadian Dollar	Sell	7/21/21	52,275	49,061	(3,214)
	Euro	Sell	9/15/21	195,947	201,477	5,530
	Japanese Yen	Buy	8/18/21	91,043	92,665	(1,622)
	Swedish Krona	Buy	9/15/21	79,442	82,272	(2,830)
<b>Citibank, N.A.</b>						
	Australian Dollar	Buy	7/21/21	58,577	60,678	(2,101)
	British Pound	Buy	9/15/21	51,052	52,197	(1,145)

## FORWARD CURRENCY CONTRACTS at 6/30/21 (aggregate face value \$14,654,870) (Unaudited) cont.

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/(depreciation)
<b>Citibank, N.A. cont.</b>						
	Canadian Dollar	Sell	7/21/21	\$1,856	\$2,433	\$577
	Euro	Sell	9/15/21	43,346	44,576	1,230
	Japanese Yen	Sell	8/18/21	84,589	86,098	1,509
	New Zealand Dollar	Sell	7/21/21	32,013	32,286	273
<b>Credit Suisse International</b>						
	Australian Dollar	Sell	7/21/21	39,901	39,872	(29)
	British Pound	Sell	9/15/21	153,295	156,658	3,363
	Canadian Dollar	Sell	7/21/21	59,616	61,223	1,607
	Euro	Sell	9/15/21	106,405	109,418	3,013
<b>Goldman Sachs International</b>						
	Australian Dollar	Buy	7/21/21	113,178	118,244	(5,066)
	British Pound	Buy	9/15/21	883,661	905,400	(21,739)
	Canadian Dollar	Sell	7/21/21	48,967	66,465	17,498
	Euro	Buy	9/15/21	514,330	519,899	(5,569)
	Japanese Yen	Sell	8/18/21	466,340	472,429	6,089
	New Zealand Dollar	Sell	7/21/21	424,488	429,842	5,354
	Norwegian Krone	Buy	9/15/21	266,478	272,331	(5,853)
	Swedish Krona	Buy	9/15/21	347,969	360,428	(12,459)
	Swiss Franc	Sell	9/15/21	137,313	140,202	2,889
<b>HSBC Bank USA, National Association</b>						
	Australian Dollar	Buy	7/21/21	47,401	50,604	(3,203)
	British Pound	Buy	9/15/21	47,870	48,608	(738)
	Canadian Dollar	Buy	7/21/21	195,303	193,568	1,735
	Euro	Buy	9/15/21	178,727	183,785	(5,058)
	Hong Kong Dollar	Sell	8/18/21	29,548	29,541	(7)
	Japanese Yen	Buy	8/18/21	4,199	4,925	(726)
	New Zealand Dollar	Buy	7/21/21	39,213	40,440	(1,227)
	Swiss Franc	Buy	9/15/21	36,494	36,491	3
<b>JPMorgan Chase Bank N.A.</b>						
	Australian Dollar	Buy	7/21/21	78,152	80,570	(2,418)
	British Pound	Buy	9/15/21	185,255	189,344	(4,089)
	Canadian Dollar	Sell	7/21/21	100,676	97,855	(2,821)
	Euro	Sell	9/15/21	416,000	423,532	7,532
	Japanese Yen	Sell	8/18/21	171,956	174,402	2,446
	New Zealand Dollar	Sell	7/21/21	31,943	32,208	265
	Norwegian Krone	Buy	9/15/21	201,673	209,028	(7,355)
	Swedish Krona	Sell	9/15/21	80,576	79,875	(701)
	Swiss Franc	Sell	9/15/21	105,584	110,632	5,048
<b>Morgan Stanley &amp; Co. International PLC</b>						
	Australian Dollar	Sell	7/21/21	39,751	40,543	792
	British Pound	Buy	9/15/21	761,080	774,418	(13,338)
	Canadian Dollar	Sell	7/21/21	16,941	25,072	8,131
	Euro	Buy	9/15/21	103,317	109,174	(5,857)
	Hong Kong Dollar	Sell	8/18/21	29,806	29,798	(8)
	Japanese Yen	Buy	8/18/21	261,626	267,471	(5,845)
	New Zealand Dollar	Sell	7/21/21	106,664	108,567	1,903
	Norwegian Krone	Buy	9/15/21	109,730	112,303	(2,573)
	Swedish Krona	Buy	9/15/21	351,862	364,447	(12,585)
	Swiss Franc	Sell	9/15/21	98,328	101,361	3,033
<b>NatWest Markets PLC</b>						
	Australian Dollar	Sell	7/21/21	37,951	37,886	(65)
	British Pound	Buy	9/15/21	119,675	122,382	(2,707)

## FORWARD CURRENCY CONTRACTS at 6/30/21 (aggregate face value \$14,654,870) (Unaudited) cont.

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
<b>NatWest Markets PLC cont.</b>						
	Canadian Dollar	Sell	7/21/21	\$109,066	\$108,717	\$(349)
	Euro	Sell	9/15/21	124,574	123,230	(1,344)
	Japanese Yen	Sell	8/18/21	41,757	41,940	183
	New Zealand Dollar	Sell	7/21/21	137,488	135,273	(2,215)
	Swedish Krona	Buy	9/15/21	40,142	41,574	(1,432)
<b>State Street Bank and Trust Co.</b>						
	Australian Dollar	Buy	7/21/21	76,652	82,704	(6,052)
	British Pound	Buy	9/15/21	17,433	22,267	(4,834)
	Canadian Dollar	Sell	7/21/21	138,107	149,023	10,916
	Euro	Buy	9/15/21	237,986	249,500	(11,514)
	Hong Kong Dollar	Sell	8/18/21	252,047	251,968	(79)
	Japanese Yen	Sell	8/18/21	1,210,730	1,229,925	19,195
	New Zealand Dollar	Sell	7/21/21	242,544	243,694	1,150
	Norwegian Krone	Buy	9/15/21	179,878	180,990	(1,112)
	Swedish Krona	Buy	9/15/21	33,898	35,098	(1,200)
	Swiss Franc	Sell	9/15/21	94,213	100,575	6,362
<b>Toronto-Dominion Bank</b>						
	Australian Dollar	Buy	7/21/21	39,151	40,282	(1,131)
	British Pound	Sell	9/15/21	108,746	111,300	2,554
	Canadian Dollar	Sell	7/21/21	36,704	38,862	2,158
	Euro	Sell	9/15/21	103,792	106,730	2,938
	Hong Kong Dollar	Sell	8/18/21	36,182	36,171	(11)
	Japanese Yen	Buy	8/18/21	208,267	212,174	(3,907)
	Norwegian Krone	Buy	9/15/21	203,079	211,228	(8,149)
	Swedish Krona	Buy	9/15/21	9,296	9,628	(332)
<b>UBSAG</b>						
	Australian Dollar	Buy	7/21/21	257,558	265,933	(8,375)
	British Pound	Sell	9/15/21	46,901	47,851	950
	Canadian Dollar	Sell	7/21/21	29,364	31,052	1,688
	Euro	Buy	9/15/21	406,500	417,935	(11,435)
	Hong Kong Dollar	Sell	8/18/21	10,974	10,977	3
	Japanese Yen	Buy	8/18/21	524,264	535,404	(11,140)
	New Zealand Dollar	Sell	7/21/21	186,347	186,971	624
	Norwegian Krone	Buy	9/15/21	15,103	15,600	(497)
	Swedish Krona	Buy	9/15/21	81,137	84,057	(2,920)
<b>WestPac Banking Corp.</b>						
	British Pound	Sell	9/15/21	18,677	18,995	318
	Canadian Dollar	Sell	7/21/21	9,035	8,907	(128)
	Euro	Sell	9/15/21	13,538	13,922	384
	Japanese Yen	Sell	8/18/21	11,670	11,880	210
	New Zealand Dollar	Sell	7/21/21	86,254	86,954	700
<b>Unrealized appreciation</b>						<b>131,939</b>
<b>Unrealized (depreciation)</b>						<b>(229,273)</b>
<b>Total</b>						<b>\$(97,334)</b>

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

<b>FUTURES CONTRACTS OUTSTANDING at 6/30/21 (Unaudited)</b>	<b>Number of contracts</b>	<b>Notional amount</b>	<b>Value</b>	<b>Expiration date</b>	<b>Unrealized appreciation/ (depreciation)</b>
MSCI EAFE Index (Long)	2	\$232,631	\$230,410	Sep-21	\$(5,929)
MSCI Emerging Markets Index (Long)	11	757,432	750,640	Sep-21	(3,053)
NASDAQ 100 Index E-Mini (Long)	2	582,192	581,960	Sep-21	23,878
Russell 2000 Index E-Mini (Long)	3	346,582	346,170	Sep-21	295
S&P 500 Index E-Mini (Short)	10	2,145,900	2,144,300	Sep-21	(29,879)
U.S. Treasury Note 2 yr (Short)	20	4,406,406	4,406,406	Sep-21	7,603
U.S. Treasury Note 5 yr (Short)	34	4,196,609	4,196,609	Sep-21	12,673
U.S. Treasury Note 10 yr (Long)	85	11,262,500	11,262,500	Sep-21	42,403
U.S. Treasury Note Ultra 10 yr (Long)	14	2,060,844	2,060,844	Sep-21	30,156
<b>Unrealized appreciation</b>					<b>117,008</b>
<b>Unrealized (depreciation)</b>					<b>(38,861)</b>
<b>Total</b>					<b>\$78,147</b>

<b>WRITTEN OPTIONS OUTSTANDING at 6/30/21 (premiums \$7,847) (Unaudited)</b>	<b>Expiration date/strike price</b>	<b>Notional amount</b>	<b>Contract amount</b>	<b>Value</b>
<b>Counterparty</b>				
<b>Goldman Sachs International</b>				
EUR/USD (Call)	Aug-21/\$1.21	\$1,319,384	EUR \$1,112,700	\$2,613
<b>Morgan Stanley &amp; Co. International PLC</b>				
GBP/USD (Call)	Aug-21/1.42	658,036	GBP 475,700	1,179
<b>Total</b>				<b>\$3,792</b>

<b>FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 6/30/21 (Unaudited)</b>	<b>Expiration date/strike</b>	<b>Contract amount</b>	<b>Premium receivable/ (payable)</b>	<b>Unrealized appreciation/ (depreciation)</b>
<b>Counterparty</b>				
<b>Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date</b>				
<b>Bank of America N.A.</b>				
(1.275)/3 month USD-LIBOR-BBA/Mar-50 (Purchased)	Mar-30/1.275	\$4,900	\$(638)	\$254
1.275/3 month USD-LIBOR-BBA/Mar-50 (Purchased)	Mar-30/1.275	4,900	(638)	(277)
(2.3075)/3 month USD-LIBOR-BBA/Jun-52 (Purchased)	Jun-22/2.3075	3,700	(84)	6
2.3075/3 month USD-LIBOR-BBA/Jun-52 (Purchased)	Jun-22/2.3075	3,700	(1,740)	(1,216)
<b>Goldman Sachs International</b>				
2.8175/3 month USD-LIBOR-BBA/Mar-47 (Purchased)	Mar-27/2.8175	1,700	(215)	99
(2.8175)/3 month USD-LIBOR-BBA/Mar-47 (Purchased)	Mar-27/2.8175	1,700	(215)	(122)
<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)	979
(2.8325)/3 month USD-LIBOR-BBA/Feb-52 (Purchased)	Feb-22/2.8325	8,600	(1,201)	(1,169)
<b>Unrealized appreciation</b>				<b>1,338</b>
<b>Unrealized (depreciation)</b>				<b>(2,784)</b>
<b>Total</b>				<b>\$(1,446)</b>

<b>TBA SALE COMMITMENTS OUTSTANDING at 6/30/21 (proceeds receivable \$4,082,578) (Unaudited)</b>	<b>Principal amount</b>	<b>Settlement date</b>	<b>Value</b>
Uniform Mortgage-Backed Securities, 2.50%, 7/1/51	\$2,000,000	7/14/21	\$2,068,594
Uniform Mortgage-Backed Securities, 2.00%, 8/1/51	1,000,000	8/12/21	1,008,413
Uniform Mortgage-Backed Securities, 2.00%, 7/1/51	1,000,000	7/14/21	1,010,405
<b>Total</b>			<b>\$4,087,412</b>

**CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 6/30/21 (Unaudited)**

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)	
\$4,300	\$307	\$—	12/7/30	2.184% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	\$(313)	
4,900	112 <sup>E</sup>	—	6/5/29	3 month USD-LIBOR-BBA — Quarterly	2.2225% — Semiannually	112	
400	47 <sup>E</sup>	—	6/22/52	2.3075% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(47)	
8,600	1,006 <sup>E</sup>	—	1/27/47	3 month USD-LIBOR-BBA — Quarterly	1.27% — Semiannually	(1,006)	
700	76 <sup>E</sup>	—	3/7/50	1.275% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	76	
2,000	288	5	10/16/50	3 month USD-LIBOR-BBA — Quarterly	1.16% — Semiannually	(279)	
13,000	49	—	2/22/31	1.3659% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(12)	
9,000	15	—	2/24/31	1.4255% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(59)	
12,000	124	—	3/2/31	1.51882% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(183)	
174,500	239	(2)	4/1/26	0.94375% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(563)	
1,221,000	17,656	1,451	4/20/31	1.57% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(19,328)	
2,228,000	3,988 <sup>E</sup>	4,223	9/15/23	3 month USD-LIBOR-BBA — Quarterly	0.30% — Semiannually	235	
542,000	1,870 <sup>E</sup>	(2,124)	9/15/26	0.95% — Semiannually	3 month USD-LIBOR-BBA — Quarterly	(254)	
60,000	1,043 <sup>E</sup>	(917)	9/15/31	3 month USD-LIBOR-BBA — Quarterly	1.65% — Semiannually	125	
142,000	7,838 <sup>E</sup>	(7,404)	9/15/51	3 month USD-LIBOR-BBA — Quarterly	2.00% — Semiannually	435	
235,000	5,313 <sup>E</sup>	4,654	9/15/31	1.45% — Annually	Secured Overnight Financing Rate — Annually	(660)	
AUD	391,000	2,284 <sup>E</sup>	2,031	9/15/31	6 month AUD-BBR-BBSW — Semiannually	1.55% — Semiannually	(254)
CAD	416,000	1,272 <sup>E</sup>	1,468	9/15/31	3 month CAD-BA-CDOR — Semiannually	1.84% — Semiannually	197
CHF	20,000	193 <sup>E</sup>	194	9/15/31	0.05% plus 6 month CHF-LIBOR-BBA — Semiannually	—	1
EUR	126,000	1,204 <sup>E</sup>	(634)	9/15/31	0.05% — Annually	6 month EUR-EURIBOR-REUTERS — Semiannually	570
GBP	149,000	4,879 <sup>E</sup>	3,377	9/15/31	0.975% — Annually	Sterling Overnight Index Average — Annually	(1,502)
NOK	1,390,000	47 <sup>E</sup>	410	9/15/31	6 month NOK-NIBOR-NIBR — Semiannually	1.70% — Annually	363
NZD	198,000	1,089 <sup>E</sup>	220	9/15/31	3 month NZD-BBR-FRA — Quarterly	1.83% — Semiannually	(868)
SEK	1,146,000	187 <sup>E</sup>	7	9/15/31	0.77% — Annually	3 month SEK-STIBOR-SIDE — Quarterly	195
<b>Total</b>		<b>\$6,959</b>				<b>\$(23,019)</b>	

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

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$5,283,040	\$5,388,158	\$—	6/20/23	(3 month USD-LIBOR-BBA plus 0.10%) — Quarterly	A basket (MLFCF15) of common stocks — Quarterly*	\$105,562
36,322	36,165	—	6/20/23	(1 month USD-LIBOR-BBA plus 0.10%) — Monthly	Al Rajhi Bank — Monthly	(156)
5,294,056	5,387,451	—	6/20/23	3 month USD-LIBOR-BBA minus 0.07% — Quarterly	Russell 1000 Total Return Index — Quarterly	(93,315)
607	606	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	7
607	606	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	7
<b>Barclays Bank PLC</b>						
1,852,891	1,838,575	—	5/26/22	(0.10%) — Monthly	Buraschi Barclays Adaptive Trend Strategy EX-Commodities ER — Monthly	(14,321)
1,470	1,473	—	1/12/43	(3.50%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	(20)
280	280	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	3
1,115	1,075	—	1/12/38	6.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 6.50% 30 year Fannie Mae pools — Monthly	(26)
<b>Citibank, N.A.</b>						
389	389	—	1/12/41	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	5
18,387	17,642	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	ACI Worldwide, Inc. — Monthly	742
76,852	86,322	—	7/5/22	1 month USD-LIBOR-BBA minus 1.30% — Monthly	Tesla, Inc. — Monthly	(9,483)
70,162	68,813	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Woodward, Inc. — Monthly	1,338
107,255	99,453	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Bausch Health Cos, Inc. — Monthly	8,017
28,759	26,384	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Dycom Industries, Inc. — Monthly	2,371
13,116	11,852	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Patterson Companies, Inc. — Monthly	1,362
3,288	3,661	—	7/5/22	1 month USD-LIBOR-BBA minus 1.25% — Monthly	Ebix, Inc. — Monthly	(380)
10,407	10,529	—	7/5/22	1 month USD-LIBOR-BBA minus 1.85% — Monthly	B&G Foods, Inc. — Monthly	(290)
40,587	44,135	—	7/5/22	1 month USD-LIBOR-BBA minus 0.65% — Monthly	Restoration Hardware Holdings, Inc. — Monthly	(3,554)

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$24,950	\$26,050	\$—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Prestige Brands Holdings, Inc. — Monthly	\$(1,104)
97,244	94,719	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Ralph Lauren Corp. — Monthly	1,955
28,368	27,164	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	AAR Corp. — Monthly	1,205
123,381	123,603	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Citrix Systems, Inc. — Monthly	(557)
41,459	32,126	—	7/5/22	1 month USD-LIBOR-BBA minus 0.80% — Monthly	Blackberry, Ltd. — Monthly	9,326
23,571	28,169	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Everbridge, Inc. — Monthly	(4,602)
66,080	68,305	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Elanco Animal Health, Inc. — Monthly	(2,236)
6,206	6,119	—	7/5/22	1 month USD-LIBOR-BBA minus 3.25% — Monthly	Zynex, Inc. — Monthly	86
36,550	35,028	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Store Capital Corp. — Monthly	1,678
10,551	11,476	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	TPI Composites, Inc. — Monthly	(926)
9,932	10,252	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	WD-40 Co. — Monthly	(295)
11,038	11,488	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Plug Power, Inc. — Monthly	(452)
30,417	27,968	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Century Link, Inc. — Monthly	1,997
29,482	29,016	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Columbia Sportswear Co — Monthly	461
63,020	65,887	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Itron, Inc. — Monthly	(2,877)
93,085	103,000	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Intuitive Surgical, Inc. — Monthly	(9,930)
82,045	80,848	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Penumbra, Inc. — Monthly	1,184
71,252	73,894	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Fair Isaac Corp. — Monthly	(2,653)
51,327	51,383	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	The Hershey Co. — Monthly	(302)
34,975	34,598	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Arcosa, Inc — Monthly	371

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$78,897	\$78,030	\$—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	L3Harris Technologies Inc — Monthly	\$485
30,015	27,549	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	PingIdentity Holding Corp. — Monthly	2,461
35,865	34,142	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	First Citizens Bcschs-Cl A — Monthly	1,717
25,085	25,072	—	7/5/22	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Parsons Corp — Monthly	9
<b>Credit Suisse International</b>						
3,542	3,549	—	1/12/43	3.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	47
301	301	—	1/12/43	3.50% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	4
3,633	3,391	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(195)
1,686	1,573	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(90)
1,883	1,881	—	1/12/41	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(22)
1,682,179	1,669,844	—	11/2/21	1 month USD-LIBOR-BBA minus 0.35% — Monthly	MSCI Emerging Markets TR Net USD — Monthly	12,002
45,263	44,932	—	11/2/21	1 month USD-LIBOR-BBA minus 0.35% — Monthly	MSCI Daily TR Net Emerging Markets USD — Monthly	323
<b>Goldman Sachs International</b>						
1,686	1,573	—	1/12/45	4.00% (1 month USD-LIBOR) — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	(90)
2,372	2,377	—	1/12/43	(3.50%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.50% 30 year Fannie Mae pools — Monthly	(32)
1,973	1,981	—	1/12/44	(3.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 3.00% 30 year Fannie Mae pools — Monthly	(31)
27,688	28,042	—	12/15/25	1 month USD-LIBOR-BBA minus 0.35% — Monthly	Open Text Corp. — Monthly	(371)
4,994	4,953	—	12/15/25	1 month USD-LIBOR-BBA minus 0.50% — Monthly	Sillajen Inc. — Monthly	40
233,780	235,217	—	12/15/25	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Enhanced 3x Excess Return Strategy — Monthly ††	1,396
154,599	156,199	—	12/15/25	(0.30%) — Monthly	Goldman Sachs Volatility of Volatility Carry Excess Return Strategy — Monthly †	1,582

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$415,782	\$422,451	\$—	12/15/25	(0.30%) — Monthly	Goldman Sachs Volatility of Volatility Carry Series 69 Excess Return Strategy — Monthly †	\$7,834
765,886	774,692	—	12/15/25	(0.45%) — Monthly	Goldman Sachs Volatility Carry US Series 85 Excess Return Strategy — Monthly ††	8,806
4,570,251	4,448,898	—	12/15/25	1 month USD-LIBOR- BBA minus 0.15% — Monthly	A basket (GSGLPWDS) of common stocks — Monthly*	116,283
4,626,726	4,530,820	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.50%) — Monthly	A basket (GSGLPWDL) of common stocks — Monthly*	(88,894)
19,704	19,698	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Sumitomo Dajnippon Pharma Co. — Monthly	(6)
12,500	12,191	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.30%) — Monthly	CSL Ltd. — Monthly	(309)
12,187	12,051	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Taisho Pharmaceutical Holdin — Monthly	(137)
5,471	5,421	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Shionogi & Co Ltd — Monthly	(50)
9,071	8,556	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Eisai Co Ltd. — Monthly	(516)
4,610	4,423	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Astellas Pharma Inc. — Monthly	(187)
1,180	1,142	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Dajichi Sankyo Co Ltd. — Monthly	(37)
7,679	7,533	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Hisamitsu Pharmaceutical Co — Monthly	(146)
7,338	7,264	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.40%) — Monthly	Takeda Pharmaceutical Co Ltd — Monthly	(74)
19,124	19,026	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	Glaxosmithkline Plc — Monthly	(99)
5,013	4,854	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	Galapagos NV — Monthly	(159)
3,589	3,554	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	Ucb Sa — Monthly	(34)
15,173	14,998	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	Bayer AG- Reg — Monthly	(175)
14,201	14,173	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	Astrazeneca Plc — Monthly	(28)
4,294	4,295	—	12/15/25	(1 month USD-LIBOR- BBA plus 0.35%) — Monthly	H Lundbeck A/S — Monthly	1

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$24,801	\$25,275	\$—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Ipsen — Monthly	\$474
8,298	8,283	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Vifor Pharma AG — Monthly	(15)
18,598	18,335	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Sanofi — Monthly	(263)
5,341	5,346	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Hikma Pharmaceuticals PLC — Monthly	5
697	688	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Orion Oyj-Class B — Monthly	(9)
15,841	15,609	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Sartorius Stedim Biotech — Monthly	(232)
2,724	2,708	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Grifols Sa — Monthly	(16)
33,309	33,554	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Merck Kgaa — Monthly	244
866	857	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Recordati Industria Chemica — Monthly	(9)
1,755	1,732	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Novartis Ag-Reg — Monthly	(23)
3,148	3,086	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Eurofins Scientific — Monthly	(62)
10,042	10,099	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Eli Lilly & Co. — Monthly	57
10,928	10,969	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Amgen Inc — Monthly	41
11,347	10,959	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Teva Pharmaceutical-Sp Adr — Monthly	(388)
34,542	34,634	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Mettler-Toledo International — Monthly	91
1,628	1,676	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Regeneron Pharmaceuticals — Monthly	48
28,791	28,755	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Thermo Fisher Scientific Inc — Monthly	(36)
10,629	10,811	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Gilead Sciences Inc — Monthly	182
25,964	25,903	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Alexion Pharmaceuticals Inc — Monthly	(61)
16,781	16,676	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Viatri, Inc. — Monthly	(105)

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>						
\$26,483	\$26,027	\$—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Illumina Inc — Monthly	\$(456)
20,010	20,098	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Johnson & Johnson — Monthly	88
16,632	16,460	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Perrigo Co Plc — Monthly	(173)
3,168	3,113	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Incyte Corp — Monthly	(55)
804	787	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Organon & Co. — Monthly	(18)
37,836	38,017	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Waters Corp. — Monthly	181
17,014	17,314	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Biogen Inc. — Monthly	300
33,728	33,701	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Agilent Technologies, Inc. — Monthly	(28)
593	605	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Vertex Pharmaceuticals Inc — Monthly	11
18,532	18,473	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Abbvie Inc. — Monthly	(59)
31,744	31,654	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Perkinelmer Inc. — Monthly	(91)
35,292	35,136	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	IQVIA Holdings, Inc. — Monthly	(156)
20,291	20,531	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Merck & Co. Inc. — Monthly	240
27,501	27,395	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Zoetis, Inc. — Monthly	(106)
24,254	24,279	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Pfizer, Inc. — Monthly	24
14,143	14,233	—	12/15/25	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Bristol-Myers Squibb Co. — Monthly	89
<b>JPMorgan Chase Bank N.A.</b>						
1,512,410	1,538,071	—	6/9/22	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	A basket (JPCMPTFL) of common stocks — Monthly*	25,574
1,290,269	1,269,623	—	2/5/22	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	Russell 1000 Value Total Return Index — Monthly	(20,986)

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (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>JPMorgan Securities LLC</b>						
\$2,101	\$1,961	\$—	1/12/45	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	\$113
4,903	4,576	—	1/12/45	(4.00%) 1 month USD-LIBOR — Monthly	Synthetic TRS Index 4.00% 30 year Fannie Mae pools — Monthly	263
<b>UBSAG</b>						
1,580,843	1,569,251	—	11/2/21	1 month USD-LIBOR-BBA minus 0.25% — Monthly	MSCI Emerging Markets TR Net USD — Monthly	11,385
127,008	126,077	—	11/2/21	1 month USD-LIBOR-BBA minus 0.25% — Monthly	MSCI Daily TR Net Emerging Markets USD — Monthly	916
8,482,637	8,651,440	—	5/22/23	(1 month USD-LIBOR-BBA plus 0.35%) — Monthly	A basket (UBSPUSER) of common stocks — Monthly*	170,088
8,473,099	8,620,840	—	5/22/23	1 month USD-LIBOR-BBA plus 0.20% — Monthly	S&P 500 Tr 4 Jan 1988 — Monthly	(146,043)
<b>Upfront premium received</b>		<b>—</b>		<b>Unrealized appreciation</b>		<b>501,081</b>
<b>Upfront premium (paid)</b>		<b>—</b>		<b>Unrealized (depreciation)</b>		<b>(408,551)</b>
<b>Total</b>		<b>\$—</b>		<b>Total</b>		<b>\$92,530</b>

† Replicates exposure to the difference between the implied and the realized volatility risk premium in the CBOE Volatility Index option market, with a delta hedge overlay.

†† Replicates exposure to the difference between the implied and the realized volatility risk premium on the S&P500 Index, with a delta hedge overlay.

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

**ABASKET (MLFCF15) OF COMMON STOCKS**

Common stocks	Sector	Shares	Value	Percentage value
Apple, Inc.	Technology	2,364	\$323,731	6.01%
Alphabet, Inc. Class A	Technology	112	272,603	5.06%
Amazon.com, Inc.	Consumer cyclicals	69	237,262	4.40%
Microsoft Corp.	Technology	681	184,542	3.42%
NVIDIA Corp.	Technology	191	152,699	2.83%
JPMorgan Chase & Co.	Financials	867	134,836	2.50%
Qualcomm, Inc.	Technology	744	106,365	1.97%
Adobe, Inc.	Technology	177	103,430	1.92%
Intuit, Inc.	Technology	206	100,853	1.87%
Bristol-Myers Squibb Co.	Health care	1,488	99,430	1.85%
Pinterest, Inc. Class A	Technology	1,183	93,379	1.73%
Procter & Gamble Co. (The)	Consumer staples	662	89,268	1.66%
Merck & Co., Inc.	Health care	1,147	89,219	1.66%
Citigroup, Inc.	Financials	1,253	88,618	1.64%
Accenture PLC Class A	Technology	290	85,446	1.59%
Verizon Communications, Inc.	Communication services	1,498	83,910	1.56%
Lockheed Martin Corp.	Capital goods	194	73,397	1.36%
TJX Cos., Inc. (The)	Consumer cyclicals	916	61,758	1.15%
Goldman Sachs Group, Inc. (The)	Financials	159	60,433	1.12%
Roku, Inc.	Technology	131	60,255	1.12%
Cisco Systems, Inc./California	Technology	1,085	57,520	1.07%
MetLife, Inc.	Financials	923	55,233	1.03%
Honeywell International, Inc.	Capital goods	248	54,477	1.01%
Ford Motor Co.	Consumer cyclicals	3,641	54,109	1.00%
Align Technology, Inc.	Health care	88	53,778	1.00%
DuPont de Nemours, Inc.	Basic materials	675	52,256	0.97%
PepsiCo, Inc.	Consumer staples	349	51,672	0.96%

**ABASKET (MLFCF15) OF COMMON STOCKS cont.**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Autodesk, Inc.	Technology	175	\$51,054	0.95%
Comcast Corp. Class A	Communication services	844	48,105	0.89%
Walmart, Inc.	Consumer cyclicals	341	48,096	0.89%
Fortinet, Inc.	Technology	201	47,943	0.89%
Vertex Pharmaceuticals, Inc.	Health care	235	47,400	0.88%
McDonald's Corp.	Consumer staples	200	46,104	0.86%
CSX Corp.	Transportation	1,378	44,210	0.82%
Edwards Lifesciences Corp.	Health care	424	43,901	0.81%
Abbott Laboratories	Health care	377	43,678	0.81%
Medtronic PLC	Health care	329	40,887	0.76%
Marriott International, Inc./MD Class A	Consumer cyclicals	290	39,574	0.73%
Altria Group, Inc.	Consumer staples	809	38,575	0.72%
Halliburton Co.	Energy	1,607	37,164	0.69%
Southern Co. (The)	Utilities and power	607	36,708	0.68%
Synchrony Financial	Financials	733	35,542	0.66%
Weyerhaeuser Co.	Basic materials	997	34,327	0.64%
Cummins, Inc.	Capital goods	141	34,308	0.64%
Parker Hannifin Corp.	Capital goods	111	34,240	0.64%
Fidelity National Information Services, Inc.	Technology	241	34,207	0.63%
Best Buy Co., Inc.	Consumer cyclicals	297	34,166	0.63%
PayPal Holdings, Inc.	Consumer cyclicals	113	32,846	0.61%
Old Dominion Freight Line, Inc.	Transportation	127	32,160	0.60%
Johnson & Johnson	Health care	195	32,141	0.60%

**ABASKET (GSGLPWDL) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Royal Bank of Canada (Canada)	Financials	385	\$39,052	0.86%
Toronto-Dominion Bank (Canada)	Financials	552	38,736	0.85%
Canadian Imperial Bank of Commerce (Canada)	Financials	335	37,957	0.84%
Arrow Electronics, Inc.	Technology	331	37,779	0.83%
Annaly Capital Management, Inc.	Financials	4,196	37,257	0.82%
AGNC Investment Corp.	Financials	2,163	36,535	0.81%
MetLife, Inc.	Financials	608	36,397	0.80%
Segro PLC (United Kingdom)	Financials	2,404	36,392	0.80%
Dover Corp.	Capital goods	239	36,041	0.80%
Swisscom AG (Switzerland)	Communication services	61	34,902	0.77%
Nippon Telegraph & Telephone Corp. (Japan)	Communication services	1,312	34,191	0.75%
Mettler-Toledo International, Inc.	Health care	24	33,657	0.74%
ITOCHU Corp. (Japan)	Consumer staples	1,162	33,466	0.74%
NN Group NV (Netherlands)	Financials	690	32,525	0.72%
Dexus Property Group (Australia)	Financials	4,049	32,398	0.72%
Accenture PLC Class A	Technology	102	30,008	0.66%
Ally Financial, Inc.	Financials	597	29,759	0.66%
Ageas SA/NV (Belgium)	Financials	536	29,740	0.66%
Church & Dwight Co., Inc.	Consumer staples	339	28,824	0.64%
Knight-Swift Transportation Holdings, Inc.	Transportation	627	28,694	0.63%
Sun Hung Kai Properties, Ltd. (Hong Kong)	Financials	1,893	28,207	0.62%
3i Group PLC (United Kingdom)	Financials	1,723	27,957	0.62%
Allstate Corp. (The)	Financials	211	27,542	0.61%
Rio Tinto PLC (United Kingdom)	Basic materials	335	27,533	0.61%
CMS Energy Corp.	Utilities and power	461	27,120	0.60%
Chubu Electric Power Co., Inc. (Japan)	Utilities and power	2,162	26,431	0.58%
Mizuho Financial Group, Inc. (Japan)	Financials	1,838	26,260	0.58%
National Bank of Canada (Canada)	Financials	340	25,654	0.57%
AMETEK, Inc.	Conglomerates	190	25,347	0.56%

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

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Swiss Life Holding AG (Switzerland)	Financials	51	\$24,808	0.55%
Open Text Corp. (Canada)	Technology	477	24,701	0.55%
Comcast Corp. Class A	Communication services	432	24,653	0.54%
Amphenol Corp. Class A	Technology	356	24,363	0.54%
Kinder Morgan, Inc.	Utilities and power	1,326	24,173	0.53%
DTE Energy Co.	Utilities and power	186	24,141	0.53%
Power Assets Holdings, Ltd. (Hong Kong)	Utilities and power	3,927	24,098	0.53%
Iberdrola SA (Spain)	Utilities and power	1,968	23,984	0.53%
Canadian Apartment Properties REIT (Canada)	Financials	506	23,790	0.53%
Old Dominion Freight Line, Inc.	Transportation	93	23,714	0.52%
Metro, Inc. (Canada)	Consumer staples	493	23,585	0.52%
Trane Technologies PLC	Capital goods	128	23,313	0.51%
Zoetis, Inc.	Health care	125	23,256	0.51%
AutoZone, Inc.	Consumer cyclicals	15	22,391	0.49%
McDonald's Corp.	Consumer staples	97	22,346	0.49%
KDDI Corp. (Japan)	Communication services	714	22,268	0.49%
Repsol SA (Spain)	Energy	1,758	22,002	0.49%
Fujitsu, Ltd. (Japan)	Technology	117	21,851	0.48%
Hershey Co. (The)	Consumer staples	127	21,769	0.48%
Goodman Group (Australia)	Financials	1,356	21,529	0.48%
Wolters Kluwer NV (Netherlands)	Consumer cyclicals	214	21,467	0.47%

**ABASKET (GSGLPWDS) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
American Express Co.	Financials	239	\$39,196	0.88%
Hang Seng Bank, Ltd. (Hong Kong)	Financials	1,885	37,647	0.85%
Markel Corp.	Financials	30	36,473	0.82%
U.S. Bancorp	Financials	620	35,137	0.79%
Emera, Inc. (Canada)	Utilities and power	747	33,981	0.76%
Equity Lifestyle Properties, Inc.	Financials	455	33,828	0.76%
Zurich Insurance Group AG (Switzerland)	Financials	82	32,978	0.74%
Lonza Group AG (Switzerland)	Health care	46	32,811	0.74%
Xylem, Inc.	Capital goods	273	32,558	0.73%
Ferrovial SA (Spain)	Basic materials	1,048	30,760	0.69%
Fortis, Inc. (Canada)	Utilities and power	671	29,924	0.67%
Essex Property Trust, Inc.	Financials	98	29,462	0.66%
Southern Co. (The)	Utilities and power	475	28,753	0.65%
Berkshire Hathaway, Inc. Class B	Financials	103	28,642	0.64%
Edison International	Utilities and power	495	28,593	0.64%
Ecolab, Inc.	Consumer cyclicals	138	28,470	0.64%
Mid-America Apartment Communities, Inc.	Financials	163	27,769	0.62%
ASML Holding NV (Netherlands)	Technology	40	27,554	0.62%
Mitsubishi Estate Co., Ltd. (Japan)	Financials	1,677	27,122	0.61%
Boeing Co. (The)	Capital goods	112	26,784	0.60%
Exelon Corp.	Utilities and power	591	26,181	0.59%
Alliant Energy Corp.	Utilities and power	467	26,051	0.59%
Liberty Media Corp.-Liberty Formula One Class C	Consumer cyclicals	529	25,965	0.58%
Aeon Co., Ltd. (Japan)	Consumer cyclicals	961	25,813	0.58%
Autodesk, Inc.	Technology	88	25,740	0.58%
T-Mobile US, Inc.	Communication services	176	25,525	0.57%
Ventas, Inc.	Health care	437	25,298	0.57%
Alexandria Real Estate Equities, Inc.	Financials	138	25,166	0.57%
Telus Corp. (Canada)	Communication services	1,118	25,137	0.57%
UDR, Inc.	Financials	506	25,037	0.56%
Accor SA (France)	Consumer cyclicals	654	24,415	0.55%

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

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Svenska Handelsbanken AB (Sweden)	Financials	2,151	\$24,275	0.55%
Novartis AG (Switzerland)	Health care	257	23,449	0.53%
AlA Group, Ltd. (Hong Kong)	Financials	1,871	23,248	0.52%
Enbridge, Inc. (Canada)	Utilities and power	575	22,923	0.52%
American Tower Corp.	Communication services	83	22,460	0.50%
Analog Devices, Inc.	Technology	128	21,999	0.49%
KBC Group NV (Belgium)	Financials	288	21,932	0.49%
Phillips 66	Energy	253	21,744	0.49%
Anheuser-Busch InBev SA/NV (Belgium)	Consumer staples	300	21,624	0.49%
Agnico-Eagle Mines, Ltd. (Canada)	Basic materials	343	20,825	0.47%
Heineken NV (Netherlands)	Consumer staples	167	20,266	0.46%
Boston Scientific Corp.	Health care	469	20,063	0.45%
Koninklijke KPN NV (Netherlands)	Communication services	6,366	19,882	0.45%
Brookfield Asset Management, Inc. (Canada)	Conglomerates	376	19,657	0.44%
Essity AB Class B (Sweden)	Consumer staples	582	19,305	0.43%
BASF SE (Germany)	Basic materials	243	19,174	0.43%
Marathon Petroleum Corp.	Energy	317	19,173	0.43%
Hennes & Mauritz AB (Sweden)	Consumer cyclicals	789	18,723	0.42%
James Hardie Industries PLC (CDI) (Australia)	Basic materials	546	18,552	0.42%

**ABASKET (JPCMPTFL) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Zoetis, Inc.	Health care	128	\$23,810	1.55%
Merck & Co., Inc.	Health care	243	18,903	1.23%
HubSpot, Inc.	Technology	30	18,117	1.18%
Bristol-Myers Squibb Co.	Health care	269	18,007	1.17%
Polaris, Inc.	Consumer cyclicals	115	15,702	1.02%
Catalent, Inc.	Health care	133	14,544	0.95%
TransDigm Group, Inc.	Capital goods	22	14,419	0.94%
United Rentals, Inc.	Consumer cyclicals	44	13,909	0.90%
AECOM	Capital goods	209	13,276	0.86%
Tapestry, Inc.	Consumer cyclicals	308	13,003	0.85%
Hexcel Corp.	Capital goods	211	12,963	0.84%
Envista Holdings Corp.	Health care	295	12,851	0.84%
Perrigo Co. PLC	Health care	277	12,782	0.83%
Trade Desk, Inc. (The) Class A	Consumer cyclicals	160	12,772	0.83%
Coupa Software, Inc.	Technology	46	12,522	0.81%
Ford Motor Co.	Consumer cyclicals	818	12,149	0.79%
General Motors Co.	Consumer cyclicals	199	11,785	0.77%
Flowserve Corp.	Capital goods	293	11,638	0.76%
Zynga, Inc. Class A	Technology	1,040	11,207	0.73%
Timken Co. (The)	Basic materials	142	11,190	0.73%
BorgWarner, Inc.	Capital goods	224	10,848	0.71%
Square, Inc. Class A	Consumer cyclicals	44	10,721	0.70%
Peloton Interactive, Inc. Class A	Consumer cyclicals	86	10,673	0.69%
Dropbox, Inc. Class A	Technology	344	10,462	0.68%
RingCentral, Inc. Class A	Technology	36	10,420	0.68%
Spirit AeroSystems Holdings, Inc. Class A	Capital goods	223	10,355	0.67%
Zendesk, Inc.	Technology	69	10,243	0.67%
Thor Industries, Inc.	Consumer cyclicals	91	10,201	0.66%
Nuance Communications, Inc.	Technology	187	10,185	0.66%
Hanesbrands, Inc.	Consumer cyclicals	548	10,110	0.66%
Boeing Co. (The)	Capital goods	42	10,064	0.65%
Lamb Weston Holdings, Inc.	Consumer staples	127	10,061	0.65%
DocuSign, Inc.	Technology	35	9,876	0.64%

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

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Jazz Pharmaceuticals PLC	Health care	55	\$9,850	0.64%
lululemon athletica, Inc. (Canada)	Consumer cyclicals	26	9,598	0.62%
Harley-Davidson, Inc.	Consumer cyclicals	203	9,363	0.61%
Charles River Laboratories International, Inc.	Health care	25	9,279	0.60%
Altria Group, Inc.	Consumer staples	193	9,183	0.60%
Pfizer, Inc.	Health care	229	8,978	0.58%
AT&T, Inc.	Communication services	312	8,970	0.58%
CrowdStrike Holdings, Inc. Class A	Technology	35	8,913	0.58%
Avalara, Inc.	Consumer cyclicals	52	8,403	0.55%
Integra LifeSciences Holdings Corp.	Health care	121	8,275	0.54%
ABIOMED, Inc.	Health care	26	8,211	0.53%
Change Healthcare, Inc.	Health care	338	7,895	0.51%
Pagerduty, Inc.	Technology	177	7,883	0.51%
Under Armour, Inc. Class C	Consumer cyclicals	424	7,859	0.51%
Teledyne Technologies, Inc.	Capital goods	19	7,801	0.51%
Avantor, Inc.	Health care	218	7,784	0.51%
Howmet Aerospace, Inc.	Capital goods	227	7,629	0.50%

**ABASKET (UBSPUSER) OF COMMON STOCKS**

<b>Common stocks</b>	<b>Sector</b>	<b>Shares</b>	<b>Value</b>	<b>Percentage value</b>
Microsoft Corp.	Technology	2,438	\$660,399	7.63%
Apple, Inc.	Technology	3,056	418,581	4.84%
Amazon.com, Inc.	Consumer cyclicals	104	359,327	4.15%
Alphabet, Inc. Class C	Technology	109	273,189	3.16%
Facebook, Inc. Class A	Technology	530	184,290	2.13%
NVIDIA Corp.	Technology	205	163,718	1.89%
PayPal Holdings, Inc.	Consumer cyclicals	553	161,046	1.86%
JPMorgan Chase & Co.	Financials	950	147,738	1.71%
Visa, Inc. Class A	Financials	614	143,622	1.66%
Walmart, Inc.	Consumer cyclicals	1,002	141,325	1.63%
Eli Lilly and Co.	Health care	594	136,289	1.58%
Bank of America Corp.	Financials	3,237	133,464	1.54%
Citigroup, Inc.	Financials	1,843	130,428	1.51%
Union Pacific Corp.	Transportation	580	127,517	1.47%
Charter Communications, Inc. Class A	Communication services	173	124,736	1.44%
Danaher Corp.	Health care	460	123,410	1.43%
UnitedHealth Group, Inc.	Health care	308	123,245	1.42%
Adobe, Inc.	Technology	208	121,885	1.41%
Mastercard, Inc. Class A	Consumer cyclicals	315	115,164	1.33%
American Tower Corp.	Communication services	402	108,523	1.25%
Johnson Controls International PLC	Capital goods	1,536	105,409	1.22%
Home Depot, Inc. (The)	Consumer cyclicals	300	95,746	1.11%
Johnson & Johnson	Health care	577	95,124	1.10%
Nike, Inc. Class B	Consumer cyclicals	591	91,380	1.06%
Northrop Grumman Corp.	Capital goods	246	89,250	1.03%
Goldman Sachs Group, Inc. (The)	Financials	229	86,747	1.00%
General Motors Co.	Consumer cyclicals	1,393	82,398	0.95%
Qualcomm, Inc.	Technology	573	81,836	0.95%
Tesla, Inc.	Consumer cyclicals	114	77,654	0.90%
Procter & Gamble Co. (The)	Consumer staples	570	76,863	0.89%
Southwest Airlines Co.	Transportation	1,445	76,718	0.89%
PepsiCo, Inc.	Consumer staples	497	73,703	0.85%
AbbVie, Inc.	Health care	640	72,112	0.83%
Eaton Corp. PLC	Capital goods	487	72,091	0.83%
Target Corp.	Consumer cyclicals	297	71,682	0.83%

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

Common stocks	Sector	Shares	Value	Percentage value
Applied Materials, Inc.	Technology	496	\$70,692	0.82%
Freeport-McMoRan, Inc. (Indonesia)	Basic materials	1,886	69,994	0.81%
Sherwin-Williams Co. (The)	Basic materials	242	65,843	0.76%
Regeneron Pharmaceuticals, Inc.	Health care	117	65,563	0.76%
Texas Instruments, Inc.	Technology	337	64,740	0.75%
Valero Energy Corp.	Energy	820	64,008	0.74%
S&P Global, Inc.	Consumer cyclicals	153	62,671	0.72%
Merck & Co., Inc.	Health care	804	62,535	0.72%
Chipotle Mexican Grill, Inc.	Consumer staples	40	62,033	0.72%
Cigna Corp.	Health care	260	61,527	0.71%
ServiceNow, Inc.	Technology	110	60,525	0.70%
ConocoPhillips	Energy	988	60,161	0.70%
Fidelity National Information Services, Inc.	Technology	420	59,527	0.69%
Berkshire Hathaway, Inc. Class B	Financials	212	58,963	0.68%
Exxon Mobil Corp.	Energy	920	58,015	0.67%

**CENTRALLY CLEARED TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 6/30/21 (Unaudited)**

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)
\$1,113,000	\$13,445	\$(19)	4/1/31	2.686% — At maturity	USA Non Revised Consumer Price Index-Urban (CPI-U) — At maturity	\$13,427
3,383,000	1,894	(34)	4/15/26	2.79% — At maturity	USA Non Revised Consumer Price Index-Urban (CPI-U) — At maturity	(1,929)
<b>Total</b>		<b>\$(53)</b>				<b>\$11,498</b>

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

**OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/21 (Unaudited)**

Swap counterparty/ Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
<b>Bank of America N.A.</b>							
CMBX NA BBB-.6 Index	BB-/P	\$68	\$1,000	\$265	5/11/63	300 bp — Monthly	\$(196)
CMBX NA BBB-.6 Index	BB-/P	121	2,000	529	5/11/63	300 bp — Monthly	(407)
CMBX NA BBB-.6 Index	BB-/P	228	4,000	1,058	5/11/63	300 bp — Monthly	(828)
CMBX NA BBB-.6 Index	BB-/P	247	4,000	1,058	5/11/63	300 bp — Monthly	(809)
<b>Barclays Bank PLC</b>							
CMBX NA BBB-.6 Index	BB-/P	887	8,000	2,116	5/11/63	300 bp — Monthly	(1,225)
CMBX NA BBB-.7 Index	BB/P	141	25,000	4,445	1/17/47	300 bp — Monthly	(4,292)
<b>Citigroup Global Markets, Inc.</b>							
CMBX NA BB.6 Index	B-/P	2,439	16,494	7,355	5/11/63	500 bp — Monthly	(4,902)
CMBX NA BB.7 Index	B/P	459	9,000	3,121	1/17/47	500 bp — Monthly	(2,654)
CMBX NA BBB-.6 Index	BB-/P	25,281	397,000	105,007	5/11/63	300 bp — Monthly	(79,527)
<b>Credit Suisse International</b>							
CMBX NA A.6 Index	A-/P	(32)	29,000	2,456	5/11/63	200 bp — Monthly	(2,479)
CMBX NA BBB-.6 Index	BB-/P	74,418	792,000	209,484	5/11/63	300 bp — Monthly	(134,670)
CMBX NA BBB-.7 Index	BB/P	3,952	50,000	8,890	1/17/47	300 bp — Monthly	(4,913)
CMBX NA BBB-.7 Index	BB/P	7,909	107,000	19,025	1/17/47	300 bp — Monthly	(11,062)
<b>Goldman Sachs International</b>							
CMBX NA A.6 Index	A-/P	309	6,000	508	5/11/63	200 bp — Monthly	(197)
CMBX NA A.6 Index	A-/P	419	8,000	678	5/11/63	200 bp — Monthly	(256)
CMBX NA A.6 Index	A-/P	1,018	20,000	1,694	5/11/63	200 bp — Monthly	(670)
CMBX NA A.6 Index	A-/P	3,977	62,000	5,251	5/11/63	200 bp — Monthly	(1,254)
CMBX NA BBB-.6 Index	BB-/P	260	3,000	794	5/11/63	300 bp — Monthly	(532)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 6/30/21 (Unaudited) cont.

Swap counterparty/ Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
<b>Goldman Sachs International cont.</b>							
CMBX NA BBB-.6 Index	BB-/P	\$259	\$3,000	\$794	5/11/63	300 bp — Monthly	\$(533)
CMBX NA BBB-.6 Index	BB-/P	422	5,000	1,323	5/11/63	300 bp — Monthly	(898)
CMBX NA BBB-.6 Index	BB-/P	661	6,000	1,587	5/11/63	300 bp — Monthly	(923)
CMBX NA BBB-.6 Index	BB-/P	365	7,000	1,852	5/11/63	300 bp — Monthly	(1,483)
CMBX NA BBB-.6 Index	BB-/P	591	7,000	1,852	5/11/63	300 bp — Monthly	(1,257)
CMBX NA BBB-.6 Index	BB-/P	633	8,000	2,116	5/11/63	300 bp — Monthly	(1,479)
CMBX NA BBB-.6 Index	BB-/P	990	9,000	2,381	5/11/63	300 bp — Monthly	(1,386)
CMBX NA BBB-.6 Index	BB-/P	435	9,000	2,381	5/11/63	300 bp — Monthly	(1,941)
CMBX NA BBB-.6 Index	BB-/P	1,218	10,000	2,645	5/11/63	300 bp — Monthly	(1,422)
CMBX NA BBB-.6 Index	BB-/P	1,160	14,000	3,703	5/11/63	300 bp — Monthly	(2,536)
CMBX NA BBB-.6 Index	BB-/P	1,671	15,000	3,968	5/11/63	300 bp — Monthly	(2,289)
CMBX NA BBB-.6 Index	BB-/P	2,221	16,000	4,232	5/11/63	300 bp — Monthly	(2,003)
CMBX NA BBB-.6 Index	BB-/P	1,090	16,000	4,232	5/11/63	300 bp — Monthly	(3,134)
CMBX NA BBB-.6 Index	BB-/P	878	18,000	4,761	5/11/63	300 bp — Monthly	(3,875)
CMBX NA BBB-.6 Index	BB-/P	2,923	27,000	7,142	5/11/63	300 bp — Monthly	(4,205)
CMBX NA BBB-.6 Index	BB-/P	3,376	36,000	9,522	5/11/63	300 bp — Monthly	(6,128)
CMBX NA BBB-.6 Index	BB-/P	4,360	58,000	15,341	5/11/63	300 bp — Monthly	(10,952)
CMBX NA BBB-.7 Index	BB/P	695	8,000	1,422	1/17/47	300 bp — Monthly	(723)
CMBX NA BBB-.7 Index	BB/P	1,448	17,000	3,023	1/17/47	300 bp — Monthly	(1,566)
CMBX NA BBB-.7 Index	BB/P	1,478	20,000	3,556	1/17/47	300 bp — Monthly	(2,068)
<b>JPMorgan Securities LLC</b>							
CMBX NA BBB-.6 Index	BB-/P	241,696	756,000	199,962	5/11/63	300 bp — Monthly	42,113
<b>Merrill Lynch International</b>							
CMBX NA BBB-.6 Index	BB-/P	51,465	191,000	50,520	5/11/63	300 bp — Monthly	1,041
<b>Morgan Stanley &amp; Co. International PLC</b>							
CMBX NA BBB-.6 Index	BB-/P	4,306	65,000	17,193	5/11/63	300 bp — Monthly	(12,854)
<b>Upfront premium received</b>		<b>446,474</b>					<b>Unrealized appreciation</b>
							<b>43,154</b>
<b>Upfront premium (paid)</b>		<b>(32)</b>					<b>Unrealized (depreciation)</b>
							<b>(314,528)</b>
<b>Total</b>		<b>\$446,442</b>					<b>Total</b>
							<b>\$(271,374)</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, 2021. 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 6/30/21 (Unaudited)

Swap counterparty/ Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
<b>Citigroup Global Markets, Inc.</b>						
CMBX NA BB.10 Index	\$(313)	\$3,000	\$731	11/17/59	(500 bp) — Monthly	\$416
CMBX NA BB.10 Index	(329)	3,000	731	11/17/59	(500 bp) — Monthly	400
CMBX NA BB.11 Index	(1,166)	9,000	802	11/18/54	(500 bp) — Monthly	(372)
CMBX NA BB.11 Index	(283)	3,000	267	11/18/54	(500 bp) — Monthly	(18)
CMBX NA BB.8 Index	(176)	965	347	10/17/57	(500 bp) — Monthly	170
CMBX NA BB.9 Index	(3,716)	36,000	7,963	9/17/58	(500 bp) — Monthly	4,217
<b>Credit Suisse International</b>						
CMBX NA BB.10 Index	(714)	6,000	1,463	11/17/59	(500 bp) — Monthly	744
CMBX NA BB.10 Index	(801)	6,000	1,463	11/17/59	(500 bp) — Monthly	657
CMBX NA BB.7 Index	(300)	16,494	7,355	5/11/63	(500 bp) — Monthly	7,041
CMBX NA BB.8 Index	(175)	965	347	10/17/57	(500 bp) — Monthly	171
CMBX NA BB.9 Index	(1,504)	15,000	3,318	9/17/58	(500 bp) — Monthly	1,802

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 6/30/21 (Unaudited) cont.

Swap counterparty/ Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
<b>Goldman Sachs International</b>						
CMBX NA BB.7 Index	\$(9,130)	\$54,000	\$18,727	1/17/47	(500 bp) — Monthly	\$9,552
CMBX NA BB.7 Index	(2,738)	15,000	5,202	1/17/47	(500 bp) — Monthly	2,451
CMBX NA BB.9 Index	(357)	3,000	664	9/17/58	(500 bp) — Monthly	304
CMBX NA BB.9 Index	(361)	3,000	664	9/17/58	(500 bp) — Monthly	300
<b>JPMorgan Securities LLC</b>						
CMBX NA BBB-.7 Index	(44,370)	189,000	33,604	1/17/47	(300 bp) — Monthly	(10,858)
<b>Merrill Lynch International</b>						
CMBX NA BB.10 Index	(341)	6,000	1,463	11/17/59	(500 bp) — Monthly	1,116
CMBX NA BB.11 Index	(3,460)	7,000	624	11/18/54	(500 bp) — Monthly	(2,842)
CMBX NA BB.9 Index	(351)	9,000	1,991	9/17/58	(500 bp) — Monthly	1,633
<b>Morgan Stanley &amp; Co. International PLC</b>						
CMBX NA BBB-.7 Index	(3,869)	38,000	6,756	1/17/47	(300 bp) — Monthly	2,866
CMBX NA BB.10 Index	(315)	3,000	731	11/17/59	(500 bp) — Monthly	414
CMBX NA BB.9 Index	(728)	6,000	1,327	9/17/58	(500 bp) — Monthly	595
CMBX NA BB.9 Index	(364)	3,000	664	9/17/58	(500 bp) — Monthly	297
<b>Upfront premium received</b>	<b>—</b>					<b>Unrealized appreciation</b>
						<b>35,146</b>
<b>Upfront premium (paid)</b>	<b>(75,861)</b>					<b>Unrealized (depreciation)</b>
						<b>(14,090)</b>
<b>Total</b>	<b>\$(75,861)</b>					<b>Total</b>
						<b>\$21,056</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 6/30/21 (Unaudited)

Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
NA HY Series 36 Index	B+/P	\$(185,572)	\$2,168,000	\$221,136	6/20/26	500 bp — Quarterly	\$38,575
<b>Total</b>		<b>\$(185,572)</b>					<b>\$38,575</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, 2021. 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 6/30/21 (Unaudited)

Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
EM Series 35 Index	\$(75,218)	\$1,903,000	\$49,459	6/20/26	(100 bp) — Quarterly	\$(26,288)
NA HY Series 36 Index	114,677	1,324,000	135,048	6/20/26	(500 bp) — Quarterly	(22,209)
<b>Total</b>	<b>\$39,459</b>					<b>\$(48,497)</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	\$328,807	\$—	\$—
Capital goods	75,805	—	—
Communication services	21,882	—	—
Consumer cyclicals	193,741	—	—
Consumer staples	357,438	—	—
Energy	87,390	—	—
Financials	513,262	—	—
Health care	95,773	—	—
Technology	970,887	—	—
Transportation	78,952	—	—
Utilities and power	—	—	—
<b>Total common stocks</b>	<b>2,723,937</b>	<b>—</b>	<b>—</b>
Asset-backed securities	—	125,000	25,000
Commodity linked notes	—	2,539,883	—
Corporate bonds and notes	—	105,191	—
Foreign government and agency bonds and notes	—	151,088	—
Investment companies	2,490,457	—	—
Mortgage-backed securities	—	1,205,665	—
Purchased options outstanding	—	11,464	—
U.S. government and agency mortgage obligations	—	6,238,765	—
Warrants	111	317,486	—
Short-term investments	—	15,064,511	—
<b>Totals by level</b>	<b>\$5,214,505</b>	<b>\$25,759,053</b>	<b>\$25,000</b>

Other financial instruments:	Valuation inputs		
	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(97,334)	\$—
Futures contracts	78,147	—	—
Written options outstanding	—	(3,792)	—
Forward premium swap option contracts	—	(1,446)	—
TBA sale commitments	—	(4,087,412)	—
Interest rate swap contracts	—	(29,978)	—
Total return swap contracts	—	104,081	—
Credit default contracts	—	(484,708)	—
<b>Totals by level</b>	<b>\$78,147</b>	<b>\$(4,600,589)</b>	<b>\$—</b>

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

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

6/30/21 (Unaudited)

### Assets

Investment in securities, at value, including \$691,931 of securities on loan (Notes 1 and 8):	
Unaffiliated issuers (identified cost \$18,801,849)	\$20,383,574
Affiliated issuers (identified cost \$10,614,984) (Notes 1 and 5)	10,614,984
Cash	509,030
Foreign currency (cost \$75,326) (Note 1)	75,328
Dividends, interest and other receivables	42,724
Foreign tax reclaim	4,023
Receivable for investments sold	619,383
Receivable for sales of TBA securities (Note 1)	4,085,717
Receivable from Manager (Note 2)	35,396
Receivable for variation margin on futures contracts (Note 1)	27,205
Receivable for variation margin on centrally cleared swap contracts (Note 1)	10,467
Unrealized appreciation on forward premium swap option contracts (Note 1)	1,338
Unrealized appreciation on forward currency contracts (Note 1)	131,939
Unrealized appreciation on OTC swap contracts (Note 1)	579,381
Premium paid on OTC swap contracts (Note 1)	75,893
<b>Total assets</b>	<b>37,196,382</b>

### Liabilities

Payable for investments purchased	898,520
Payable for purchases of TBA securities (Note 1)	6,269,110
Payable for shares of the fund repurchased	4,013
Payable for custodian fees (Note 2)	38,266
Payable for investor servicing fees (Note 2)	2,724
Payable for Trustee compensation and expenses (Note 2)	3,286
Payable for administrative services (Note 2)	70
Payable for distribution fees (Note 2)	4,802
Payable for variation margin on futures contracts (Note 1)	13,641
Payable for variation margin on centrally cleared swap contracts (Note 1)	15,993
Unrealized depreciation on OTC swap contracts (Note 1)	737,169
Premium received on OTC swap contracts (Note 1)	446,474
Unrealized depreciation on forward currency contracts (Note 1)	229,273
Unrealized depreciation on forward premium swap option contracts (Note 1)	2,784
Written options outstanding, at value (premiums \$7,847) (Note 1)	3,792
TBA sale commitments, at value (proceeds receivable \$4,082,578) (Note 1)	4,087,412
Collateral on securities loaned, at value (Note 1)	704,750
Other accrued expenses	43,456
<b>Total liabilities</b>	<b>13,505,535</b>
<b>Net assets</b>	<b>\$23,690,847</b>

### Represented by

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$23,595,156
Total distributable earnings (Note 1)	95,691
<b>Total — Representing net assets applicable to capital shares outstanding</b>	<b>\$23,690,847</b>

### Computation of net asset value Class IA

Net assets	\$100,176
Number of shares outstanding	10,533
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$9.51

### Computation of net asset value Class IB

Net assets	\$23,590,671
Number of shares outstanding	2,527,571
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$9.33

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

## Statement of operations

Six months ended 6/30/21 (Unaudited)

### Investment income

Dividends (net of foreign tax of \$3,559)	\$60,137
Interest (including interest income of \$5,281 from investments in affiliated issuers) (Note 5)	42,483
Securities lending (net of expenses) (Notes 1 and 5)	344
<b>Total investment income</b>	<b>102,964</b>

### Expenses

Compensation of Manager (Note 2)	81,707
Investor servicing fees (Note 2)	8,102
Custodian fees (Note 2)	37,011
Trustee compensation and expenses (Note 2)	515
Distribution fees (Note 2)	28,609
Administrative services (Note 2)	202
Auditing and tax fees	50,421
Other	8,930
Fees waived and reimbursed by Manager (Note 2)	(83,497)
<b>Total expenses</b>	<b>132,000</b>
Expense reduction (Note 2)	(64)
<b>Net expenses</b>	<b>131,936</b>
<b>Net investment loss</b>	<b>(28,972)</b>

### Realized and unrealized gain (loss)

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

Securities from unaffiliated issuers (Notes 1 and 3)	860,543
Foreign currency transactions (Note 1)	(1,659)
Forward currency contracts (Note 1)	69,874
Futures contracts (Note 1)	(715,321)
Swap contracts (Note 1)	(227,228)
Written options (Note 1)	11,459
<b>Total net realized loss</b>	<b>(2,332)</b>

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

Securities from unaffiliated issuers and TBA sale commitments	31,858
Assets and liabilities in foreign currencies	(67)
Forward currency contracts	(155,202)
Futures contracts	61,715
Swap contracts	219,559
Written options	(316)
<b>Total change in net unrealized appreciation</b>	<b>157,547</b>
<b>Net gain on investments</b>	<b>155,215</b>
<b>Net increase in net assets resulting from operations</b>	<b>\$126,243</b>

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

## Statement of changes in net assets

	Six months ended 6/30/21*	Year ended 12/31/20
<b>Decrease in net assets</b>		
<b>Operations:</b>		
Net investment income (loss)	\$(28,972)	\$113,421
Net realized loss on investments and foreign currency transactions	(2,332)	(2,451,428)
Change in net unrealized appreciation of investments and assets and liabilities in foreign currencies	157,547	377,114
<b>Net increase (decrease) in net assets resulting from operations</b>	<b>126,243</b>	<b>(1,960,893)</b>
Decrease from capital share transactions (Note 4)	(793,588)	(132,712)
<b>Total decrease in net assets</b>	<b>(667,345)</b>	<b>(2,093,605)</b>
<b>Net assets:</b>		
Beginning of period	24,358,192	26,451,797
<b>End of period</b>	<b>\$23,690,847</b>	<b>\$24,358,192</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 (%) <sup>f</sup>
<b>Class IA</b>														
6/30/21†	\$9.45	— <sup>g</sup>	.06	.06	—	—	—	—	\$9.51	.63*	\$100	.45*	.01*	615*
12/31/20	10.18	.07	(.80)	(.73)	—	—	—	—	9.45	(7.17)	58	.90	.75	749
12/31/19	9.61	.22	.35	.57	—	—	—	—	10.18	5.93	69	.90	2.17	476
12/31/18	10.88	.15	(.95)	(.80)	(.06)	(.39)	(.02)	(.47)	9.61	(7.57)	12	.90	1.45	449
12/31/17	10.15	.10	.63	.73	—	—	—	—	10.88	7.19	20	.90	.98	576
12/31/16	10.46	.09	—	.09	(.38)	—	(.02)	(.40)	10.15	.93	11	.90	.86	503
<b>Class IB</b>														
6/30/21†	\$9.29	(.01)	.05	.04	—	—	—	—	\$9.33	.43*	\$23,591	.57*	(.13)*	615*
12/31/20	10.03	.04	(.78)	(.74)	—	—	—	—	9.29	(7.38)	24,300	1.15	.46	749
12/31/19	9.47	.17	.39	.56	—	—	—	—	10.03	5.91	26,383	1.15	1.73	476
12/31/18	10.73	.12	(.94)	(.82)	(.03)	(.39)	(.02)	(.44)	9.47	(7.84)	27,359	1.15	1.22	449
12/31/17	10.03	.08	.62	.70	—	—	—	—	10.73	6.98	33,221	1.15	.76	576
12/31/16	10.35	.06	(.01)	.05	(.35)	—	(.02)	(.37)	10.03	.60	31,034	1.15	.61	503

Before April 30, 2018, the fund was managed with a materially different investment strategy and may have achieved materially different performance results under its current investment strategy from that shown for periods before this date.

\* 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
6/30/21	0.36%
12/31/20	0.61
12/31/19	0.45
12/31/18	0.60
12/31/17	0.45
12/31/16	0.51

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

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

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

## Notes to financial statements 6/30/21 (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, 2021 through June 30, 2021.

Putnam VT Multi-Asset Absolute Return 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. In pursuing a positive total return, the fund’s strategies are 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. The Fund aims to accomplish this objective by combining “directional” strategies and “non-directional” strategies. The directional strategies seek efficient, diversified exposure to investment markets. They also seek to balance risk and 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 non-directional strategies aim to provide positive returns that have minimal correlation with traditional asset classes, such as equities or equity-like investments. The non-directional strategies are generally implemented using paired long and short positions in an effort to capitalize on long-term market inefficiencies and short-term opportunities. The non-directional strategies may involve the use of active trading strategies, currency transactions and options transactions.

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

### Note 1 — Significant accounting policies

The following is a summary of significant accounting policies consistently followed by the fund in the preparation of its financial statements. The preparation of financial statements is in conformity with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases

in net assets from operations. Actual results could differ from those estimates. Subsequent events after the Statement of assets and liabilities date through the date that the financial statements were issued have been evaluated in the preparation of the financial statements.

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

**Security valuation** Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund’s assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Investments for which market quotations are readily available are valued at the last reported sales price on their principal exchange, or official closing price for certain markets, and are classified as Level 1 securities under Accounting Standards Codification 820 *Fair Value Measurements and Disclosures* (ASC 820). If no sales are reported, as in the case of some securities that are traded OTC, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

Market quotations are not considered to be readily available for certain debt obligations (including short-term investments with remaining maturities of 60 days or less) and other investments; such investments are valued on the basis of valuations furnished by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such services or dealers determine valuations for normal institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships, generally recognized by institutional traders, between securities (which consider such factors as security prices, yields, maturities and ratings). These securities will generally be categorized as Level 2.

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depository Receipts, exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. 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. Certain securities may be valued on the basis of a price provided by a single source. 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, 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, if any, and including amortization and accretion of premiums and discounts on debt securities, is recorded on the accrual basis. Dividend income, net of any applicable withholding taxes, is recognized on the ex-dividend date except that certain dividends from foreign securities, if any, are recognized as soon as the fund is informed of the ex-dividend date. Non-cash dividends, if any, are recorded at the fair value of the securities received. Dividends representing a return of capital or capital gains, if any, are reflected as a reduction of cost and/or as a realized gain.

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

**Options contracts** The fund uses options contracts to hedge duration and convexity, to isolate prepayment risk, to gain exposure to interest rates, to hedge against changes in values of securities it owns, owned or expects to own, to hedge prepayment risk, to generate additional income for the portfolio, to enhance returns on securities owned, to enhance the return on a security owned, to gain exposure to securities and to manage downside risks.

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

originally received is recorded as an addition to sales proceeds. If a written put option is exercised, the premium originally received is recorded as a reduction to the cost of investments.

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

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

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 credit risk, to hedge market risk, 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 pledged to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or replugged, are presented in the fund's portfolio.

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

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 \$641,342 on open derivative contracts subject to the Master Agreements. Collateral pledged by the fund at period end for these agreements totaled \$607,939 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 \$704,750 and the value of securities loaned amounted to \$691,931.

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

**Lines of credit** The fund participates, along with other Putnam funds, in a \$317.5 million unsecured committed line of credit and a \$235.5 million unsecured uncommitted line of credit, both provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the committed line of credit and 1.30% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the uncommitted line of credit. A closing fee equal to 0.04%

of the committed line of credit and 0.04% of the uncommitted line of credit has been paid by the participating funds. In addition, a commitment fee of 0.21% per annum on any unutilized portion of the committed line of credit is allocated to the participating funds based on their relative net assets and paid quarterly. During the reporting period, the fund had no borrowings against these arrangements.

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

Under the Regulated Investment Company Modernization Act of 2010, the fund will be permitted to carry forward capital losses incurred for an unlimited period and the carry forwards will retain their character as either short-term or long-term capital losses. At December 31, 2020, the fund had the following capital loss carryovers available, to the extent allowed by the Code, to offset future net capital gain, if any:

Loss carryover		
Short-term	Long-term	Total
\$707,563	\$494,778	\$1,202,341

Tax cost of investments includes adjustments to net unrealized appreciation (depreciation) which may not necessarily be final tax cost basis adjustments, but closely approximate the tax basis unrealized gains and losses that may be realized and distributed to shareholders. The aggregate identified cost on a tax basis is \$25,137,046, resulting in gross unrealized appreciation and depreciation of \$2,804,548 and \$1,465,478, respectively, or net unrealized appreciation of \$1,339,070.

**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 51.5% of the fund is owned by accounts of one insurance company.

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

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

0.880%	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 0.353% of the fund's average net assets.

Putnam Management has contractually agreed, through April 30, 2023, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plans, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were reduced by \$74,039 as a result of this limit.

Putnam Management has also contractually agreed to waive fees (and, to the extent necessary, bear other expenses) of the fund through April 30, 2023, to the extent that total expenses of the fund (excluding brokerage, interest, taxes, investment-related expenses, payments under distribution plans, 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 \$9,458 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	\$26
Class IB	8,076
Total	\$8,102

The fund has entered into expense offset arrangements with Putnam Investor Services, Inc. and State Street whereby Putnam Investor Services, Inc.'s and State Street's fees are reduced by credits allowed on cash balances. For the reporting period, the fund's expenses were reduced by \$64 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$15, 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)	\$85,019,906	\$87,835,724
U.S. government securities (Long-term)	—	—
<b>Total</b>	<b>\$85,019,906</b>	<b>\$87,835,724</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 6/30/21		Year ended 12/31/20		Six months ended 6/30/21		Year ended 12/31/20	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	5,443	\$51,096	1,588	\$15,276	221,585	\$2,034,910	610,740	\$5,754,931
Shares issued in connection with reinvestment of distributions	—	—	—	—	—	—	—	—
	5,443	51,096	1,588	15,276	221,585	2,034,910	610,740	5,754,931
Shares repurchased	(1,043)	(9,674)	(2,262)	(21,692)	(310,919)	(2,869,920)	(625,324)	(5,881,227)
<b>Net increase (decrease)</b>	<b>4,400</b>	<b>\$41,422</b>	<b>(674)</b>	<b>\$(6,416)</b>	<b>(89,334)</b>	<b>\$(835,010)</b>	<b>(14,584)</b>	<b>\$(126,296)</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	10.77%	\$10,784

#### Note 5 — Affiliated transactions

Transactions during the reporting period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/20	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 6/30/21
<b>Short-term investments</b>					
Putnam Cash Collateral Pool, LLC*	\$1,357,775	\$13,087,375	\$13,740,400	\$568	\$704,750
Putnam Short Term Investment Fund**	9,670,286	5,744,687	5,504,739	5,281	9,910,234
<b>Total Short-term investments</b>	<b>\$11,028,061</b>	<b>\$18,832,062</b>	<b>\$19,245,139</b>	<b>\$5,849</b>	<b>\$10,614,984</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.

On July 27, 2017, the United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, announced a desire to phase out the use of LIBOR by the end of 2021. On March 5, 2021, the FCA and LIBOR's administrator, ICE Benchmark Administration, announced that most LIBOR settings will no longer be published after the end of 2021 and a majority of U.S. dollar LIBOR settings will no longer be published after June 30, 2023. LIBOR has historically been a common benchmark interest rate index used to make adjustments to variable-rate loans. It is used throughout global banking and financial industries to determine interest rates for a variety of financial instruments and borrowing arrangements. The transition process might lead to increased volatility and illiquidity in markets that currently rely on LIBOR to determine interest rates. It could also lead to a reduction in the value of some LIBOR-based investments and reduce the effectiveness of new hedges placed against existing LIBOR-based investments. While some LIBOR-based instruments may contemplate a scenario where LIBOR is no longer available by providing for an alternative rate-setting methodology, not all may have such provisions and there may be significant uncertainty regarding the effectiveness of any such alternative methodologies. Since the usefulness of LIBOR as a benchmark could deteriorate during the transition period, these effects could occur prior to the date on which the applicable rate ceases to be published.

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

### 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)	\$2,000
Purchased currency option contracts (contract amount)	\$850,000
Purchased swap option contracts (contract amount)	\$860,000
Written currency option contracts (contract amount)	\$850,000
Written swap option contracts (contract amount)	\$820,000
Futures contracts (number of contracts)	200
Forward currency contracts (contract amount)	\$23,500,000
Centrally cleared interest rate swap contracts (notional)	\$7,000,000
OTC total return swap contracts (notional)	\$49,800,000
Centrally cleared total return swap contracts (notional)	\$4,800,000
OTC credit default contracts (notional)	\$3,300,000
Centrally cleared credit default contracts (notional)	\$5,200,000
Warrants (number of warrants)	96,000

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	\$369,994*	Payables, Net assets — Unrealized depreciation	\$854,702*
Foreign exchange contracts	Investments, Receivables	143,403	Payables	233,065
Equity contracts	Investments, Receivables, Net assets — Unrealized appreciation	842,402*	Payables, Net assets — Unrealized depreciation	446,906*
Interest rate contracts	Investments, Receivables, Net assets — Unrealized appreciation	120,399*	Payables, Net assets — Unrealized depreciation	47,494*
<b>Total</b>		<b>\$1,476,198</b>		<b>\$1,582,167</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	\$—	\$—	\$—	\$—	\$(59,083)	\$(59,083)
Foreign exchange contracts	—	—	—	69,874	—	69,874
Equity contracts	10,523	(145,874)	(75,706)	—	(102,139)	(313,196)
Interest rate contracts	—	25,236	(639,615)	—	(66,006)	(680,385)
<b>Total</b>	<b>\$10,523</b>	<b>\$(120,638)</b>	<b>\$(715,321)</b>	<b>\$69,874</b>	<b>\$(227,228)</b>	<b>\$(982,790)</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	\$—	\$—	\$—	\$—	\$116,625	\$116,625
Foreign exchange contracts	—	7,661	—	(155,202)	—	(147,541)
Equity contracts	(47,051)	143,236	(6,875)	—	114,077	203,387
Interest rate contracts	—	(2,750)	68,590	—	(11,143)	54,697
<b>Total</b>	<b>\$(47,051)</b>	<b>\$148,147</b>	<b>\$61,715</b>	<b>\$(155,202)</b>	<b>\$219,559</b>	<b>\$227,168</b>

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

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

	Bank of America N.A.	Barclays Bank PLC	Barclays Capital, Inc. (clearing broker)	BofA Securities, Inc.	Citibank, N.A.	Citigroup Global Markets, Inc.	Credit Suisse International	Goldman Sachs International
<b>Assets:</b>								
Centrally cleared interest rate swap contracts <sup>§</sup>	\$—	\$—	\$9,006	\$—	\$—	\$—	\$—	\$—
OTC Total return swap contracts*#	105,576	3	—	—	36,770	—	12,376	138,017
Centrally cleared total return swap contracts <sup>§</sup>	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection sold*#	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection purchased*#	—	—	—	—	—	10,796	13,909	25,193
Centrally cleared credit default contracts <sup>§</sup>	—	—	1,461	—	—	—	—	—
Futures contracts <sup>§</sup>	—	—	—	480	—	—	—	—
Forward currency contracts#	1,786	5,530	—	—	3,589	—	7,983	31,830
Forward premium swap option contracts#	260	—	—	—	—	—	—	99
Purchased options***	—	—	—	—	—	—	—	7,602
<b>Total Assets</b>	<b>\$107,622</b>	<b>\$5,533</b>	<b>\$10,467</b>	<b>\$480</b>	<b>\$40,359</b>	<b>\$10,796</b>	<b>\$34,268</b>	<b>\$202,741</b>
<b>Liabilities:</b>								
Centrally cleared interest rate swap contracts <sup>§</sup>	—	—	15,993	—	—	—	—	—
OTC Total return swap contracts*#	93,471	14,367	—	—	39,641	—	307	93,736
Centrally cleared total return swap contracts <sup>§</sup>	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection sold*#	2,904	6,545	—	—	—	115,262	239,371	86,567
OTC Credit default contracts — protection purchased*#	—	—	—	—	—	—	—	—
Centrally cleared credit default contracts <sup>§</sup>	—	—	—	—	—	—	—	—
Futures contracts <sup>§</sup>	—	—	—	11,047	—	—	—	—
Forward currency contracts#	12,100	13,735	—	—	3,246	—	29	50,686
Forward premium swap option contracts#	1,493	—	—	—	—	—	—	122
Written options#	—	—	—	—	—	—	—	2,613
<b>Total Liabilities</b>	<b>\$109,968</b>	<b>\$34,647</b>	<b>\$15,993</b>	<b>\$11,047</b>	<b>\$42,887</b>	<b>\$115,262</b>	<b>\$239,707</b>	<b>\$233,724</b>
<b>Total Financial and Derivative Net Assets</b>	<b>\$(2,346)</b>	<b>\$(29,114)</b>	<b>\$(5,526)</b>	<b>\$(10,567)</b>	<b>\$(2,528)</b>	<b>\$(104,466)</b>	<b>\$(205,439)</b>	<b>\$(30,983)</b>
Total collateral received (pledged)†##	\$—	\$—	\$—	\$—	\$—	\$(104,466)	\$(205,439)	\$—
Net amount	\$(2,346)	\$(29,114)	\$(5,526)	\$(10,567)	\$(2,528)	\$—	\$—	\$(30,983)
<i>Controlled collateral received (including TBA commitments)**</i>	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
<i>Uncontrolled collateral received</i>	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
<i>Collateral (pledged) (including TBA commitments)**</i>	\$—	\$—	\$—	\$—	\$—	\$(112,000)	\$(273,983)	\$—

\*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.

HSBC Bank USA, National Association	JPMorgan Chase Bank N.A.	JPMorgan Securities LLC	Merrill Lynch International	Morgan Stanley & Co. International PLC	NatWest Markets PLC	State Street Bank and Trust Co.	Toronto-Dominion Bank	UBSAG	WestPac Banking Corp.	Total
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$9,006
—	25,574	376	—	—	—	—	—	182,389	—	501,081
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	33,512	4,059	9,448	—	—	—	—	—	96,917
—	—	—	—	—	—	—	—	—	—	1,461
—	—	26,725	—	—	—	—	—	—	—	27,205
1,738	15,291	—	—	13,859	183	37,623	7,650	3,265	1,612	131,939
—	979	—	—	—	—	—	—	—	—	1,338
—	—	—	—	3,862	—	—	—	—	—	11,464
<b>\$1,738</b>	<b>\$41,844</b>	<b>\$60,613</b>	<b>\$4,059</b>	<b>\$27,169</b>	<b>\$183</b>	<b>\$37,623</b>	<b>\$7,650</b>	<b>\$185,654</b>	<b>\$1,612</b>	<b>\$780,411</b>
—	—	—	—	—	—	—	—	—	—	15,993
—	20,986	—	—	—	—	—	—	146,043	—	408,551
—	—	—	—	—	—	—	—	—	—	—
—	—	199,583	50,424	17,160	—	—	—	—	—	717,816
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	—	2,594	—	—	—	—	—	—	—	13,641
10,959	17,384	—	—	40,206	8,112	24,791	13,530	34,367	128	229,273
—	1,169	—	—	—	—	—	—	—	—	2,784
—	—	—	—	1,179	—	—	—	—	—	3,792
<b>\$10,959</b>	<b>\$39,539</b>	<b>\$202,177</b>	<b>\$50,424</b>	<b>\$58,545</b>	<b>\$8,112</b>	<b>\$24,791</b>	<b>\$13,530</b>	<b>\$180,410</b>	<b>\$128</b>	<b>\$1,391,850</b>
<b>\$(9,221)</b>	<b>\$2,305</b>	<b>\$(141,564)</b>	<b>\$(46,365)</b>	<b>\$(31,376)</b>	<b>\$(7,929)</b>	<b>\$12,832</b>	<b>\$(5,880)</b>	<b>\$5,244</b>	<b>\$1,484</b>	<b>\$(611,439)</b>
\$—	\$—	\$(141,564)	\$—	\$—	\$—	\$—	\$—	\$—	\$—	
\$(9,221)	\$2,305	\$—	\$(46,365)	\$(31,376)	\$(7,929)	\$12,832	\$(5,880)	\$5,244	\$1,484	
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$—	\$—	\$(221,956)	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$(607,939)

†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.

§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 \$313,946 and \$232,981, respectively.

#### **Note 9 — New accounting pronouncements**

In March 2020, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2020-04, Reference Rate Reform (Topic 848) — *Facilitation of the Effects of Reference Rate Reform on Financial Reporting*. The amendments in ASU 2020-04 provide optional temporary financial reporting relief from the effect of certain types of contract modifications due to the planned discontinuation of LIBOR and other interbank-offered based reference rates as of the end of 2021. The discontinuation of LIBOR was subsequently extended to June 30, 2023. ASU 2020-04 is effective for certain reference rate-related contract modifications that occur during the period March 12, 2020 through December 31, 2022. Management is currently evaluating the impact, if any, of applying this provision.

## 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 considered any possible changes to the annual contract review materials furnished to the Contract Committee during the course of the previous year's review and, as applicable, identified those changes to Putnam Management. 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 2021, 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 2021, 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 2021 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, 2021. (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 any 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 certain exceptions primarily involving newly launched or repositioned funds, the current fee arrangements under the vast majority of the funds' 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. Under its management contract, your fund has the benefit of breakpoints in its management fee schedule that provide shareholders with reduced fee levels as assets under management in the Putnam family of funds increase. 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. (Two 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 schedule for your fund would be appropriate at this time.

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 and the funds' investor servicing agent, Putnam Investor Services, Inc. ("PSERV"), have implemented expense limitations that were in effect during your fund's fiscal year ending in 2020. These expense limitations were: (i) a contractual expense limitation applicable to specified open-end funds, including your fund, 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 during their fiscal years ending in 2020. However, in the case of your fund, the second expense limitation applied during its fiscal year ending in 2020. Putnam Management and PSERV have agreed to maintain these expense limitations until at least April 30, 2023. In addition, Putnam Management contractually agreed to 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 through at least April 30, 2023. During its fiscal year ending in 2020, your fund's expenses were reduced as a result of this expense limitation. The support of Putnam Management and PSERV 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 fees), which provides a general indication of your fund's relative standing. In the custom peer group, your fund ranked in the third 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 fourth quintile in total expenses (excluding any applicable 12b-1 fees) as of December 31, 2020. 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, 2020 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 the revenues, expenses and profitability of Putnam Management and its affiliates, 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 for the Putnam funds, including the fee schedule for your fund, represented reasonable compensation for the services being provided and represented an appropriate sharing between fund shareholders and Putnam Management of any 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 services provided and fees charged by Putnam Management and its affiliates to other clients, including defined benefit pension and profit-sharing plans, sub-advised mutual funds, private funds sponsored by affiliates of Putnam Management, model-only separately managed

accounts and Putnam Management's newly launched exchange-traded funds. This information included, in cases where a 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 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 marketplaces. The Trustees considered the fact that in many cases fee rates across different asset classes are higher on average for mutual funds than for other clients, and the Trustees also considered 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 Putnam Management's 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 individual portfolio managers and with senior management 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, in the aggregate, The Putnam Funds generally performed well in 2020, which Putnam Management characterized as a challenging year with significant volatility and varied market dynamics. On an asset-weighted basis, the Putnam funds ranked in the second quartile of their peers as determined by Lipper Inc. ("Lipper") for the year ended December 31, 2020 and, on an asset-weighted-basis, delivered a gross return that was 2.3% ahead of their benchmarks in 2020. In addition to the performance of the individual Putnam funds, the Trustees considered, as they had in prior years, the performance of The Putnam Fund complex versus competitor fund complexes. In this regard, the Trustees observed that The Putnam Funds' relative performance, as reported in the Barron's/Lipper Fund Families survey, continued to be exceptionally strong over the long term, with The Putnam Funds ranking as the 3rd best performing mutual fund complex out of 44 complexes for the ten-year period, with 2020 marking the fourth consecutive year that The Putnam Funds have ranked in the top ten fund complexes for the ten-year period. The Trustees noted that The Putnam Funds' performance was solid over the one- and five-year periods, with The Putnam Funds ranking 22nd out of 53 complexes and 14th out of 50 complexes, respectively. In addition to the Barron's/Lipper Fund Families Survey, the Trustees also considered the funds' ratings assigned by Morningstar Inc., noting that 26 of the funds were four- or five-star rated at the end of 2020 (representing an increase of four funds year-over-year) and that this included seven funds that had achieved a five-star rating (representing an increase of two funds

year-over-year). They also noted, however, the disappointing investment performance of some funds for periods ended December 31, 2020 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 and evaluate whether additional actions to address areas of underperformance may be 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 comparisons of those returns to the returns of selected investment benchmarks. In the case of your fund, the Trustees considered information about your fund's total return and its performance relative to its benchmark over the one-year, three-year and five-year periods ended December 31, 2020. Your fund's class IA shares' return, net of fees and expenses, was negative and trailed the return of its benchmark over the one-year, three-year and five-year periods ended December 31, 2020. (When considering performance information, shareholders should be mindful that past performance is not a guarantee of future results.)

The Trustees expressed concern about your fund's significant underperformance relative to its benchmark over the one-year and three-year periods ended December 31, 2020 and considered the circumstances that may have contributed to this disappointing performance. The Trustees considered Putnam Management's observation that the fund's underperformance over the one-year period was primarily due to poor security selection in several equity and fixed income strategies. The Trustees also noted Putnam Management's view that the fund's underperformance over the three-year period was primarily due to poor security selection in several equity strategies. The Trustees considered Putnam Management's observation that strategic exposure to commodities also detracted from the fund's performance over the three-year period, noting that commodities exposure had since been removed from the fund's strategic positioning.

The Trustees considered that the fund's portfolio managers continued to have confidence in the long-term efficacy of the strategies that had underperformed in recent years and that the fund had reduced its reliance on equity strategies in an effort to improve the fund's balance of risks. The Trustees noted that Putnam Management remained confident in the fund's portfolio managers. The Trustees also considered Putnam Management's continued efforts to support fund performance through certain initiatives, including structuring compensation for portfolio managers 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 had made selective hires and internal promotions in 2020 to strengthen its investment team.

As a general matter, the Trustees believe that cooperative efforts between the Trustees and Putnam Management represent the most effective way to address investment performance concerns that may arise from time to time. The Trustees noted that investors in the Putnam funds have, in effect, placed their trust in the Putnam organization, under the oversight of the funds' Trustees, to make appropriate decisions regarding the management of the funds. The Trustees also considered that Putnam Management has made changes in light of subpar investment performance when warranted. Based on Putnam Management's willingness to take appropriate measures to address fund performance issues, the Trustees concluded that it continued to be advisable to seek change within Putnam Management to address performance shortcomings. In the Trustees' view, the alternative of engaging a new investment adviser for an underperforming fund, with all the attendant risks and disruptions, would not likely provide any greater assurance of improved investment performance.

### **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. The Trustees indicated their continued intent to monitor regulatory and industry developments in this area with the assistance of their Brokerage Committee. In addition, with the assistance of their Brokerage Committee, the Trustees 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 PSERV and its distributor's contract 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 investor services provided by PSERV were required for the operation of the funds, and that they were of a quality at least equal to those provided by other providers.

## Other important information

### Proxy voting

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

### Fund portfolio holdings

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

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

### Liquidity risk management program

Putnam, as the administrator of the fund's liquidity risk management program (appointed by the Board of Trustees), presented the most recent annual report on the program to the Trustees in April 2021. The report covered the structure of the program, including the program documents and related policies and procedures adopted to comply with Rule 22e-4 under the Investment Company Act of 1940, and reviewed the operation of the program from January 2020 through December 2020. The report included a description of the annual liquidity assessment of the fund that Putnam performed in November 2020. The report noted that there were no material compliance exceptions identified under Rule 22e-4 during the period. The report included a review of the governance of the program and the methodology for classification of the fund's investments. The report also included a discussion of liquidity monitoring during the period, including during the market liquidity challenges caused by the Covid-19 pandemic, and the impact those challenges had on the liquidity of the fund's investments. Putnam concluded that the program has been operating effectively and adequately to ensure compliance with Rule 22e-4.

## Fund information

### Investment Manager

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### Investment Sub-Advisors

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### Marketing Services

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### Investor Servicing Agent

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### Custodian

State Street Bank and Trust Company

### Legal Counsel

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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.