

Putnam Variable Trust

Putnam VT High Yield Fund

Semiannual report 6 | 30 | 19

IMPORTANT NOTICE: Delivery of paper fund reports

In accordance with regulations adopted by the Securities and Exchange Commission, beginning on or after January 1, 2021, at the election of your insurance provider, you may not receive paper reports like this one in the mail from the insurance provider that offers your variable annuity contract or variable life insurance policy unless you specifically request it. Instead, they will be available on a website, and your insurance provider will notify you by mail whenever a new one is available, and provide you with a website link to access the report.

If you wish to continue to receive paper reports free of charge after January 1, 2021, please contact your insurance provider. If you already receive these reports electronically, no action is required.

Message from the Trustees

August 5, 2019

Dear Shareholder:

If there is any lesson to be learned from constantly changing financial markets, it is the importance of positioning your investment portfolio for your long-term goals. We believe that one strategy is to diversify across different asset classes and investment approaches.

We also believe your mutual fund investment offers a number of advantages, including constant monitoring by experienced investment professionals who maintain a long-term perspective. Putnam's portfolio managers and analysts take a research-intensive approach that includes risk management strategies designed to serve you through changing conditions.

Another key strategy, in our view, is seeking the counsel of a financial advisor. For over 80 years, Putnam has recognized the importance of professional investment advice. Your financial advisor can help in many ways, including defining and planning for goals such as retirement, evaluating the level of risk appropriate for you, and reviewing your investments on a regular basis and making adjustments as necessary.

As always, your fund's Board of Trustees remains committed to protecting the interests of Putnam shareholders like you, and we 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

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: The value of investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political or financial market conditions, investor sentiment and market perceptions, government actions, geopolitical events or changes, and factors related to a specific issuer, geography, industry or sector. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings. Lower-rated bonds may offer higher yields in return for more risk. 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 (a significant part of the fund's investments). 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. Unlike bonds, funds that invest in bonds have fees and expenses. You can lose money by investing in the fund.

Performance summary (as of 6/30/19)

Investment objective

High current income, with a secondary objective of capital growth when consistent with achieving high current income

Net asset value June 30, 2019

Class IA: \$6.14 Class IB: \$6.08

Total return at net asset value

(as of 6/30/19)	Class IA shares*	Class IB shares [†]	JPMorgan Developed High Yield Index‡
6 months	10.07%	10.05%	10.09%
1 year	6.48	6.25	7.51
5 years	20.92	19.45	26.32
Annualized	3.87	3.62	4.78
10 years	123.29	118.17	151.35
Annualized	8.36	8.11	9.66
Life	857.27	798.77	_
Annualized	7.46	7.24	_

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

†Class inception date: April 30, 1998.

‡The fund's benchmark, the JPMorgan Developed High Yield Index, was introduced on 12/31/94, which post-dates the inception of the fund's class IA shares.

The JPMorgan Developed High Yield Index is an unmanaged index of high-yield fixed-income securities issued in developed countries.

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. Performance of class IB shares before their inception is derived from the historical performance of class IA shares, adjusted to reflect the higher operating expenses applicable to such shares. 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

Consumer cyclicals	18.9%
Communication services	12.8%
Basic materials	11.8%
Energy	11.3%
Financial	9.4%
Health care	8.7%
Capital goods	7.3%
Consumer staples	5.2%
Technology	5.1%
Utilities	3.1%
Transportation	0.3%
Cash and net other assets	6.3%

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.

Allocations may not total 100% because the table includes the notional value of certain derivatives (the economic value for purposes of calculating periodic payment obligations), in addition to the market value of securities. Holdings and allocations may vary over time.

Credit quality

A	0.2%
ВВВ	8.5%
ВВ	41.5%
В	32.3%
CCC and below	9.2%
Notrated	2.0%
Cash and net other assets	6.3%

Credit qualities are shown as a percentage of net assets. A bond rated BBB or higher (A-3 or higher, for short-term debt) is considered investment grade. This chart reflects the highest security rating provided by one or more of Standard & Poor's, Moody's, and Fitch. Ratings and portfolio credit quality may vary

Cash and net other assets, if any, represent the market value weights of cash, derivatives, and short-term securities in the portfolio. The fund itself has not been rated by an independent rating agency.

^{*} Class inception date: February 1, 1988.

Understanding your fund's expenses

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

Review your fund's expenses

The two left-hand columns of the Expenses per \$1,000 table show the expenses you would have paid on a \$1,000 investment in your fund from 1/1/19 to 6/30/19. They also show how much a \$1,000 investment would be worth at the close of the period, assuming actual returns and expenses. To estimate the ongoing expenses you paid over the period, divide your account value by \$1,000, then multiply $the \, result \, by \, the \, number \, in \, the \, first \, line \, for \, the \, class \, of \, shares \, you \, own.$

Compare your fund's expenses with those of other funds

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

Expense ratios

	ClassIA	ClassIB
Total annual operating expenses for the fiscal year ended 12/31/18	0.72%	0.97%
Annualized expense ratio for the six-month period ended 6/30/19	0.73%	0.98%

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

Expenses are shown as a percentage of average net assets.

Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 6/30/19		Expenses and v \$1,000 investm a hypothetical return for the 6 ended 6/30/19	nent, assuming 5% annualized
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$3.80	\$5.10	\$3.66	\$4.91
Ending value (after expenses)	\$1,100.70	\$1,100.50	\$1,021.17	\$1,019.93

*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 6/30/19. The expense ratio may differ for each share class.

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

Your fund's managers



Portfolio Manager Paul D. Scanlon, CFA, is Co-Head of Fixed Income. He joined Putnam in 1999 and has been in the investment industry since 1986.

Norman P. Boucher and Robert L. Salvin 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.

The fund's portfolio 6/30/19 (Unaudited)

Advertising and marketing services (0.1%)		
Outfront Media Capital, LLC/Outfront Media		
Capital Corp. company guaranty sr. unsec.	Ċ14E 000	Č140.040
sub. notes 5.875%, 3/15/25 Outfront Media Capital, LLC/Outfront Media	\$145,000	\$149,848
Capital Corp. company guaranty sr. unsec.		
sub. notes 5.625%, 2/15/24	140,000	144,032
Automotive (0.4%)		293,880
Navistar International Corp. 144A sr. unsec.		
notes 6.625%, 11/1/25	720,000	754,200
Durandonation (2.60/)		754,200
Broadcasting (2.6%) Clear Channel Worldwide Holdings, Inc. company		
guaranty sr. unsec. unsub. notes 6.50%, 11/15/22	270,000	275,063
Clear Channel Worldwide Holdings, Inc. 144A		
company guaranty sr. unsec. notes 9.25%, 2/15/24	225,000	244,125
Entercom Media Corp. 144A company		
guaranty notes 6.50%, 5/1/27	330,000	343,200
Entercom Media Corp. 144A company		
guaranty sr. unsec. notes 7.25%, 11/1/24	370,000	389,888
Gray Television, Inc. 144A sr. unsec.	620.000	C02 EE(
notes 7.00%, 5/15/27 iHeartCommunications, Inc. company	630,000	683,550
guaranty sr. notes 6.375%, 5/1/26	168,141	178,440
iHeartCommunications, Inc. company		,
guaranty sr. unsec. notes 8.375%, 5/1/27	337,569	353,610
Nexstar Broadcasting, Inc. 144A company		
guaranty sr. unsec. notes 5.625%, 8/1/24	645,000	668,194
Nexstar Escrow, Inc. 144A sr. unsec.		
notes 5.625%, 7/15/27	125,000	127,969
Sinclair Television Group, Inc. 144A company guaranty sr. unsec. sub. notes 5.625%, 8/1/24	170 000	172 025
Sirius XM Radio, Inc. 144A sr. unsec.	170,000	173,825
bonds 5.00%, 8/1/27	660,000	670,725
Townsquare Media, Inc. 144A company		
guaranty sr. unsec. notes 6.50%, 4/1/23	355,000	349,675
Univision Communications, Inc. 144A company		
guaranty sr. sub. notes 5.125%, 2/15/25	465,000	442,331
Building materials (1.2%)		4,900,595
American Builders & Contractors Supply Co., Inc.		
144A company guaranty sr. unsec. notes 5.875%,		
5/15/26	100,000	104,250
American Builders & Contractors Supply Co., Inc.	225.000	242.22
144A sr. unsec. notes 5.75%, 12/15/23	235,000	243,225
Jeld-Wen, Inc. 144A company guaranty sr. unsec. notes 4.875%, 12/15/27	320,000	309,600
Jeld-Wen, Inc. 144A company guaranty sr. unsec.	320,000	303,000
notes 4.625%, 12/15/25	135,000	132,469
Standard Industries, Inc. 144A sr. unsec.		
notes 6.00%, 10/15/25	255,000	270,619
Standard Industries, Inc. 144A sr. unsec.		
notes 5.375%, 11/15/24	335,000	346,725
Standard Industries, Inc. 144A sr. unsec.	220.000	224.000
notes 5.00%, 2/15/27	320,000	324,000
Standard Industries, Inc. 144A sr. unsec. notes 4.75%, 1/15/28	30,000	29,775
Werner FinCo LP/Werner FinCo, Inc. 144A company	-0,000	20,110
guaranty sr. unsec. notes 8.75%, 7/15/25	495,000	419,513
		2,180,176

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Cable television (5.4%)		
Altice Luxembourg SA 144A company		
guaranty sr. unsec. notes 7.75%, 5/15/22 (Luxembourg)	\$239,000	\$242,884
Altice Luxembourg SA 144A sr. unsec.	\$259,000	ŞZ 4 Z,004
notes 10.50%, 5/15/27 (Luxembourg)	345,000	354,488
Cablevision Systems Corp. sr. unsec.		
unsub. notes 8.00%, 4/15/20	75,000	77,462
CCO Holdings, LLC/CCO Holdings Capital Cor 144A company guaranty sr. unsec. bonds	p.	
5.50%,5/1/26	440,000	460,482
CCO Holdings, LLC/CCO Holdings Capital Cor	p.	
144A company guaranty sr. unsec. notes 5.875%, 4/1/24	600,000	627.000
5.675%, 4/1/24 CCO Holdings, LLC/CCO Holdings Capital Cor	600,000	627,000
144A sr. unsec. bonds 5.375%, 6/1/29 ##	955,000	986,038
CCO Holdings, LLC/CCO Holdings Capital Cor	p.	
144A sr. unsec. notes 5.75%, 2/15/26	595,000	624,006
CSC Holdings, LLC sr. unsec. unsub. bonds 5.3 6/1/24	25%, 1,085,000	1,127,044
CSC Holdings, LLC sr. unsec. unsub. notes 6.7		1,121,077
11/15/21	180,000	192,150
CSC Holdings, LLC 144A sr. unsec. notes 7.759		
7/15/25	255,000	275,885
CSC Holdings, LLC 144A sr. unsec. unsub. notes 10.875%, 10/15/25	200,000	229,250
CSC Holdings, LLC 144A sr. unsec.		
unsub. notes 7.50%, 4/1/28	855,000	938,619
CSC Holdings, LLC 144A sr. unsec.	560,000	F.CO. 000
unsub. notes 5.125%, 12/15/21 DISH DBS Corp. company guaranty sr. unsec.	560,000	560,000
unsub. notes 5.875%, 11/15/24	1,020,000	965,175
Quebecor Media, Inc. sr. unsec.		
unsub. notes 5.75%, 1/15/23 (Canada)	110,000	117,700
Unitymedia GmbH 144A company	200,000	200 500
guaranty sr. notes 6.125%, 1/15/25 (Germany Videotron, Ltd. company guaranty sr. unsec.	200,000	208,500
unsub. notes 5.00%, 7/15/22 (Canada)	480,000	502,800
Videotron, Ltd./Videotron Ltee. 144A sr. unse		
notes 5.125%, 4/15/27 (Canada)	325,000	339,219
Virgin Media Finance PLC 144A company guaranty sr. unsec. unsub. notes 5.75%, 1/15/	/25	
(United Kingdom)	540,000	558,895
Ziggo Bond Co. BV 144A sr. unsec. notes 6.00		
1/15/27 (Netherlands)	400,000	401,000
Ziggo BV 144A company guaranty sr. notes 5. 1/15/27 (Netherlands)	50%, 195,000	198,356
	100,000	9,986,953
Capital goods (6.5%) Allison Transmission, Inc. 144A company		, ,
guaranty sr. unsec. notes 4.75%, 10/1/27	535,000	530,988
Amsted Industries, Inc. 144A company		
guaranty sr. unsec. sub. notes 5.625%, 7/1/27		239,775
ARD Securities Finance SARL 144A sr. notes 8		210.024
1/31/23 (Luxembourg) ‡‡ Ardagh Packaging Finance PLC/Ardagh Holdi	218,287	219,924
USA, Inc. 144A company guaranty sr. unsec.	iligs	
notes 7.25%, 5/15/24 (Ireland)	680,000	717,400
Ardagh Packaging Finance PLC/Ardagh Holdi	ings	
USA, Inc. 144A company guaranty sr. unsec. notes 6.00%, 2/15/25 (Ireland)	285,000	295,331
ATS Automation Tooling Systems, Inc. 144A	200,000	
sr. unsec. notes 6.50%, 6/15/23 (Canada)	395,000	408,167

AND NOTES (85.0%)* cont. Prin	cipal amount	Value
Capital goods cont.		
Berry Global, Inc. 144A notes 4.50%, 2/15/26	\$110,000	\$108,350
Bombardier, Inc. 144A sr. unsec. notes 8.75%,		
12/1/21 (Canada)	150,000	163,125
Bombardier, Inc. 144A sr. unsec. notes 7.875%, 4/15/27 (Canada)	360,000	360,450
Bombardier, Inc. 144A sr. unsec. notes 7.50%, 12/1/24 (Canada)	560,000	574,700
Briggs & Stratton Corp. company guaranty sr. unsec. notes 6.875%, 12/15/20	380,000	395,200
Clean Harbors, Inc. 144A sr. unsec. bonds 5.125% 7/15/29	, 125,000	127,500
Clean Harbors, Inc. 144A sr. unsec. notes 4.875%, 7/15/27	215,000	218,515
Crown Americas, LLC/Crown Americas Capital Co	orp.	
VI company guaranty sr. unsec. notes 4.75%,		
2/1/26	220,000	226,050
Crown Cork & Seal Co., Inc. company guaranty sr. unsec. bonds 7.375%, 12/15/26	305,000	350,750
GFL Environmental, Inc. 144A sr. unsec. notes 8.50%, 5/1/27 (Canada)	325,000	349,781
Great Lakes Dredge & Dock Corp. company	525,000	
guaranty sr. unsec. notes 8.00%, 5/15/22 Hulk Finance Corp. 144A sr. unsec. notes 7.00%,	323,000	555,844
6/1/26 (Canada)	695,000	711,506
MasTec, Inc. company guaranty sr. unsec. unsub. notes 4.875%, 3/15/23	240,000	243,300
Oshkosh Corp. company guaranty sr. unsec. sub. notes 5.375%, 3/1/25	205,000	212,688
Panther BF Aggregator 2 LP/Panther		
Finance Co., Inc. 144A company guaranty sr. notes 6.25%, 5/15/26	60,000	62,325
Panther BF Aggregator 2 LP/Panther	00,000	02,323
Finance Co., Inc. 144A company		
guaranty sr. unsec. notes 8.50%, 5/15/27	310,000	319,300
Park-Ohio Industries, Inc. company	220.000	220.000
guaranty sr. unsec. notes 6.625%, 4/15/27	220,000	220,000
RBS Global, Inc./Rexnord, LLC 144A sr. unsec. notes 4.875%, 12/15/25	350,000	354,375
Resideo Funding, Inc. 144A company	222.022	222.222
guaranty sr. unsec. notes 6.125%, 11/1/26	230,000	239,200
Staples, Inc. 144A sr. notes 7.50%, 4/15/26 Staples, Inc. 144A sr. unsec. notes 10.75%,	725,000	720,730
4/15/27	440,000	437,800
Stevens Holding Co, Inc. 144A company		
guaranty sr. unsec. notes 6.125%, 10/1/26	590,000	621,713
Tennant Co. company guaranty sr. unsec. unsub. notes 5.625%, 5/1/25	295,000	304,588
Titan Acquisition, Ltd./Titan Co-Borrower, LLC 144A sr. unsec. notes 7.75%, 4/15/26 (Canada)	200,000	180,000
TransDigm, Inc. company guaranty sr. unsec.		
sub. notes 6.50%, 5/15/25 TransDigm, Inc. company guaranty sr. unsec.	70,000	70,805
sub. notes 6.375%, 6/15/26	720,000	725,400
TransDigm, Inc. 144A company guaranty sr. notes 6.25%, 3/15/26	520,000	547,300
Vertiv Group Corp. 144A sr. unsec. notes 9.25%, 10/15/24	180,000	172,350
Vertiv Intermediate Holding Corp. 144A sr. unsec. notes 12.00%, 2/15/22 ‡‡	140,000	135,100
	± 10,000	12,120,330

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Chemicals (3.5%) Alpha 2 BV 144A sr. unsec. notes 8.75%, 6/1/23 (Netherlands) ‡‡	3 \$310,000	\$304,575
Alpha 3 BV/Alpha US Bidco, Inc. 144A compan		Q00 1,010
guaranty sr. unsec. notes 6.25%, 2/1/25 (Netherlands)	400,000	397,500
Axalta Coating Systems, LLC 144A company guaranty sr. unsec. unsub. notes 4.875%, 8/15	5/24 235,000	242,050
CF Industries, Inc. company guaranty sr. unse bonds 4.95%, 6/1/43	425,000	380,375
Chemours Co. (The) company guaranty sr. un notes 5.375%, 5/15/27	sec. 215,000	204,788
Chemours Co. (The) company guaranty sr. un unsub. notes 7.00%, 5/15/25	sec. 345,000	360,525
Compass Minerals International, Inc. 144A co guaranty sr. unsec. notes 4.875%, 7/15/24	mpany 670,000	639,850
GCP Applied Technologies, Inc. 144A sr. unsec notes 5.50%, 4/15/26	e. 850,000	862,750
Ingevity Corp. 144A sr. unsec. notes 4.50%, 2/	1/26 455,000	441,350
Kraton Polymers, LLC/Kraton Polymers Capital Corp. 144A company guaranty sr. uns notes 7.00%, 4/15/25	ec. 190,000	192,375
PQ Corp. 144A company guaranty sr. unsec. notes 5.75%, 12/15/25	435,000	440,981
Starfruit Finco BV/Starfruit US Holdco, LLC 14 sr. unsec. notes 8.00%, 10/1/26 (Netherlands)		657,600
Syngenta Finance NV 144A company guaranty sr. unsec. unsub. notes 5.182%, 4/24 (Switzerland)	4/28 390,000	405,719
Syngenta Finance NV 144A company guaranty sr. unsec. unsub. notes 4.892%, 4/24 (Switzerland)	4/25 390,000	407,025
Tronox Finance PLC 144A company guaranty sr. unsec. notes 5.75%, 10/1/25 (United Kingdom)	165,000	160,050
WR Grace & Co Conn. 144A company guaranty sr. unsec. notes 5.625%, 10/1/24	330,000	355,575
		6,453,088
Commercial and consumer services (1.5%) Carriage Services, Inc. 144A sr. unsec.	•	
notes 6.625%, 6/1/26 Gartner, Inc. 144A company guaranty sr. unse	325,000 c.	333,938
notes 5.125%, 4/1/25 IHS Markit, Ltd. sr. unsec. sub. bonds 4.75%,	430,000	442,040
8/1/28 (United Kingdom)	165,000	180,056
IHS Markit, Ltd. 144A company guaranty notes 4.75%, 2/15/25 (United Kingd		536,250
IHS Markit, Ltd. 144A company guaranty sr. ur notes 4.00%, 3/1/26 (United Kingdom)	95,000	98,088
Iron Mountain, Inc. 144A company guaranty sr. unsec. bonds 5.25%, 3/15/28 R	95,000	95,119
Iron Mountain, Inc. 144A company guaranty sr. unsec. notes 4.875%, 9/15/27 R	485,000	480,756
Refinitiv US Holdings, Inc. 144A company guaranty sr. notes 6.25%, 5/15/26	145,000	149,133
Sabre GLBL, Inc. 144A company guaranty sr. notes 5.375%, 4/15/23	460,000	470,350
Construction (2.3%)		2,785,730
Beacon Roofing Supply, Inc. company guaranty sr. unsec. unsub. notes 6.375%, 10/1	1/23 175,000	181,781
Beacon Roofing Supply, Inc. 144A company guaranty sr. unsec. notes 4.875%, 11/1/25	385,000	381,150

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Construction cont.		
BMC East, LLC 144A company		
guaranty sr. notes 5.50%, 10/1/24	\$515,000	\$522,081
Builders FirstSource, Inc. 144A company		
guaranty sr. unsub. notes 5.625%, 9/1/24	485,000	499,875
Builders FirstSource, Inc. 144A sr. notes 6.75%	6,	
6/1/27	75,000	79,125
Cemex Finance, LLC 144A company		
guaranty sr. notes 6.00%, 4/1/24 (Mexico)	615,000	633,450
Cemex SAB de CV 144A company		
guaranty sr. sub. notes 5.70%, 1/11/25 (Mexic	200,000	207,000
CPG Merger Sub, LLC 144A company	055.000	050 500
guaranty sr. unsec. notes 8.00%, 10/1/21	255,000	258,506
James Hardie International Finance DAC 144		
sr. unsec. bonds 5.00%, 1/15/28 (Ireland)	200,000	199,000
NCI Building Systems, Inc. 144A company		400.000
guaranty sr. unsec. sub. notes 8.00%, 4/15/26		423,038
TopBuild Corp. 144A company guaranty sr. u		420.450
notes 5.625%, 5/1/26	420,000	429,450
U.S. Concrete, Inc. company guaranty sr. uns		200 200
unsub. notes 6.375%, 6/1/24	384,000	399,360
Consumer (0.2%)		4,213,816
Spectrum Brands, Inc. company guaranty sr.	unsec.	
unsub. notes 6.125%, 12/15/24	300,000	309,000
	,	309,000
Consumer staples (4.6%)		303,000
1011778BCULC/NewRedFinance, Inc.144A		
company guaranty notes 5.00%, 10/15/25		
(Canada)	510,000	513,825
1011778 BC ULC/New Red Finance, Inc. 144A		
company guaranty sr. notes 4.625%, 1/15/22		0.40.600
(Canada)	240,000	240,600
1011778 BC ULC/New Red Finance, Inc. 144A	10.4	
company guaranty sr. sub. notes 4.25%, 5/15 (Canada)		274 162
· '	370,000	374,163
Albertsons Cos., LLC/Safeway, Inc./New Albertson's, LLC 144A company	ertsons	
guaranty sr. unsec. notes 7.50%, 3/15/26	280,000	298,900
	200,000	230,300
Ascend Learning, LLC 144A sr. unsec. notes 6.875%, 8/1/25	460,000	468,050
Ashtead Capital, Inc. 144A notes 4.375%, 8/15		200,250
		200,250
Brand Energy & Infrastructure Services, Inc. 3 sr. unsec. notes 8.50%, 7/15/25		125 000
	480,000	435,000
Energizer Holdings, Inc. 144A company	20.000	22.470
guaranty sr. unsec. notes 7.75%, 1/15/27	30,000	32,470
Energizer Holdings, Inc. 144A company	115,000	110 162
guaranty sr. unsec. sub. notes 6.375%, 7/15/2	26 115,000	118,163
Fresh Market, Inc. (The) 144A company	275 000	255 000
guaranty sr. notes 9.75%, 5/1/23	375,000	255,000
Go Daddy Operating Co, LLC/GD Finance Co.		
144A company guaranty sr. unsec. notes 5.25 12/1/27	150,000	155,250
	130,000	133,230
Golden Nugget, Inc. 144A company	475,000	100 750
guaranty sr. unsec. sub. notes 8.75%, 10/1/25		498,750
Golden Nugget, Inc. 144A sr. unsec. notes 6.75		619.000
10/15/24	600,000	618,000
IAA Spinco, Inc. 144A sr. unsec. notes 5.50%,	60.000	E2 400
6/15/27	60,000	62,400
Itron, Inc. 144A company guaranty sr. unsec.	400.000	400.000
notes 5.00%, 1/15/26	480,000	490,800
KFC Holding Co./Pizza Hut Holdings, LLC/Tac		
of America, LLC 144A company guaranty sr. u		121 710
notes 5.25%, 6/1/26	405,000	424,740

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Consumer staples cont.		
KFC Holding Co./Pizza Hut Holdings, LLC/Ta		
of America, LLC 144A company guaranty sr.		4
notes 5.00%, 6/1/24	\$405,000	\$418,669
KFC Holding Co./Pizza Hut Holdings, LLC/Ta		
of America, LLC 144A company guaranty sr.		246.000
notes 4.75%, 6/1/27	240,000	246,000
amb Weston Holdings, Inc. 144A company	/1 /26 400 000	E00.000
guaranty sr. unsec. unsub. notes 4.875%, 11	/1/26 490,000	509,600
_amb Weston Holdings, Inc. 144A company	/1/24 120.000	124 250
guaranty sr. unsec. unsub. notes 4.625%, 11		124,350
Match Group, Inc. 144A sr. unsec. bonds 5.00		240.405
12/15/27	325,000	340,405
Netflix, Inc. sr. unsec. notes 4.875%, 4/15/28	340,000	350,625
Netflix, Inc. sr. unsec. unsub. notes 5.875%,		
11/15/28	440,000	487,133
Netflix, Inc. 144A sr. unsec. bonds 6.375%,		
5/15/29	170,000	193,214
Newell Brands, Inc. sr. unsec.		
unsub. notes 4.20%, 4/1/26	295,000	293,180
Rite Aid Corp. 144A company guaranty sr. ur	isec.	
unsub. notes 6.125%, 4/1/23	570,000	480,938
Energy (oil field) (1.2%)		8,630,475
Apergy Corp. company guaranty sr. unsec. notes 6.375%, 5/1/26	415,000	418,113
		410,113
Ensco Rowan PLC sr. unsec. notes 7.75%, 2/2 (United Kingdom)	265,000	197,425
	200,000	131,423
Nabors Industries, Inc. company guaranty sr. unsec. notes 5.75%, 2/1/25	575 OOO	E00 E04
	575,000	509,594
Nabors Industries, Inc. company guaranty sr. unsec. notes 5.50%, 1/15/23	E0 000	46.750
	50,000	46,750
Nine Energy Service, Inc. 144A sr. unsec. notes 8.75%, 11/1/23	160.000	156 000
	160,000	156,000
SESI, LLC company guaranty sr. unsec. notes 7.75%, 9/15/24	125,000	00 212
	123,000	80,313
SESI, LLC company guaranty sr. unsec.	225,000	162 012
unsub. notes 7.125%, 12/15/21	235,000	163,913
Seventy Seven Energy, Inc. escrow sr. unsec notes 6.50%, 7/15/22 F		35
	345,000	33
Seventy Seven Operating, LLC escrow comp	pany	
guaranty sr. unsec. unsub. notes 6.625%, 11/15/19 F	770,000	77
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JSA Compression Partners LP/USA Compre Finance Corp. company guaranty sr. unsec.	ession	
notes 6.875%, 4/1/26	495,000	523,413
		323,713
JSA Compression Partners LP/USA Compre Finance Corp. 144A sr. unsec. notes 6.875%,		
9/1/27	95,000	99,760
0) 1/ 21	33,000	2,195,393
Entertainment (1.9%)		2,133,333
AMC Entertainment Holdings, Inc. company	1	
guaranty sr. unsec. notes 6.125%, 5/15/27	200,000	178,000
AMC Entertainment Holdings, Inc. company	1	
guaranty sr. unsec. sub. notes 5.875%, 11/15	5/26 220,000	196,900
AMC Entertainment Holdings, Inc. company		
guaranty sr. unsec. sub. notes 5.75%, 6/15/2	5 420,000	389,046
- Cinemark USA, Inc. company guaranty sr. ur		
notes 5.125%, 12/15/22	85,000	86,275
Cinemark USA, Inc. company guaranty sr. ur	nsec.	
sub. notes 4.875%, 6/1/23	160,000	162,000
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Constellation Merger Sub, Inc. 144A sr. unse	C.	

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Entertainment cont.		
Live Nation Entertainment, Inc. 144A compa	ny	
guaranty sr. unsec. notes 4.875%, 11/1/24	\$290,000	\$298,338
Live Nation Entertainment, Inc. 144A compar	ny	
guaranty sr. unsec. sub. notes 5.625%, 3/15/2		340,844
Six Flags Entertainment Corp. 144A company	/	
guaranty sr. unsec. bonds 5.50%, 4/15/27	780,000	811,200
Six Flags Entertainment Corp. 144A company	/	
guaranty sr. unsec. unsub. notes 4.875%, 7/3.	1/24 330,000	335,156
E: 1 (0 co/)		3,567,584
Financials (8.6%)		
Alliance Data Systems Corp. 144A company	400.000	406 270
guaranty sr. unsec. notes 5.375%, 8/1/22	490,000	496,370
Alliant Holdings Intermediate, LLC 144A	275 000	201 702
sr. unsec. notes 8.25%, 8/1/23	275,000	281,793
Ally Financial, Inc. company guaranty sr. unsenotes 8.00%, 11/1/31		1 665 255
	1,260,000	1,665,355
Ally Financial, Inc. sub. unsec. notes 5.75%,	100 000	100 107
11/20/25	180,000	199,107
American International Group, Inc. jr. unsec.	200,000	460,000
sub. FRB 8.175%, 5/15/58	360,000	460,800
Bank of America Corp. jr. unsec. sub. FRN	215 000	222.200
Ser. AA, 6.10%, perpetual maturity	215,000	232,200
Bank of America Corp. jr. unsec. sub. FRN Ser		207.675
6.50%, perpetual maturity	270,000	297,675
CIT Group, Inc. sr. unsec. sub. notes 5.00%,	440.000	470.250
8/1/23	440,000	470,250
CIT Group, Inc. sr. unsec. unsub. notes 5.25%		241 175
3/7/25	220,000	241,175
CIT Group, Inc. sr. unsec. unsub. notes 5.00%		E0 2E0
8/15/22	55,000	58,359
CNO Financial Group, Inc. sr. unsec. notes 5.2		227 225
5/30/29	210,000	227,325
CNO Financial Group, Inc. sr. unsec. unsub. notes 5.25%, 5/30/25	225 000	260.062
	335,000	360,963
Credit Acceptance Corp. company guaranty sr. unsec. notes 7.375%, 3/15/23	265,000	275,269
	203,000	213,209
Credit Acceptance Corp. 144A company guaranty sr. unsec. notes 6.625%, 3/15/26	155,000	162 044
		162,944
Credit Suisse Group AG 144A jr. unsec. sub. FF 6.25%, perpetual maturity (Switzerland)	500,000	518,750
Dresdner Funding Trust I 144A jr. unsec.	300,000	310,730
sub. notes 8.151%, 6/30/31	150,000	201,713
ESH Hospitality, Inc. 144A company	150,000	201,713
guaranty sr. unsec. notes 5.25%, 5/1/25 R	270,000	276,413
Fairfax Financial Holdings, Ltd. sr. unsec.	210,000	210,415
notes 4.85%, 4/17/28 (Canada)	205,000	216,145
Freedom Mortgage Corp. 144A sr. unsec.	203,000	210,115
notes 8.25%, 4/15/25	295,000	253,700
Freedom Mortgage Corp. 144A sr. unsec.	233,000	233,100
notes 8.125%, 11/15/24	270,000	229,500
GLP Capital LP/GLP Financing II, Inc. compar		223,300
guaranty sr. unsec. notes 5.25%, 6/1/25	295,000	315,650
GLP Capital LP/GLP Financing II, Inc. compar		010,000
guaranty sr. unsec. unsub. notes 5.375%, 4/1		264,955
goeasy, Ltd. 144A company guaranty sr. unse		201,333
notes 7.875%, 11/1/22 (Canada)	280,000	293,300
HUB International, Ltd. 144A sr. unsec.	200,000	233,300
notes 7.00%, 5/1/26	410,000	415,638
Icahn Enterprises LP/Icahn Enterprises	.20,000	.10,000
Finance Corp. company guaranty sr. unsec.		
notes 6.75%, 2/1/24	300,000	311,625
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CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Financials cont. Icahn Enterprises LP/Icahn Enterprises Finance Corp. company guaranty sr. unsec.		
notes 6.25%, 2/1/22	\$290,000	\$296,888
Icahn Enterprises LP/Icahn Enterprises		
Finance Corp. company guaranty sr. unsec. notes 5.875%, 2/1/22	235,000	237,350
Icahn Enterprises LP/Icahn Enterprises	,	
Finance Corp. 144A company guaranty sr. un		
notes 6.25%, 5/15/26	120,000	121,650
iStar, Inc. sr. unsec. notes 6.00%, 4/1/22 R	185,000	189,625
iStar, Inc. sr. unsec. unsub. notes 5.25%, 9/15/22 R	45,000	46,069
Lloyds Bank PLC jr. unsec. sub. FRN Ser. EMTN, 13.00%, perpetual maturity (United Kingdom) GBF	P 115,000	250,466
Lloyds Banking Group PLC jr. unsec. sub. FRB		244 910
7.50%, perpetual maturity (United Kingdom) LPL Holdings, Inc. 144A company	\$328,000	344,810
guaranty sr. unsec. notes 5.75%, 9/15/25	630,000	644,963
MGM Growth Properties Operating Partnersh LP/MGP Finance Co-Issuer, Inc. company	nip	
guaranty sr. unsec. notes 5.625%, 5/1/24 R	205,000	220,888
MGM Growth Properties Operating Partnersh LP/MGP Finance Co-Issuer, Inc. company	nip	
guaranty sr. unsec. notes 4.50%, 1/15/28 R	150,000	148,875
Nationstar Mortgage Holdings, Inc. 144A com guaranty sr. unsec. notes 9.125%, 7/15/26	npany 315,000	319,725
Nationstar Mortgage Holdings, Inc. 144A com guaranty sr. unsec. notes 8.125%, 7/15/23	npany 300,000	305,250
Provident Funding Associates LP/PFG Financ	e Corp.	
144A sr. unsec. notes 6.375%, 6/15/25 Royal Bank of Scotland Group PLC jr. unsec.	505,000	474,700
sub. FRB 7.648%, perpetual maturity (United Kingdom)	675,000	876,656
Springleaf Finance Corp. company		
guaranty sr. unsec. sub. notes 7.125%, 3/15/2	160,000	175,300
Springleaf Finance Corp. company guaranty sr. unsec. sub. notes 6.625%, 1/15/2	28 165,000	173,250
Springleaf Finance Corp. company guaranty sr. unsec. unsub. notes 6.875%, 3/15	5/25 330,000	361,343
Starwood Property Trust, Inc. sr. unsec. notes 4.75%, 3/15/25 R	420,000	424,200
Stearns Holdings, Inc. 144A company	420,000	727,200
guaranty sr. notes 9.375%, 8/15/20	536,000	506,520
TMX Finance, LLC/TitleMax Finance Corp. 144		221 200
sr. notes 11.125%, 4/1/23 USIS Merger Sub, Inc. 144A sr. unsec.	340,000	321,300
notes 6.875%, 5/1/25	430,000	425,700
WeWork Cos, Inc. 144A company guaranty sr. notes 7.875%, 5/1/25	unsec. 540,000	532,764
Forest products and packaging (2.2%)		16,125,266
Berry Global Escrow Corp. 144A notes 5.625%		156,000
7/15/27 Boise Cascade Co. 144A company	150,000	156,000
guaranty sr. unsec. notes 5.625%, 9/1/24	695,000	708,900
BWAY Holding Co. 144A sr. notes 5.50%, 4/15/	/24 395,000	395,198
BWAY Holding Co. 144A sr. unsec. notes 7.25% 4/15/25	6, 580,000	559,700
Greif, Inc. 144A company guaranty sr. unsec. notes 6.50%, 3/1/27	395,000	407,838
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CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Forest products and packaging cont.		
Louisiana-Pacific Corp. company		
guaranty sr. unsec. unsub. notes 4.875%, 9/1	5/24 \$345,000	\$350,606
Mercer International, Inc. company		
guaranty sr. unsec. notes 7.75%, 12/1/22		
(Canada)	164,000	170,150
Mercer International, Inc. sr. unsec.	255.000	262.025
notes 6.50%, 2/1/24 (Canada)	255,000	263,925
Mercer International, Inc. sr. unsec. notes 5.50%, 1/15/26 (Canada)	195,000	194.075
Mercer International, Inc. 144A sr. unsec.	185,000	184,075
notes 7.375%, 1/15/25 (Canada)	75,000	79,688
Smurfit Kappa Treasury Funding DAC compa		.5,555
guaranty sr. unsec. unsub. notes 7.50%, 11/2	-	
(Ireland)	645,000	749,813
Coming and lettern (2.00/)		4,025,893
Gaming and lottery (3.0%) Boyd Gaming Corp. company guaranty sr. ur	0000	
notes 6.00%, 8/15/26	160,000	168,200
Boyd Gaming Corp. company guaranty sr. ur		100,200
unsub. notes 6.375%, 4/1/26	170,000	179,840
Cirsa Finance International SARL 144A		
sr. notes 7.875%, 12/20/23 (Luxembourg)	200,000	211,500
CRC Escrow Issuer, LLC/CRC Finco, Inc. 144A		
company guaranty sr. unsec. notes 5.25%,		
10/15/25	615,000	616,922
Eldorado Resorts, Inc. company		
guaranty sr. unsec. notes 6.00%, 9/15/26	60,000	65,550
Eldorado Resorts, Inc. company	21 21 000	224.675
guaranty sr. unsec. unsub. notes 7.00%, 8/1/		224,675
Jack Ohio Finance, LLC/Jack Ohio Finance 1 144A company guaranty notes 10.25%, 11/1		799,013
Jack Ohio Finance, LLC/Jack Ohio Finance 1		133,013
144A company guaranty sr. notes 6.75%, 11/		606,048
Penn National Gaming, Inc. 144A sr. unsec.		
notes 5.625%, 1/15/27	340,000	335,750
Rivers Pittsburgh Borrower LP/Rivers Pittsbu	urgh	
Finance Corp. 144A sr. notes 6.125%, 8/15/21	610,000	620,675
Scientific Games International, Inc. company		
guaranty sr. unsec. notes 10.00%, 12/1/22	545,000	571,569
Scientific Games International, Inc. 144A cor	, ,	470 406
guaranty sr. unsec. notes 8.25%, 3/15/26	450,000	472,496
Wynn Las Vegas, LLC/Wynn Las Vegas Capita 144A company guaranty sr. unsec.	al Corp.	
sub. notes 5.25%, 5/15/27	780,000	782,925
		5,655,163
Health care (8.3%)		, ,
Air Medical Merger Sub Corp. 144A sr. unsec. notes 6.375%, 5/15/23	440.000	393,800
ASP AMC Merger Sub, Inc. 144A sr. unsec.	440,000	393,600
notes 8.00%, 5/15/25	435,000	259,913
Bausch Health Americas, Inc. 144A company		200,010
guaranty sr. unsec. notes 9.25%, 4/1/26	370,000	413,956
Bausch Health Americas, Inc. 144A sr. unsec.		
notes 8.50%, 1/31/27	395,000	433,513
Bausch Health Cos., Inc. company		
guaranty sr. unsec. notes Ser. REGS, 4.50%,	_	
5/15/23 EU	R 275,000	316,530
Bausch Health Cos., Inc. 144A company	¢120.000	125 100
guaranty sr. notes 5.50%, 11/1/25	\$120,000	125,100
Bausch Health Cos., Inc. 144A company guaranty sr. unsec. notes 9.00%, 12/15/25	320,000	357,536
Bausch Health Cos., Inc. 144A company	520,000	JJ1,JJ0
guaranty sr. unsec. notes 7.25%, 5/30/29	290,000	301,600
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CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Health care cont.		
Bausch Health Cos., Inc. 144A company		
guaranty sr. unsec. notes 7.00%, 1/15/28	\$145,000	\$150,256
Bausch Health Cos., Inc. 144A company		
guaranty sr. unsec. notes 6.125%, 4/15/25	835,000	852,719
Bausch Health Cos., Inc. 144A company		
guaranty sr. unsub. notes 7.00%, 3/15/24	500,000	531,300
Bausch Health Cos., Inc. 144A company		
guaranty sr. unsub. notes 6.50%, 3/15/22	165,000	170,981
Bausch Health Cos., Inc. 144A sr. notes 5.759	6,	
3/15/27	115,000	120,863
Centene Corp. sr. unsec. unsub. notes 6.125	%,	
2/15/24	500,000	523,750
Centene Corp. sr. unsec. unsub. notes 4.75%	Ö,	
5/15/22	175,000	178,719
Centene Escrow I Corp. 144A sr. unsec.		
notes 5.375%, 6/1/26	160,000	168,200
CHS/Community Health Systems, Inc. comp		
guaranty sr. notes 6.25%, 3/31/23	1,295,000	1,246,438
CHS/Community Health Systems, Inc. comp	-	
guaranty sr. unsec. notes 6.875%, 2/1/22	612,000	413,100
CHS/Community Health Systems, Inc. 144A		
company guaranty sr. notes 8.00%, 3/15/26		149,141
CHS/Community Health Systems, Inc. 144A		
company guaranty sub. notes 8.125%, 6/30,		221,260
Eagle Holding Co II, LLC 144A unsec. notes 7		
5/15/22 ‡‡	90,000	90,675
Endo DAC/Endo Finance, LLC/Endo Finco, II		
company guaranty sr. unsec. unsub. notes 6		226.000
7/15/23 (Ireland)	328,000	236,980
HCA, Inc. company guaranty sr. bonds 5.259		E20 200
6/15/26	470,000	520,388
HCA, Inc. company guaranty sr. sub. notes 5 B/15/24		240 620
	320,000	348,620
HCA, Inc. company guaranty sr. unsec. unsub. notes 7.50%, 2/15/22	210,000	231,525
Hologic, Inc. 144A company guaranty sr. uns		231,323
notes 4.375%, 10/15/25	170,000	172,338
		172,550
Jaguar Holding Co. II/Pharmaceutical Prodi Development, LLC 144A company	uct	
guaranty sr. unsec. notes 6.375%, 8/1/23	490,000	507,150
Mallinckrodt International Finance	,	
SA/Mallinckrodt CB, LLC 144A company		
guaranty sr. unsec. unsub. notes 5.50%, 4/1	5/25	
Luxembourg)	345,000	231,150
Molina Healthcare, Inc. company		
guaranty sr. unsec. notes 5.375%, 11/15/22	350,000	364,000
Molina Healthcare, Inc. 144A company		
guaranty sr. unsec. notes 4.875%, 6/15/25	90,000	91,350
Ortho-Clinical Diagnostics, Inc./Ortho-Clin	ical	
Diagnostics SA 144A sr. unsec. notes 6.625%	Ď,	
5/15/22	815,000	778,325
Par Pharmaceutical, Inc. 144A company		
guaranty sr. notes 7.50%, 4/1/27	310,000	304,575
Service Corp. International sr. unsec.		
oonds 5.125%, 6/1/29	435,000	457,838
Service Corp. International sr. unsec.		
notes 4.625%, 12/15/27	125,000	127,656
Service Corp. International sr. unsec.		
•	F7F 000	591,531
unsub. notes 5.375%, 5/15/24	575,000	331,331
•	310,000	313,875

AND NOTES (85.0%)* cont.	Principal amount	Value
Health care cont.		<u> </u>
Tenet Healthcare Corp. company		
guaranty sr. notes 4.625%, 7/15/24	\$195,000	\$197,438
Tenet Healthcare Corp. company guaranty sr. sub. notes 6.00%, 10/1/20	715,000	736,048
Tenet Healthcare Corp. sr. unsec. notes 8.12 4/1/22	5%, 590,000	618,763
Tenet Healthcare Corp. 144A company guaranty notes 6.25%, 2/1/27	155,000	160,425
Teva Pharmaceutical Finance Netherlands I company guaranty sr. unsec. notes 6.75%, 3,	/1/28	
(Israel) Teva Pharmaceutical Finance Netherlands I	465,000	427,509
company guaranty sr. unsec. notes 6.00%, 4 (Israel)		282,938
WellCare Health Plans, Inc. sr. unsec.	300,000	202,330
notes 5.25%, 4/1/25 WellCare Health Plans, Inc. 144A sr. unsec.	220,000	229,350
notes 5.375%, 8/15/26	130,000	137,800
Homebuilding (1.7%) Howard Hughes Corp. (The) 144A sr. unsec.		15,486,922
notes 5.375%, 3/15/25	465,000	480,438
Lennar Corp. company guaranty sr. unsec. sub. notes 5.875%, 11/15/24	250,000	274,063
Lennar Corp. company guaranty sr. unsec. unsub. notes 4.75%, 4/1/21	70,000	71,838
Mattamy Group Corp. 144A sr. unsec. notes 6 12/15/23 (Canada)	6.875%, 400,000	416,500
Mattamy Group Corp. 144A sr. unsec. notes 6 10/1/25 (Canada)	5.50%, 145,000	152,250
PulteGroup, Inc. company guaranty sr. unse unsub. notes 7.875%, 6/15/32	c. 630,000	749,700
Realogy Group, LLC/Realogy Co-Issuer Corpcompany guaranty sr. unsec. notes 9.375%,		78,863
TRI Pointe Group, Inc./TRI Pointe Homes, Incompany guaranty sr. unsec. unsub. notes 5		
6/15/24	405,000	418,041
Weekley Homes, LLC/Weekley Finance Corpsr. unsec. notes 6.00%, 2/1/23	535,000	528,313
, , , ,	,	3,170,006
Lodging/Tourism (0.7%) Hilton Worldwide Finance, LLC/Hilton World	huido	0,2.0,000
Finance Corp. company guaranty sr. unsec.	iwide	
notes 4.875%, 4/1/27	535,000	552,896
SugarHouse HSP Gaming Prop. Mezz LP/Sug HSP Gaming Finance Corp. 144A company		,,,,,,,,
guaranty sr. unsub. notes 5.875%, 5/15/25	370,000	364,450
Wyndham Hotels & Resorts, Inc. 144A comp guaranty sr. unsec. notes 5.375%, 4/15/26	any 295,000	309,013
Media (1.1%)		1,226,359
Lions Gate Capital Holdings, LLC 144A comp guaranty sr. unsec. notes 5.875%, 11/1/24	any 485,000	497,125
Lions Gate Capital Holdings, LLC 144A sr. uns notes 6.375%, 2/1/24		325,888
Nielsen Co. Luxembourg SARL (The) 144A co guaranty sr. unsec. notes 5.00%, 2/1/25		,
(Luxembourg)	215,000	211,238
Nieleen Finance II C/Nieleen Finance Co. 14	4A	
Nielsen Finance, LLC/Nielsen Finance Co. 14 company guaranty sr. unsec. sub. notes 5.00 4/15/22)%,	

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Media cont.		
WMG Acquisition Corp. 144A company		
guaranty sr. notes 5.00%, 8/1/23	\$390,000	\$397,800
WMG Acquisition Corp. 144A company		
guaranty sr. unsec. notes 5.50%, 4/15/26	110,000	113,564
		2,154,090
Metals (3.7%)		
Allegheny Technologies, Inc. sr. unsec.	220,000	242.006
unsub. notes 7.875%, 8/15/23	320,000	342,896
Allegheny Technologies, Inc. sr. unsec. unsub. notes 5.95%, 1/15/21	215,000	220 013
<u> </u>		220,913
ArcelorMittal SA sr. unsec. unsub. bonds 6.12 6/1/25 (France)	80,000	90,500
ArcelorMittal SA sr. unsec. unsub. notes 7.009		30,300
10/15/39 (France)	395,000	468,694
Big River Steel, LLC/BRS Finance Corp. 144A	333,000	100,001
company guaranty sr. notes 7.25%, 9/1/25	665,000	698,616
Cleveland-Cliffs, Inc. company		
guaranty sr. unsec. notes 5.75%, 3/1/25	32,000	31,840
Constellium NV 144A company guaranty sr. u		
notes 5.875%, 2/15/26 (Netherlands)	250,000	256,875
Constellium NV 144A company guaranty sr. u		
notes 5.75%, 5/15/24 (Netherlands)	315,000	323,269
Constellium NV 144A sr. unsec. notes 6.625%		
3/1/25 (Netherlands)	250,000	260,000
First Quantum Minerals, Ltd. 144A company		
guaranty sr. unsec. notes 6.875%, 3/1/26		
(Canada)	360,000	333,900
Freeport-McMoRan, Inc. company		
guaranty sr. unsec. notes 6.875%, 2/15/23		
(Indonesia)	395,000	415,738
Freeport-McMoRan, Inc. company		
guaranty sr. unsec. unsub. notes 5.45%, 3/15,		100 105
(Indonesia)	175,000	160,125
HudBay Minerals, Inc. 144A company		
guaranty sr. unsec. notes 7.625%, 1/15/25 (Canada)	355,000	366,538
· · · · · ·	333,000	300,336
Joseph T Ryerson & Son, Inc. 144A sr. notes 11.00%, 5/15/22	180,000	190,350
New Gold, Inc. 144A company guaranty sr. un		130,330
unsub. notes 6.25%, 11/15/22 (Canada)	170,000	155,550
Novelis Corp. 144A company guaranty sr. uns		133,330
bonds 5.875%, 9/30/26	675,000	683,438
Novelis Corp. 144A company guaranty sr. uns		000,100
notes 6.25%, 8/15/24	365,000	381,425
Steel Dynamics, Inc. company guaranty sr. ur		,
notes 5.00%, 12/15/26	145,000	151,163
Steel Dynamics, Inc. company guaranty sr. ur		
notes 4.125%, 9/15/25	60,000	59,700
Steel Dynamics, Inc. company guaranty sr. ur		
unsub. notes 5.50%, 10/1/24	265,000	274,606
Teck Resources, Ltd. company guaranty sr. u	nsec.	
unsub. notes 3.75%, 2/1/23 (Canada)	170,000	172,993
TMS International Corp. 144A sr. unsec.		
notes 7.25%, 8/15/25	515,000	498,263
Zekelman Industries, Inc. 144A company		
guaranty sr. notes 9.875%, 6/15/23	415,000	438,084
Oil and 555 (0.38/)		6,975,476
Oil and gas (9.2%)	21 /25	
Aker BP ASA 144A sr. unsec. notes 5.875%, 3/3		620 021
(Norway)	605,000	639,031
Aker BP ASA 144A sr. unsec. notes 4.75%, 6/15 (Norway)	160,000	164,912
(ito:way)	100,000	104,312

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principalamount	Value
Oil and gas cont.		
Antero Resources Corp. company		
guaranty sr. unsec. notes 5.625%, 6/1/23	\$185,000	\$178,562
Antero Resources Corp. company		
guaranty sr. unsec. notes 5.00%, 3/1/25	110,000	101,475
Antero Resources Corp. company		
guaranty sr. unsec. sub. notes 5.125%, 12/1/	22 275,000	264,000
Ascent Resources Utica Holdings, LLC/ARU		
Finance Corp. 144A sr. unsec. notes 10.00%,		
4/1/22	284,000	300,657
Ascent Resources Utica Holdings, LLC/ARU		
Finance Corp. 144A sr. unsec. notes 7.00%,	120.000	110.605
11/1/26	130,000	118,625
Baytex Energy Corp. 144A company	4	
guaranty sr. unsec. sub. notes 5.625%, 6/1/2 (Canada)	165,000	157,575
California Resources Corp. company	100,000	131,313
guaranty sr. unsec. sub. notes 5.00%, 1/15/2	0 160,000	152,800
California Resources Corp. 144A company	100,000	
guaranty notes 8.00%, 12/15/22	216,000	162,810
Cenovus Energy, Inc. sr. unsec. bonds 6.75%		
11/15/39 (Canada)	265,000	312,038
Cheniere Corpus Christi Holdings, LLC comp		
guaranty sr. notes 5.875%, 3/31/25	730,000	813,038
Cheniere Corpus Christi Holdings, LLC comp		
guaranty sr. notes 5.125%, 6/30/27	450,000	488,813
Chesapeake Energy Corp. company		
guaranty sr. unsec. notes 8.00%, 6/15/27	155,000	136,594
Chesapeake Energy Corp. company		
guaranty sr. unsec. notes 8.00%, 1/15/25	440,000	408,100
Chesapeake Energy Corp. company		
guaranty sr. unsec. notes 5.75%, 3/15/23	200,000	187,500
Comstock Escrow Corp. company guaranty	sr. unsec.	
sub. notes 9.75%, 8/15/26	335,000	257,113
Covey Park Energy, LLC/Covey Park Finance		
144A company guaranty sr. unsec. notes 7.50		
5/15/25	685,000	493,200
DCP Midstream Operating LP 144A company		412.075
guaranty sr. unsec. unsub. bonds 6.75%, 9/1	5/37 385,000	413,875
Denbury Resources, Inc. 144A company	224.000	210 140
guaranty notes 9.00%, 5/15/21	324,000	319,140
Denbury Resources, Inc. 144A company	125.000	102.750
guaranty sub. notes 7.75%, 2/15/24	125,000	103,750
Diamondback Energy, Inc. company guaranty sr. unsec. unsub. notes 5.375%, 5/3	31/25 735,000	772,669
		112,009
Endeavor Energy Resources LP/EER Finance 144A sr. unsec. bonds 5.75%, 1/30/28	595,000	628,469
Energy Transfer Partners LP company	333,000	020,103
guaranty sr. unsec. notes 5.875%, 1/15/24	295,000	328,383
Energy Transfer Partners LP company	255,555	020,000
guaranty sr. unsec. notes 5.50%, 6/1/27	180,000	201,209
Energy Transfer Partners LP jr. unsec. sub. FF		
Ser. B, 6.625%, perpetual maturity	760,000	710,600
EP Energy, LLC/Everest Acquisition Finance,		•
144A company guaranty sr. notes 7.75%, 5/1		178,500
Hess Infrastructure Partners LP/Hess		
Infrastructure Partners Finance Corp. 144A		
sr. unsec. notes 5.625%, 2/15/26	635,000	653,256
Holly Energy Partners LP/Holly Energy		
Finance Corp. 144A company guaranty sr. ur		
notes 6.00%, 8/1/24	635,000	661,194
Indigo Natural Resources, LLC 144A sr. unsec		
notes 6.875%, 2/15/26	415,000	372,463

AND NOTES (85.0%)* cont. Princip	oalamount	Value
Oil and gas cont.		
MEG Energy Corp. 144A company guaranty sr. unser notes 7.00%, 3/31/24 (Canada)	c. \$80,000	\$76,000
MEG Energy Corp. 144A company guaranty sr. unser notes 6.375%, 1/30/23 (Canada)	c. 285,000	271,463
MEG Energy Corp. 144A notes 6.50%, 1/15/25 (Canada)	455,000	457,275
Newfield Exploration Co. sr. unsec. unsub. notes 5.75%, 1/30/22	5,000	5,350
Noble Holding International, Ltd. company guaranty sr. unsec. unsub. notes 7.75%, 1/15/24	150,000	114,375
Noble Holding International, Ltd. 144A company guaranty sr. unsec. notes 7.875%, 2/1/26	200,000	172,064
Oasis Petroleum, Inc. company guaranty sr. unsec. sub. notes 6.875%, 1/15/23	410,000	407,950
Oasis Petroleum, Inc. company guaranty sr. unsec. unsub. notes 6.875%, 3/15/22	105,000	104,738
Oasis Petroleum, Inc. 144A sr. unsec. notes 6.25%, 5/1/26	325,000	314,438
Precision Drilling Corp. 144A company	323,000	317,730
guaranty sr. unsec. notes 7.125%, 1/15/26 (Canada)	450,000	435,375
Rose Rock Midstream LP/Rose Rock Finance Corp. company guaranty sr. unsec. sub. notes 5.625%,		
11/15/23	35,000	33,425
Rose Rock Midstream LP/Rose Rock Finance Corp. company guaranty sr. unsec. sub. notes 5.625%,	E70 000	EC1 003
7/15/22 SM Energy Co. sr. unsec. notes 6.625%, 1/15/27	570,000 130,000	561,883 120,250
SM Energy Co. sr. unsec. sub. notes 5.00%, 1/15/24	380,000	348,650
SM Energy Co. sr. unsec. unsub. notes 6.125%, 11/15/22	12,000	11,910
Tallgrass Energy Partners LP/Tallgrass Energy Finance Corp. 144A company guaranty sr. unsec. notes 5.50%, 1/15/28	310,000	313,488
Targa Resources Partners LP/Targa Resources Partners Finance Corp. company		
guaranty sr. unsec. unsub. notes 5.00%, 1/15/28 Targa Resources Partners LP/Targa Resources	215,000	215,538
Partners Finance Corp. 144A company guaranty sr. unsec. notes 6.875%, 1/15/29	95,000	105,326
Targa Resources Partners LP/Targa Resources Partners Finance Corp. 144A company		
guaranty sr. unsec. notes 6.50%, 7/15/27 Transocean Pontus, Ltd. 144A company	155,000	169,144
guaranty sr. notes 6.125%, 8/1/25 (Cayman Islands)	240,975	248,204
Transocean Poseidon, Ltd. 144A company guaranty sr. notes 6.875%, 2/1/27	170,000	179,669
Transocean Sentry Ltd. 144A company guaranty sr. notes 5.375%, 5/15/23		
(Cayman Islands)	255,000	255,319
Transocean, Inc. company guaranty sr. unsec. unsub. bonds 7.50%, 4/15/31	170,000	144,500
Transocean, Inc. 144A company guaranty sr. unsec. notes 9.00%, 7/15/23	13,000	13,845
Vermilion Energy, Inc. 144A company		191,100
guaranty sr. unsec. notes 5.625%, 3/15/25	195,000	
	195,000	163,944

AND NOTES (85.0%)* cont.	Principal amount	Value
Oil and gas cont.		
Williams Cos., Inc. (The) sr. unsec.		
unsub. notes 7.75%, 6/15/31	\$200,000	\$263,690
WPX Energy, Inc. sr. unsec. notes 8.25%, 8/1/2	23 255,000	290,700
WPX Energy, Inc. sr. unsec. notes 5.75%, 6/1/2	26 305,000	316,819
WPX Energy, Inc. sr. unsec. unsub. notes 6.00	%,	
1/15/22	44,000	45,870
Publishing (0.3%)		17,189,222
Meredith Corp. company guaranty sr. unsec.		
notes 6.875%, 2/1/26	525,000	557,093
Regional Bells (0.6%)		557,093
Frontier Communications Corp. sr. unsec.		
notes 11.00%, 9/15/25	860,000	533,200
Frontier Communications Corp. 144A compa	any	
guaranty notes 8.50%, 4/1/26	535,000	518,950
Retail (0.7%)		1,052,150
Penske Automotive Group, Inc. company		
guaranty sr. unsec. sub. notes 5.75%, 10/1/22	395,000	400,431
Penske Automotive Group, Inc. company		
guaranty sr. unsec. sub. notes 5.50%, 5/15/26	5 175,000	182,438
Penske Automotive Group, Inc. company		
guaranty sr. unsec. sub. notes 5.375%, 12/1/2	24 450,000	462,375
Wolverine World Wide, Inc. 144A company guaranty sr. unsec. bonds 5.00%, 9/1/26	325,000	320,938
guaranty sr. unsec. bonus 5.0070, 3/1/20	323,000	1,366,182
Technology (4.4%)		1,300,102
Avaya, Inc. 144A escrow notes 7.00%, 4/1/20	1,150,000	_
Banff Merger Sub, Inc. 144A sr. unsec.	500.000	F11 00F
notes 9.75%, 9/1/26	590,000	511,825
CommScope Finance, LLC 144A sr. notes 6.00 3/1/26	140,000	143,500
CommScope Finance, LLC 144A sr. notes 5.50		110,000
3/1/24	95,000	97,494
Diamond 1 Finance Corp./Diamond 2 Financ	e Corp.	
144A company guaranty sr. notes 6.02%, 6/15	5/26 1,105,000	1,219,016
Diamond 1 Finance Corp./Diamond 2 Financ		
144A company guaranty sr. unsec. notes 7.12		205 241
6/15/24	365,000	385,341
First Data Corp. 144A notes 5.75%, 1/15/24	530,000	544,906
First Data Corp. 144A sr. notes 5.375%, 8/15/2	23 375,000	381,750
Inception Merger Sub, Inc./Rackspace Hosting, Inc. 144A sr. unsec. notes 8.625%,		
11/15/24	148,000	135,790
Infor US, Inc. company guaranty sr. unsec.		
notes 6.50%, 5/15/22	355,000	361,248
Legrand France SA sr. unsec. unsub. notes 8.5		
2/15/25 (France)	315,000	408,888
Plantronics, Inc. 144A company	E00 000	407 E00
guaranty sr. unsec. notes 5.50%, 5/31/23	500,000	497,500
Qorvo, Inc. company guaranty sr. unsec. unsub. notes 5.50%, 7/15/26	255,000	269,867
Solera, LLC / Solera Finance, Inc. 144A		
sr. unsec. notes 10.50%, 3/1/24	555,000	600,094
SS&C Technologies, Inc. 144A company		
guaranty sr. unsec. notes 5.50%, 9/30/27	640,000	664,800
Star Merger Sub, Inc. 144A sr. notes 6.875%,		
8/15/26	155,000	163,719
Tempo Acquisition, LLC/Tempo Acquisition		
Finance Corp. 144A sr. unsec. notes 6.75%, 6/1/25	765,000	787,950
V ± ∠√	103,000	101,330

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Technology cont.		
TTM Technologies, Inc. 144A company		
guaranty sr. unsec. notes 5.625%, 10/1/25	\$635,000	\$620,878
Western Digital Corp. company guaranty sr. u notes 4.75%, 2/15/26	unsec. 400,000	392,420
Telecommunications (4.8%)		8,186,986
Altice Finco SA 144A company guaranty sr. ur	isec.	
unsub. notes 7.625%, 2/15/25 (Luxembourg)	600,000	576,000
Altice France SA 144A sr. bonds 6.25%, 5/15/2 (France)	24 200,000	205,750
CommScope Technologies, LLC 144A compa guaranty sr. unsec. notes 6.00%, 6/15/25		763,826
CommScope Technologies, LLC 144A compa		100,020
guaranty sr. unsec. unsub. notes 5.00%, 3/15	•	34,800
Digicel Group Two Ltd. 144A company		
guaranty sr. unsec. notes 6.75%, 3/1/23		
(Jamaica)	320,000	181,600
Equinix, Inc. sr. unsec. notes 5.375%, 5/15/27	R 635,000	680,701
Intelsat Connect Finance SA 144A company		
guaranty sr. unsec. notes 9.50%, 2/15/23 (Luxembourg)	960 000	761 100
Intelsat Jackson Holdings SA 144A sr. unsec.	860,000	761,100
notes 9.75%, 7/15/25 (Bermuda)	790,000	807,775
Level 3 Financing, Inc. company guaranty sr. unsec. unsub. notes 5.625%, 2/1	/23 275,000	278,427
Level 3 Financing, Inc. company		
guaranty sr. unsec. unsub. notes 5.25%, 3/15	/26 715,000	740,025
SFR Group SA 144A company guaranty sr. notes 7.375%, 5/1/26 (France)	510,000	522,750
Sprint Capital Corp. company guaranty sr. ur	isec.	
unsub. notes 6.875%, 11/15/28	1,325,000	1,361,835
Sprint Corp. company guaranty sr. unsec. sub. notes 7.875%, 9/15/23	1,050,000	1,140,563
Sprint Corp. company guaranty sr. unsec. sub. notes 7.25%, 9/15/21	845,000	897,813
Tolombono (0.00/)		8,952,965
Telephone (0.8%)	00	
T-Mobile USA, Inc. company guaranty sr. uns notes 6.375%, 3/1/25	ec. 515,000	534,828
T-Mobile USA, Inc. company guaranty sr. uns		33 1,020
notes 5.375%, 4/15/27	355,000	379,850
T-Mobile USA, Inc. company guaranty sr. uns unsub. bonds 4.75%, 2/1/28	ec. 380,000	390,963
T-Mobile USA, Inc. company guaranty sr. uns		330,303
unsub. notes 4.50%, 2/1/26	160,000	163,800
		1,469,441
Textiles (0.2%)		, ,
Hanesbrands, Inc. 144A company guaranty sr. unsec. unsub. notes 4.625%, 5/1	5/24 325,000	337,415
guaranty st. unsec. unsub. notes 4.025%, 3/1	3/24 323,000	337,415
Transportation (0.3%)		331,413
WatcoCos., LLC/WatcoFinanceCorp.144Ac	ompany	
guaranty sr. unsec. notes 6.375%, 4/1/23	465,000	471,975
Utilities and power (3.0%)		471,975
AES Corp./Virginia (The) sr. unsec.		
unsub. notes 5.50%, 4/15/25	520,000	539,500
AES Corp./Virginia (The) sr. unsec.		
unsub. notes 5.125%, 9/1/27	180,000	189,900
AES Corp./Virginia (The) sr. unsec.		
unsub. notes 4.875%, 5/15/23	255,000	258,825
AES Corp./Virginia (The) sr. unsec.	105.000	100 500
unsub. notes 4.50%, 3/15/23	165,000	169,538

CORPORATE BONDS AND NOTES (85.0%)* cont.	Principal amount	Value
Utilities and power cont.		
Calpine Corp. sr. unsec. sub. notes 5.75%, 1/1	.5/25 \$685,000	\$679,863
Calpine Corp. 144A company		
guaranty sr. notes 5.25%, 6/1/26	250,000	254,375
Calpine Corp. 144A company guaranty sr. sub. notes 5.875%, 1/15/24	145,000	148,625
Colorado Interstate Gas Co., LLC company guaranty sr. unsec. notes 6.85%, 6/15/37	445,000	500,616
GenOn Energy, Inc./NRG Americas, Inc. comp guaranty sub. FRN (BBA LIBOR USD 6 Month +6.50%), 9.044%, 12/1/23	oany 34,687	34,383
NRG Energy, Inc. company guaranty sr. unsecnotes 7.25%, 5/15/26		280,819
NRG Energy, Inc. company guaranty sr. unsec		,
notes 6.625%, 1/15/27	320,000	347,600
NRG Energy, Inc. company guaranty sr. unseconotes 5.75%, 1/15/28	c. 155,000	166,238
NRG Energy, Inc. 144A company guaranty sr. bonds 4.45%, 6/15/29	210,000	218,502
NRG Energy, Inc. 144A company guaranty sr. notes 3.75%, 6/15/24	135,000	138,693
NRG Energy, Inc. 144A sr. unsec. bonds 5.25%	΄,	
6/15/29	325,000	346,938
Texas Competitive Electric Holdings Co., LLC Finance, Inc. escrow company	/ ICEH	
guaranty sr. notes 11.50%, 10/1/20 F	415,000	1,660
Vistra Energy Corp. 144A company guaranty sr. unsec. notes 8.125%, 1/30/26	225,000	241,875
Vistra Operations Co., LLC 144A company		
guaranty sr. unsec. notes 5.00%, 7/31/27 Vistra Operations Co., LLC 144A sr. bonds 4.3	200,000	207,250
7/15/29	135,000	136,858
Vistra Operations Co., LLC 144A sr. notes 3.55 7/15/24	80,000	80,471
Vistra Operations Co., LLC 144A sr. unsec. notes 5.625%, 2/15/27	185,000	195,869
Vistra Operations Co., LLC 144A sr. unsec. notes 5.50%, 9/1/26	435,000	450.460
110(es 3.30%), 9/1/20	433,000	459,469 5,597,867
Total corporate bonds and notes (cost \$15	SE 639 610)	\$158,391,691
Total corporate bolius and notes (cost \$15	0,030,010)	J150,551,051
SENIOR LOANS (5.0%)*c	Principal amount	Value
Basic materials (—%)		
Diamond (BC) BV bank term loan FRN (BBA L		ć70.701
USD 3 Month + 3.00%), 5.583%, 9/6/24	\$89,722	\$78,731
Capital goods (0.5%)		78,731
GFL Environmental, Inc. bank term loan FRN (BBA LIBOR USD 3 Month + 3.00%), 5.402%, 5		185,690
Titan Acquisition, Ltd. (United Kingdom) ban		105,050
term loan FRN Ser. B, (BBA LIBOR USD 3 Mont		
+3.00%), 5.402%, 3/28/25	315,343	300,443
Vertiv Intermediate Holding II Corp. bank terr loan FRN Ser. B, (BBA LIBOR USD 3 Month		
+4.00%), 6.439%, 11/15/23	385,000	365,028
Communication services (0.4%)	OTICU 3	851,161
Asurion, LLC bank term loan FRN (BBA LIBOR Month + 6.50%), 8.902%, 8/4/25	515,000	521,652
WideOpenWest Finance, LLC bank term loan Ser. B, (BBA LIBOR USD 3 Month + 3.25%), 5.6	FRN	2-1,002
8/19/23	288,532	281,559
		803,211

SENIOR LOANS (5.0%)*ccont.	Principal amount	Value
Consumer cyclicals (2.5%) Academy, Ltd. bank term loan FRN Ser. B, (B		¢00.202
LIBOR USD 3 Month + 4.00%), 6.439%, 7/2/2 Cineworld Finance US, Inc. bank term loan R Ser. B, (BBA LIBOR USD 3 Month + 2.25%), 4.4	RN	\$88,362
2/28/25	182,226	179,060
CPG International, Inc. bank term loan FRN LIBOR USD 3 Month + 3.75%), 5.933%, 5/5/24	194,261	190,619
iHeartCommunications, Inc. bank term load (BBA LIBOR USD 3 Month + 4.00%), 6.579%,	5/1/26 319,993	320,327
Jo-Ann Stores, LLC bank term loan FRN (BB. USD 3 Month + 9.25%), 11.727%, 5/21/24	397,950	348,207
Jo-Ann Stores, LLC bank term loan FRN (BB. USD 3 Month + 5.00%), 7.592%, 10/16/23	198,413	174,604
Navistar, Inc. bankterm loan FRN Ser. B, (BE LIBOR USD 3 Month + 3.50%), 5.89%, 11/6/2		782,753
Refinitiv US Holdings, Inc. bank term loan FF Ser. B, (BBA LIBOR USD 3 Month + 3.75%), 6.3 10/1/25		959,264
Robertshaw Holdings Corp. bank term loan LIBOR USD 3 Month + 8.00%), 10.438%, 2/28		229,500
Robertshaw Holdings Corp. bank term loan LIBOR USD 3 Month + 3.50%), 6.00%, 2/28/2	FRN (BBA	249,769
Star Merger Sub, Inc. bank term loan FRN Se (BBALIBOR USD 3 Month + 5.00%), 7.479%, 2	r. B,	145,000
Talbots, Inc. (The) bank term loan FRN Ser. E (BBA LIBOR USD 3 Month + 7.00%), 9.33%, 1.	•	369,515
Travelport Finance Luxembourg Sarl bank t FRN Ser. B, (BBA LIBOR USD 3 Month + 5.009	6),	FF 4 010
7.541%, 3/18/26	590,000	554,010 4,590,990
Consumer staples (0.5%) Ascend Learning, LLC bank term loan FRN S	er B	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
(BBA LIBOR USD 3 Month + 3.00%), 5.402%,	7/12/24 229,063	224,912
Brand Industrial Services, Inc. bank term lo FRN (BBA LIBOR USD 3 Month + 4.25%), 6.78 6/21/24		457,026
Revlon Consumer Products Corp. bank term		451,020
Ser. B, (BBA LIBOR USD 3 Month + 3.50%), 6.9/7/23	047%, 254,850	212,693
	231,030	894,631
Energy (0.6%) California Resources Corp. bank term loan F (BBA LIBOR USD 3 Month + 10.38%), 12.7779		
12/31/21	265,000	268,644
California Resources Corp. bank term loan F (BBA LIBOR USD 3 Month + 4.75%), 7.152%,		214 125
12/31/22 FTS International, Inc. bank term loan FRN	225,000	214,125
Ser. B, (BBA LIBOR USD 3 Month + 4.75%), 6.0 4/16/21	00%, 102,295	102,007
Keane Group Holdings, LLC bank term loan Ser. B, (BBA LIBOR USD 3 Month + 3.75%), 6.3	313%,	620
5/25/25 Lower Cadence Holdings, LLC bank term loa	en FRN	639
Ser. B, (BBA LIBOR USD 3 Month + 4.00%), 6 5/9/26		263,010
Traverse Midstream Partners, LLC bank terr FRN Ser. B, (BBA LIBOR USD 3 Month + 4.00%		
6.60%, 9/27/24	248,125	244,713
		1,093,138

SENIOR LOANS (5.0%)*cont.	incipalamount	Value
Health care (0.2%)		
Air Methods Corp. bank term loan FRN Ser. B, (E		
LIBOR USD 3 Month + 3.50%), 5.83%, 4/21/24	\$339,758	\$274,992
Ortho-Clinical Diagnostics, Inc. bank term loan	1	
FRN Ser. B, (BBA LIBOR USD 3 Month + 3.25%), 5.68%, 6/1/25	131,625	126,415
3.00 70, 0/ 1/ 23	131,023	401,407
Technology (0.3%)		,
Avaya, Inc. bankterm loan FRN Ser. B, (BBA LIB USD 3 Month + 4.25%), 6.723%, 12/15/24	OR 200,166	191,259
Kronos, Inc./MA bank term loan FRN (BBA LIBO 3 Month + 8.25%), 10.986%, 11/1/24	RUSD 310,000	319,429
Rackspace Hosting, Inc. bank term loan FRN (B LIBOR USD 3 Month + 3.00%), 5.576%, 11/3/23	BA 93,027	85,585
		596,273
Total senior loans (cost \$9,769,767)		\$9,309,542
		40,000,0.
COMMON STOCKS (1.5%)*	Shares	Value
Advanz Pharma Corp. (Canada) †	1,941	\$31,794
Ally Financial, Inc.	12,375	383,501
Avaya Holdings Corp. †	14,763	175,827
Caesars Entertainment Corp. †	29,640	350,345
Cenovus Energy, Inc. (Canada)	8,940	78,849
Charter Communications, Inc. Class A†	1,030	407,035
CHC Group, LLC (acquired 3/23/17,		
cost \$32,379) (Cayman Islands) ∆∆†	2,233	223
CIT Group, Inc.	6,345	333,366
Clear Channel Outdoor Holdings, Inc. †	30,411	143,541
GenOn Energy, Inc.	434	79,422
iHeartMedia, Inc. Class A†	12,744	191,804
Live Nation Entertainment, Inc.†	3,790	251,088
MWO Holdings, LLC (Units) F	281	9,506
Nine Point Energy F	6,715	13,430
T-Mobile US, Inc. †	3,499	259,416
Tervita Corp. (Canada) †	748	3,884
Texas Competitive Electric Holdings Co., LLC/T		
Finance, Inc. (Rights)	36,615	27,827
Tribune Media Co. Class 1C	93,841	51,613
Total common stocks (cost \$3,167,626)		\$2,792,471
CONVERTIBLE BONDS AND NOTES (0.5%)* Pr	incipal amount	Value
CHC Group, LLC/CHC Finance Ltd. cv. notes Ser. Al, zero %, 10/1/20 (acquired 2/2/17,		
cost \$79,504) (Cayman Islands) ΔΔ	\$114,839	\$32,155
).	
DISH Network Corp. cv. sr. unsec. notes 3.375% 8/15/26	168,000	163,327
8/15/26 Microchip Technology, Inc. cv. sr. unsec.		
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27	168,000	
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2	168,000 280,000 0 357,000	329,868
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2	168,000 280,000 0 357,000	329,868
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2 Total convertible bonds and notes (cost \$95)	168,000 280,000 0 357,000	329,868 438,572 \$963,922
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2 Total convertible bonds and notes (cost \$95' CONVERTIBLE PREFERRED STOCKS (0.4%)* Crown Castle International Corp. Ser. A,	168,000 280,000 0 357,000 7,259) Shares	329,868 438,572 \$963,922 Value
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2 Total convertible bonds and notes (cost \$95' CONVERTIBLE PREFERRED STOCKS (0.4%)* Crown Castle International Corp. Ser. A, 6.875% cv. pfd.	168,000 280,000 0 357,000 7,259) Shares	329,868 438,572 \$963,922 Value \$377,865
8/15/26 Microchip Technology, Inc. cv. sr. unsec. sub. notes 1.625%, 2/15/27 ON Semiconductor Corp. cv. company guaranty sr. unsec. unsub. notes 1.00%, 12/1/2 Total convertible bonds and notes (cost \$95' CONVERTIBLE PREFERRED STOCKS (0.4%)* Crown Castle International Corp. Ser. A,	168,000 280,000 0 357,000 7,259) Shares	329,868 438,572 \$963,922 Value

	Expiration					
WARRANTS (0.0%)* †	date	Strike price	Warrants	Value		
iHeartMedia,Inc.	5/1/19	\$16.75	189	\$2,599		
Total warrants (cost	\$4,207)			\$2,599		
SHORT-TERM INVEST	MENTS (6.8%)	*	Shares	Value		
SHORT-TERM INVESTM Putnam Short Term In	• • •		Shares 12,607,449	Value \$12,607,449		
	vestment Fun	d 2.46% L	12,607,449			

Key to holding's currency abbreviations

EUR Euro GBP British Pound

Key to holding's abbreviations

Designated Activity Company **EMTN** Euro Medium Term Notes FRB

Floating Rate Bonds: the rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.

FRN Floating Rate Notes: the rate shown is the current interest rate or yield at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate

currently in place at the close of the reporting period. MTN Medium Term Notes

REGS Securities sold under Regulation S may not be offered, sold or delivered within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933.

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, 2019 through June 30, 2019 (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 \$186,438,213.
- † This security is non-income-producing.
- ΔΔ This security is restricted with regard to public resale. The total fair value of this security and any other restricted securities (excluding 144A securities), if any, held at the close of the reporting period was \$32,378, or less than 0.1% of net assets.
- ‡‡ Income may be received in cash or additional securities at the discretion of the issuer. The rate shown in parenthesis is the rate paid in kind, if applicable.
- ## Forward commitment, in part or in entirety (Note 1).
- c Senior loans are exempt from registration under the Securities Act of 1933, as amended, but contain certain restrictions on resale and cannot be sold publicly. These loans pay interest at rates which adjust periodically. The interest rates shown for senior loans are the current interest rates at the close of the reporting period. Senior loans are also subject to mandatory and/or optional prepayment which cannot be predicted. As a result, the remaining maturity may be substantially less than the stated maturity shown (Notes 1 and 7).
- 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.
- R Real Estate Investment Trust.

At the close of the reporting period, the fund maintained liquid assets totaling \$71,746 to cover certain derivative contracts and the settlement of certain securities.

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.

The dates shown on debt obligations are the original maturity dates.

FORWARD CURRENCY CONTRACTS at	: 6/30/19 (aggregate face val	ue \$702,405) (Unauc Contract	lited) Delivery		Aggregate	Unrealized appreciation/
Counterparty	Currency	type*	date	Value	face value	(depreciation)
Bank of America N.A.						
	Euro	Sell	9/18/19	\$375,707	\$370,865	\$(4,842)
JPMorgan Chase Bank N.A.						
	Canadian Dollar	Sell	7/17/19	205,565	202,104	(3,461)
State Street Bank and Trust Co.						
	Canadian Dollar	Sell	7/17/19	10,694	10,144	(550)
UBSAG						
	British Pound	Sell	9/18/19	116,349	115,988	(361)
WestPac Banking Corp.						
	Canadian Dollar	Sell	7/17/19	3,361	3,304	(57)
Unrealized appreciation						_
Unrealized (depreciation)						(9,271)
Total						\$(9,271)

^{*} The exchange currency for all contracts listed is the United States Dollar.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

		Valuation inputs				
Investments in securities:	Level 1	Level 2	Level 3			
Common stocks*:						
Capital goods	\$3,884	\$—	\$—			
Communication services	666,451	_	_			
Consumer cyclicals	936,778	51,613	_			
Energy	78,849	223	22,936			
Financials	716,867	_	_			
Health care	31,794	_	_			
Technology	175,827	_	_			
Utilities and power	_	107,249	_			
Total common stocks	2,610,450	159,085	22,936			
Convertible bonds and notes	_	963,922	_			
Convertible preferred stocks	_	800,100	28,800			
Corporate bonds and notes	_	158,389,919	1,772			
Seniorloans	_	9,309,542	_			
Warrants	2,599	_	_			
Short-term investments	12,607,449	_	_			
Totals by level	\$15,220,498	\$169,622,568	\$53,508			

		Valuation inputs	
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(9,271)	\$—
Totals by level	\$—	\$(9,271)	\$-

^{*} 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.

Statement of assets and liabilities

6/30/19 (Unaudited)

Α	s	s	e	t	s

Investment in securities, at value (Notes 1 and 9):	
Unaffiliated issuers (identified cost \$171,282,013)	\$172,289,125
Affiliated issuers (identified cost \$12,607,449) (Notes 1 and 5)	12,607,449
Cash	216,184
Foreign currency (cost \$290) (Note 1)	290
Dividends, interest and other receivables	2,689,659
Receivable for shares of the fund sold	23,219
Receivable for investments sold	394,882
Receivable for sales of delayed delivery securities (Note 1)	70,963
Total assets	188,291,771
Liabilities	
Payable for investments purchased	1,069,093
Payable for purchases of delayed delivery securities (Note 1)	131,621
Payable for shares of the fund repurchased	275,486
Payable for compensation of Manager (Note 2)	84,772
Payable for custodian fees (Note 2)	20,617
Payable for investor servicing fees (Note 2)	21,356
Payable for Trustee compensation and expenses (Note 2)	154,640
Payable for administrative services (Note 2)	755
Payable for distribution fees (Note 2)	10,526
Unrealized depreciation on forward currency contracts (Note 1)	9,271
Other accrued expenses	75,421
Total liabilities	1,853,558
Netassets	\$186,438,213
Represented by	
Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$194,874,567
Total distributable earnings (Note 1)	(8,436,354)
Total — Representing net assets applicable to capital shares outstanding	\$186,438,213
Computation of net asset value Class IA	
Netassets	\$133,810,605
Number of shares outstanding	21,784,626
Net as set value, of fering price and redemption price per share (net as sets divided by number of shares outstanding)	\$6.14
Computation of net asset value Class IB	
Net assets	\$52,627,608
Number of shares outstanding	8,650,142
Net asset value, of fering price and redemption price per share (net assets divided by number of shares outstanding)	\$6.08

Statement of operationsSix months ended 6/30/19 (Unaudited)

Investm	ent income

Interest (including interest income of \$100,204 from investments in affiliated issuers) (Note 5)	\$5,624,469
Dividends (net of foreign tax of \$50)	30,826
Total investment income	5,655,295
Expenses	
Compensation of Manager (Note 2)	512,407
Investor servicing fees (Note 2)	64,459
Custodian fees (Note 2)	11,510
Trustee compensation and expenses (Note 2)	4,487
Distribution fees (Note 2)	62,176
Administrative services (Note 2)	2,392
Auditing and tax fees	39,272
Other	35,247
Total expenses	731,950
Expense reduction (Note 2)	(58)
Net expenses	731,892
Net investment income	4,923,403
Realized and unrealized gain (loss)	
Net realized gain (loss) on:	
Securities from unaffiliated issuers (Notes 1 and 3)	(2,757,678)
Foreign currency transactions (Note 1)	10,707
Forward currency contracts (Note 1)	52,320
Total net realized loss	(2,694,651)
Change in net unrealized appreciation (depreciation) on:	
Securities from unaffiliated issuers	15,406,915
Assets and liabilities in foreign currencies	10,872
Forward currency contracts	(57,869)
Total change in net unrealized appreciation	15,359,918
Net gain on investments	12,665,267
Net increase in net assets resulting from operations	\$17,588,670

Statement of changes in net assets

	Six months ended 6/30/19*	Year ended 12/31/18
Increase (decrease) in net assets		
Operations:		
Net investment income	\$4,923,403	\$11,248,421
Net realized loss on investments and foreign currency transactions	(2,694,651)	(1,319,662)
Change in net unrealized appreciation (depreciation) of investments and assets and liabilities in foreign currencies	15,359,918	(17,057,739)
Net increase (decrease) in net assets resulting from operations	17,588,670	(7,128,980)
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(8,191,664)	(9,041,505)
Class IB	(2,965,380)	(3,185,422)
Increase (decrease) from capital share transactions (Note 4)	4,500,724	(24,702,528)
Total increase (decrease) in net assets	10,932,350	(44,058,435)
Net assets:		
Beginning of period	175,505,863	219,564,298
End of period (Note 1)	\$186,438,213	\$175,505,863

^{*} Unaudited.

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

INVESTMENT OPERATIONS:					LESS DISTRIB	UTIONS:			RATIOSAND	SUPPLEM	MENTAL DA	NTA:
Period ended	Net asset value, beginning of period	Net investment income (loss)ª	Net realized and unrealized gain (loss) on investments	Total from investment operations	From net investment income	Total distributions	Net asset value, end of period	Total return at net asset value (%) b.c	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) b.d	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%)
ClassIA									*	*		
6/30/19†	\$5.94	.17	.42	.59	(.39)	(.39)	\$6.14	10.07*	\$133,811	.36*	2.71*	14*
12/31/18	6.55	.35	(.57)	(.22)	(.39)	(.39)	5.94	(3.59)	129,535	.72	5.58	31
12/31/17	6.50	.35	.10	.45	(.40)	(.40)	6.55	7.22	160,526	.72	5.48	43
12/31/16	6.02	.35	.54	.89	(.41)	(.41)	6.50	15.66	175,839	.72 e	5.68 e	48
12/31/15	6.82	.38	(.69)	(.31)	(.49)	(.49)	6.02	(5.14)	172,830	.70	5.80	35
12/31/14	7.13	.39	(.25)	.14	(.45)	(.45)	6.82	1.91	233,920	.72	5.60	45
ClassIB												
6/30/19†	\$5.87	.16	.42	.58	(.37)	(.37)	\$6.08	10.05*	\$52,628	.49*	2.59*	14*
12/31/18	6.49	.33	(.58)	(.25)	(.37)	(.37)	5.87	(4.07)	45,971	.97	5.33	31
12/31/17	6.44	.33	.10	.43	(.38)	(.38)	6.49	6.98	59,038	.97	5.23	43
12/31/16	5.96	.33	.55	.88	(.40)	(.40)	6.44	15.55	73,141	.97 e	5.39 e	48
12/31/15	6.75	.36	(.69)	(.33)	(.46)	(.46)	5.96	(5.35)	57,337	.95	5.54	35
12/31/14	7.07	.37	(.26)	.11	(.43)	(.43)	6.75	1.56	70,915	.97	5.36	45

^{*} Not annualized.

[†] Unaudited.

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

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

[•] Total return assumes dividend reinvestment.

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

e Reflects a voluntary waiver of certain fund expenses in effect during the period. As a result of such waivers, the expenses of each class reflect a reduction of less than 0.01% as a percentage of average net assets (Note 2).

Notes to financial statements 6/30/19 (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, 2019 through June 30, 2019.

Putnam VT High Yield 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 high current income. Capital growth is a secondary goal when consistent with achieving high current income. The fund invests mainly in bonds that are obligations of U.S. companies, are below investment-grade in quality (sometimes referred to as "junk bonds"), and have intermediate- to long-term maturities (three years or longer). Under normal circumstances, Putnam Management invests at least 80% of the fund's net assets in securities rated below investment-grade. This policy may be changed only after 60 days' notice to shareholders. The fund may also invest in other debt instruments, including loans. Putnam Management may consider, among other factors, credit, interest rate and prepayment risks, as well as general market conditions, when deciding whether to buy or sell investments. Putnam Management may also use derivatives, such as futures, options, certain foreign currency transactions and swap contracts, for both hedging and non-hedging purposes.

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. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

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

Interest income, net of any applicable withholding taxes 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.

The fund may have earned certain fees in connection with its senior loan purchasing activities. These fees, if any, are treated as market discount and are amortized into income in the Statement of operations.

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

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.

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, for hedging currency exposures 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.

Master agreements The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements (Master Agreements) with certain counterparties that govern OTC derivative and foreign exchange contracts entered into from time to $\bar{\text{time}}$. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, is presented in the fund's portfolio.

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

Termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term and short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as

reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund had a net liability position of \$9,271 on open derivative contracts subject to the Master Agreements. There was no collateral posted by the fund at period end for these agreements.

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.

 $\boldsymbol{\mathsf{Lines}}$ of $\boldsymbol{\mathsf{credit}}$ The fund participates, along with other Putnam funds, in a \$317.5 million unsecured committed line of credit and a \$235.5 million unsecured uncommitted line of credit, both provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the overnight LIBOR for the committed line of credit and the Federal Funds rate plus 1.30% for the uncommitted line of credit. A closing fee equal to 0.04% of the committed line of credit 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, 2018, 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
\$119,003	\$10,715,723	\$10,834,276

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 \$183,975,894, resulting in gross unrealized appreciation and depreciation of \$6,043,843 and \$5,132,434, respectively, or net unrealized appreciation of \$911,409

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. Effective with the December 2018 distributions, the fund established

targeted distribution rates, whose principal source of the distribution is ordinary income. However, the balance of the distribution, if any, comes first from capital gain and then will constitute a return of capital. A return of capital is not taxable; rather it reduces a shareholder's tax basis in their shares of the fund. The fund may make return of capital distributions to achieve the targeted distribution rates. 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 32.1% 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:

of the first \$5 billion, 0.720% 0.670% of the next \$5 billion. 0.620% of the next \$10 billion, of the next \$10 billion, 0.570% of the next \$50 billion, 0.520% of the next \$50 billion. 0.500% of the next \$100 billion and 0.490% 0.485% 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 0.278% of the fund's average net assets.

Putnam Management has contractually agreed, through April 30, 2021, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plan, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were not reduced as a result of 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 0.40% of the average net assets of the portion of the fund managed by PIL.

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	\$46,891
Class IB	17,568
Total	\$64,459

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 \$58 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$133, 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)	\$24,658,617	\$32,732,488
U.S. government securities (Long-term)	_	_
Total	\$24,658,617	\$32,732,488

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 6/30/19		Year ended 12/31/18		Six months ended 6/30/19		Year ended 12/31/18	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	587,713	\$3,610,241	1,358,621	\$8,556,550	1,916,352	\$11,587,338	2,792,125	\$17,590,179
Shares issued in connection with reinvestment of distributions	1,372,138	8,191,664	1,482,214	9,041,505	500,909	2,965,380	526,516	3,185,422
	1,959,851	11,801,905	2,840,835	17,598,055	2,417,261	14,552,718	3,318,641	20,775,601
Shares repurchased	(1,993,398)	(12,221,828)	(5,515,318)	(34,519,101)	(1,592,381)	(9,632,071)	(4,595,360)	(28,557,083)
Net increase (decrease)	(33,547)	\$(419,923)	(2,674,483)	\$(16,921,046)	824,880	\$4,920,647	(1,276,719)	\$(7,781,482)

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 12/31/18	Purchase cost	Sale proceeds	Investmentincome	Shares outstanding and fair value as of 6/30/19
Short-term investments					
Putnam Short Term Investment Fund*	\$3,447,187	\$28,332,459	\$19,172,197	\$100,204	\$12,607,449
Total Short-term investments	\$3,447,187	\$28,332,459	\$19,172,197	\$100,204	\$12,607,449

^{*}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.

Note 7 — Senior loan commitments

Senior loans are purchased or sold on a when-issued or delayed delivery basis and may be settled a month or more after the trade date, which from time to time can delay the actual investment of available cash balances; interest income is accrued based on the terms of the securities. Senior loans can be acquired through an agent, by assignment from another holder of the loan, or as a participation interest in another holder's portion of the loan. When the fund invests in a loan or participation, the fund is subject to the risk that an intermediate participant between the fund and the borrower will fail to meet its obligations to the fund, in addition to the risk that the borrower under the loan may default on its obligations.

Note 8 — 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:

Forward currency contracts (contract amount)	\$2,000,000
Warrants (number of warrants)	1,000

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

	Asset de	rivatives	Liability derivatives		
Derivatives not accounted for as hedging instruments under ASC 815	Statement of assets and liabilities location		Statement of assets and liabilities location	Fair value	
Foreign exchange contracts	Receivables	\$—	Payables	\$9,271	
Equity contracts	Investments	2,599	Payables	_	
Total		\$2,599		\$9,271	

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	Forward currency contracts	Total
Foreign exchange contracts	\$-	\$52,320	\$52,320
Equity contracts	128	_	128
Total	\$128	\$52,320	\$52,448

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

Derivatives not accounted for as hedging instruments under ASC 815	Warrants	Forward currency contracts	Total
Foreign exchange contracts	\$-	\$(57,869)	\$(57,869)
Equity contracts	(1,799)	_	(1,799)
Total	\$(1,799)	\$(57,869)	\$(59,668)

Note 9 — Offsetting of financial and derivative assets and liabilities

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

	Bank of America N.A.	JPMorgan Chase Bank N.A.	State Street Bank and Trust Co.	UBS AG	WestPac Banking Corp.	Total
Assets:						
Forward currency contracts#	\$—	\$-	\$-	\$—	\$-	\$-
Total Assets	\$-	\$-	\$-	\$-	\$-	\$-
Liabilities:						
Forward currency contracts#	4,842	3,461	550	361	57	9,271
Total Liabilities	\$4,842	\$3,461	\$550	\$361	\$57	\$9,271
Total Financial and Derivative						
NetAssets	\$(4,842)	\$(3,461)	\$(550)	\$(361)	\$(57)	\$(9,271)
Total collateral received (pledged)†##	\$—	\$-	\$-	\$-	\$-	
Netamount	\$(4,842)	\$(3,461)	\$(550)	\$(361)	\$(57)	
Controlled collateral received (including						
TBA commitments)**	\$—	\$-	\$-	\$—	\$—	\$-
Uncontrolled collateral received	\$—	\$—	\$-	\$—	\$	\$-
Collateral (pledged) (including						
TBA commitments)**	\$—	\$—	\$-	\$—	\$—	\$—

^{**} Included with Investments in securities on the Statement of assets and liabilities.

Note 10 — New accounting pronouncements

In March 2017, the Financial Accounting Standards Board issued Accounting Standards Update (ASU) No. 2017–08, Receivables — Nonrefundable Fees and Other Costs (Subtopic 310 - 20): Premium Amortization on Purchased Callable Debt Securities. The amendments in the ASU shorten the amortization period for certain callable debt securities held at a premium, to be amortized to the earliest call date. The ASU is effective for fiscal years and interim periods within those fiscal years beginning after $December 15, 2018. \ The \ adoption \ of these \ amendments \ is \ not \ material \ to \ the \ financials \ statements.$

[†] 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.

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") and the sub-management contract with respect to your fund between Putnam Management and its affiliate, Putnam Investments Limited ("PIL"). The Board, with the assistance of its Contract Committee, requests and evaluates all information it deems reasonably necessary under the circumstances in connection with its annual contract review. The Contract Committee consists solely of Trustees who are not "interested persons" (as this term is defined in the Investment Company Act of 1940, as amended (the "1940 Act")) of The Putnam Funds ("Independent Trustees").

At the outset of the review process, members of the Board's independent staff and independent legal counsel discussed with representatives of Putnam Management the annual contract review materials furnished to the Contract Committee during the course of the previous year's review, identifying possible changes in these materials that might be necessary or desirable for the coming year. Following these discussions and in consultation with the Contract Committee, the Independent Trustees' independent legal counsel requested that Putnam Management and its affiliates furnish specified information, together with any additional information that Putnam Management considered relevant, to the Contract Committee. Over the course of several months ending in June 2019, 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 2019, 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 2019 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 and sub-management contracts, effective July 1, 2019. (Because PIL is an affiliate of Putnam Management and Putnam Management remains fully responsible for all services provided by PIL, the Trustees have not attempted to evaluate PIL as a separate entity, and all subsequent references to Putnam Management below should be deemed to include reference to PIL as necessary or appropriate in the context.)

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

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

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

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

Management fee schedules and total expenses

The Trustees reviewed the management fee schedules in effect for all Putnam funds, including fee levels and breakpoints. The Trustees also reviewed the total expenses of each Putnam fund, recognizing that in most cases management fees represented the major, but not the sole, determinant of total costs to fund shareholders. (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 structure for your fund would be appropriate at

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

As in the past, the Trustees also focused on the competitiveness of each fund's total expense ratio. In order to support the effort to have fund expenses meet competitive standards, the Trustees and Putnam Management 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 2018. These expense limitations were: (i) a contractual expense limitation applicable to all open-end funds of 25 basis points on investor servicing fees and expenses and (ii) a contractual expense limitation applicable to specified open-end funds, including your fund, of 20 basis points on so-called "other expenses" (i.e., all expenses exclusive of management fees, distribution fees, investor servicing fees, investment-related expenses, interest, taxes, brokerage commissions, acquired fund fees and expenses and extraordinary expenses). These expense limitations attempt to maintain competitive expense levels for the funds. Most funds, including your fund, had sufficiently low expenses that these expense limitations were not operative during their fiscal years ending in 2018. Putnam Management and PSERV have agreed to maintain these expense limitations until at least April 30, 2021. 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 and sub-management 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 first quintile in effective management fees (determined for your fund and the other funds in the custom peer group based on fund asset size and the applicable contractual management fee schedule) and in the second quintile in total expenses (excluding any applicable 12b-1 fees) as of December 31, 2018. 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, 2018 reflected the most recent fiscal year-end data available in Broadridge's database at that time.

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

The information examined by the Trustees in connection with their annual contract review for the Putnam funds included information regarding fees charged by Putnam Management and its affiliates to institutional clients, including defined benefit pension and profit-sharing plans and sub-advised mutual funds. This information included, in cases where an institutional product's investment strategy corresponds with a fund's strategy, comparisons of those fees with fees charged to the Putnam funds, as well as an assessment of the differences in the services provided to these different types of clients as compared to the services provided to the Putnam funds. The Trustees observed that the differences in fee rates between these clients and the Putnam funds are by no means uniform when examined by individual asset sectors, suggesting that differences in the pricing of investment management services to these types of clients may reflect, among other things, historical competitive forces operating in separate markets. The Trustees considered the fact that in many cases fee rates across different asset classes are higher on average for mutual funds than for institutional clients, 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 the Putnam funds' investment process and performance by the work of the investment oversight committees of the Trustees and the full Board of Trustees, which meet on a regular basis with the funds' portfolio teams and with the Chief Investment Officers and other senior members of Putnam Management's Investment Division throughout the year. The Trustees concluded that Putnam Management generally provides a high-quality investment process — based on the experience and skills of the individuals assigned to the management of fund portfolios, the resources made available to them, and in general Putnam Management's ability to attract and retain high-quality personnel — but also recognized that this does not guarantee favorable investment results for every fund in every time period.

The Trustees considered that, after a strong start to the year, 2018 was a mixed year for the Putnam funds, with the Putnam open-end Funds' performance, on an asset-weighted basis, ranking in the 54th percentile of their Lipper Inc. ("Lipper") peers (excluding those Putnam funds that are evaluated based on their total returns versus selected investment benchmarks). The Trustees also noted that The Putnam Funds were ranked by the Barron's/Lipper Fund Families survey as the 41st-best performing mutual fund complex out of 57 complexes for the one-year period ended December 31, 2018 and the 29th-best performing mutual fund complex out of 55 complexes for the five-year period ended December 31, 2018. The Trustees observed that The Putnam Funds' performance over the longer-term continued to be strong, ranking 6th out of 49 mutual fund complexes in the survey over the ten-year period ended 2018. In addition, the Trustees noted that 22 of the Funds were four- or five-star rated by Morningstar Inc. at the end of 2018. They also noted, however, the disappointing investment performance of some funds for periods ended December 31, 2018 and considered information provided by Putnam Management regarding the factors contributing to the underperformance and actions being taken to improve the performance of these particular funds. The Trustees indicated their intention to continue to monitor closely the performance of those funds, including the effectiveness of any efforts Putnam Management has undertaken to address underperformance and whether additional actions to address areas of underperformance are warranted.

For purposes of the Trustees' evaluation of the Putnam Funds' investment performance, the Trustees generally focus on a competitive industry ranking of each fund's total net return over a one-year, threeyear 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 with the returns of selected investment benchmarks. In the case of your

fund, the Trustees considered that its class IA share cumulative total return performance at net asset value was in the following quartiles of its Lipper Inc. ("Lipper") peer group (Lipper VP (Underlying Funds) — High Yield Funds) for the one-year, three-year and five-year periods ended December 31, 2018 (the first quartile representing the best-performing funds and the fourth quartile the worst-performing funds):

One-year period	Three-year period	Five-year period
4th	2nd	3rd

Over the one-year, three-year and five-year periods ended December 31, 2018, there were 109, 103 and 98 funds, respectively, in your fund's Lipper peer group. (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 fourth quartile performance over the one-year period ended December 31, 2018 and considered the circumstances that may have contributed to this disappointing performance. The Trustees noted Putnam Management's view that the fund's underperformance in 2018 was driven by several factors, including security selection in the financials and technology sectors and overweight allocations to the housing sector and higher quality CCC-rated securities (which underperformed relative to B- and BBBrated securities, especially in the fourth quarter of 2018). The Trustees noted Putnam Management's view that, although overweighted, strong security selection in CCC-rated securities contributed to returns.

The Trustees noted the fund's performance in the top third of its Lipper peer group over the three-year period. The Trustees considered 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 initiatives including structuring compensation for portfolio managers and research analysts to enhance accountability for fund performance, emphasizing accountability in the portfolio management process, and affirming its commitment to a fundamental-driven approach to investing. The Trustees noted further that Putnam Management had made selective hires in 2018 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. Based on Putnam Management's willingness

to take appropriate measures to address fund performance issues and Putnam Management's responsiveness to Trustee concerns about investment performance, the Trustees concluded that it continues 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. However, the Trustees noted that a portion of available soft dollars continues to be used to pay fund expenses. The Trustees indicated their continued intent to monitor regulatory and industry developments in this area with the assistance of their Brokerage Committee. The Trustees also indicated their continued intent to monitor the allocation of the Putnam funds' brokerage in order to ensure that the principle of seeking best price and execution remains paramount in the portfolio trading process.

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

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, 2019, are available in the Individual Investors section of putnam.com and on the Securities and Exchange Commission's (SEC) website at www.sec.gov. If you have questions about finding forms on the SEC's website, you may call the SEC at 1-800-SEC-0330. You may also obtain the Putnam funds' proxy voting guidelines and procedures at no charge by calling Putnam's Shareholder Services at 1-800-225-1581.

Fund portfolio holdings

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

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

Fund information

Investment Manager

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

Investment Sub-Advisor

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

Marketing Services

Putnam Retail Management 100 Federal Street Boston, MA 02110

Investor Servicing Agent

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

Custodian

State Street Bank and Trust Company

Legal Counsel

Ropes & Gray LLP

Trustees

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

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