

Putnam Variable Trust

Putnam VT Diversified Income Fund

Annual report

12 | 31 | 23

Message from the Trustees

February 12, 2024

Dear Shareholder:

With the new year comes new beginnings. We are pleased to report that on January 1, 2024, Franklin Resources, Inc., a leading global asset management firm operating as Franklin Templeton, acquired Putnam Investments.

With complementary capabilities and an established infrastructure serving over 150 countries, Franklin Templeton enhances Putnam's investment, risk management, operations, and technology platforms. Together, our firms are committed to delivering strong fund performance and more choices for our investors.

As we enter this new chapter, you can rest assured that your fund continues to be actively managed by the same experienced professionals. Your investment team is exploring new and attractive opportunities for your fund, while monitoring changing market conditions. The following pages provide an update on your fund.

Thank you for investing with Putnam.

Respectfully yours,



Robert L. Reynolds
President, The Putnam Funds



Kenneth R. Leibler
Chair, Board of Trustees

Performance summary (as of 12/31/23)

Investment objective

As high a level of current income as Putnam Investment Management, LLC (Putnam Management) believes is consistent with preservation of capital

Net asset value December 31, 2023

Class IA: \$4.62

Class IB: \$4.65

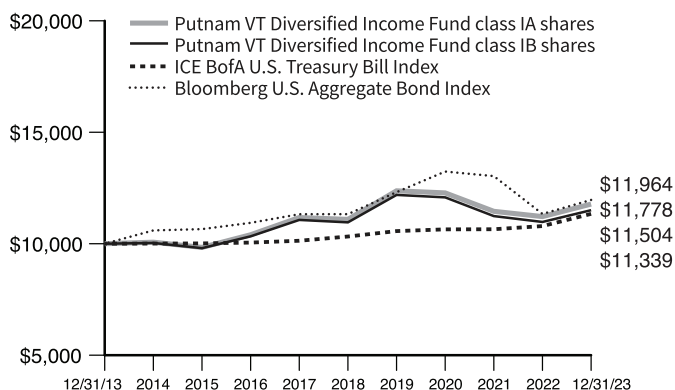
Annualized total return at net asset value (as of 12/31/23)

	Class IA shares (9/15/93)	Class IB shares (4/6/98)	ICE BofA U.S. Treasury Bill Index	Bloomberg U.S. Aggregate Bond Index
1 year	5.01%	4.82%	5.08%	5.53%
5 years	1.21	0.98	1.90	1.10
10 years	1.65	1.41	1.26	1.81
Life of fund	4.51	4.32	2.47	4.37

Recent performance may have benefited from one or more legal settlements.

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

Cumulative total returns of a \$10,000 investment in class IA and class IB shares at net asset value — since 12/31/13



The Bloomberg U.S. Aggregate Bond Index is an unmanaged index of U.S. investment-grade fixed income securities.

The ICE BofA (Intercontinental Exchange Bank of America) U.S. Treasury Bill Index is an unmanaged index that tracks the performance of U.S. dollar-denominated U.S. Treasury bills publicly issued in the U.S. domestic market. Qualifying securities must have a remaining term of at least one month to final maturity and a minimum amount outstanding of \$1 billion.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

BLOOMBERG® is a trademark and service mark of Bloomberg Finance L.P. and its affiliates (collectively "Bloomberg"). Bloomberg or Bloomberg's licensors own all proprietary rights in the Bloomberg Indices. Neither Bloomberg nor Bloomberg's licensors approve or endorse this material, or guarantee the accuracy or completeness of any information herein, or make any warranty, express or implied, as to the results to be obtained therefrom, and to the maximum extent allowed by law, neither shall have any liability or responsibility for injury or damages arising in connection therewith.

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

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

Agency pass-throughs	42.0%
High-yield corporate bonds	20.2%
Agency collateralized mortgage obligations	13.3%
Emerging market bonds	12.9%
Commercial mortgage-backed securities	9.9%
Non-agency residential mortgage-backed securities	9.4%
Investment-grade corporate bonds	6.5%
Convertible securities	3.2%
Bank loans	1.8%
Asset-backed securities	0.9%
Cash and net other assets	29.1%

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

AAA	13.9%
AA	1.5%
A	2.0%
BBB	10.2%
BB	17.6%
B	7.1%
CCC and below	6.2%
Not rated	12.4%
Cash and net other assets	29.1%

Credit qualities are shown as a percentage of the fund's net assets. A bond rated BBB or higher is considered investment grade. This table reflects the highest security rating provided by one or more of Standard & Poor's, Moody's, and Fitch. Ratings and portfolio credit quality will vary over time. 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. Due to rounding, percentages may not equal 100%.

Report from your fund's managers

How was the investment environment during the 12-month reporting period ended December 31, 2023?

Bond markets faced several headwinds during the period but ended 2023 on solid footing. Stubborn inflation, rising interest rates, banking turmoil, and a U.S. debt ceiling crisis weighed on investor sentiment at times. After raising the federal funds rate in July, the Federal Reserve left its benchmark rate unchanged for the balance of the year and indicated interest-rate cuts would be coming in 2024. With inflationary pressures easing further in the fourth quarter of 2023, market sentiment improved significantly, and fixed income rallied.

How did Putnam VT Diversified Income Fund perform in this environment?

For the 12-month reporting period, the fund's class IA shares posted a return of 5.01%, which was close to the 5.08% return for the fund's primary benchmark, the ICE BofA U.S. Treasury Bill Index.

What were some holdings or strategies that helped fund performance relative to the benchmark during the reporting period?

Corporate credit risk strategies added the most to returns, particularly the fund's investments in high-yield bonds. High-yield corporate spreads tightened considerably during the period, as investors increased their risk exposure. Spreads are the yield advantage credit-sensitive bonds offer over comparable-maturity U.S. Treasuries.

Residential mortgage credit investments, led by residential mortgage-backed securities, added to fund returns as well. Despite higher mortgage rates, the U.S. housing market was supported by constrained supply.

Emerging market [EM] risk strategies were also a notable contributor to relative returns. EM credit held up well despite higher interest rates and a stronger U.S. dollar for much of the period.

What were some holdings or strategies that detracted from fund performance relative to the benchmark during the reporting period?

Term structure risk strategies were the largest detractors from fund performance in 2023. The period was marked by higher yields and an inverted yield curve, which happens when yields on longer-term bonds fall below those of shorter-term bonds. These conditions negatively impacted the fund, which was positioned with a structurally positive duration of around four years.

Exposure to commercial mortgage-backed securities [CMBS] detracted from fund performance as well. In the first quarter of 2023, poor technicals [supply/demand metrics] and negative headlines surrounding office properties negatively impacted the CMBS market.

Currency risk strategies modestly detracted from fund performance during the period. These strategies employ a hedge of safe-haven currencies that typically do well in risk-averse investing environments. We held a long position to the U.S. dollar, Japanese yen, and Swiss franc versus the remaining G10 currencies [the top 10 most-traded currencies in the world]. During the period, the Japanese yen weakened, the Swiss franc strengthened, and the

U.S. dollar fluctuated relative to all G10 currencies, which led to the strategies' underperformance.

How did you use derivatives during the reporting period?

We used bond future contracts and interest-rate swaps to take tactical positions at various points along the yield curve, and to hedge the risk associated with the fund's curve positioning. We also employed interest-rate swaps to gain exposure to rates in various countries. We also utilized options to hedge the fund's duration and convexity, to isolate the prepayment risk associated with our holdings of collateralized mortgage obligations [CMOs], and to help manage overall downside risk. We used currency forward contracts to hedge the foreign exchange risk associated with non-U.S. bonds and to efficiently gain exposure to foreign currencies. Finally, we used credit default swaps to gain exposure to CMBS via CMBX and to hedge the fund's credit and market risks. CMBX is a group of tradeable indexes that each reference a basket of 25 CMBS issued in a particular year. In addition, we used credit default swaps to gain liquid exposure to specific sectors and individual names.

What is your near-term outlook?

Healthy market technicals and supportive macroeconomic data have kept investment-grade spread volatility low and allowed the high-yield market to perform strongly with other risk assets. In 2023, corporate fundamentals were resilient, and we expect these trends to persist in 2024 in the context of slower economic growth. Valuations are somewhat less compelling after a particularly strong rally in the fourth quarter of 2023, in our view. Risks to our outlook include policy missteps from global central banks, a more severe economic slowdown or recession, and heightened geopolitical tension.

The increased likelihood of Fed interest-rate cuts in 2024 should benefit commercial borrowers, in our view. Still, we believe the commercial real estate market faces meaningful headwinds that will vary significantly by geography and property type. We believe that property types that can adjust rents [hotels and apartments] will hold their value better, while property types with longer leases and greater exposure to higher capital costs will face pressure. We believe much of these risks are priced into the CMBS market. This has created relative value in corporate credit and attractive opportunities for security selection, in our view.

U.S. homeowner balance sheets remain well positioned, in our view, supported by the combination of locked-in, ultra-low mortgage rates and the substantial home price appreciation they have experienced in recent years. We believe this limits the likelihood of a housing and/or economic correction leading to widespread defaults and delinquencies. Using conservative macroeconomic and housing assumptions in our modeling, we favor higher-quality bonds with shorter duration spreads, as well as bonds with seasoned collateral.

We expect prepayment speeds will be stable going forward. In our view, prepayment strategies provide risk mitigation against a potential recession scenario, which would negatively impact home prices and/or unemployment. Macroeconomic volatility in interest rates can hinder performance, but we anticipate volatility will decline and

further support the market. In our view, many prepayment-sensitive assets offer an attractive risk-adjusted return at current price levels and upside potential if interest rates stabilize and volatility declines.

We have a cautiously optimistic outlook on EM over the intermediate term, supported by a stable growth environment and the expectation of more supportive monetary policy. Risks to our outlook include stickier inflation or much lower growth. Given current valuations, we are tactically taking advantage of idiosyncratic high-yield opportunities. However, we are not looking to increase aggregate risk materially until there is a significant widening in credit spreads.

The foregoing information reflects our views, which 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.

Your fund's managers



Portfolio Manager **Michael V. Salm** is Chief Investment Officer, Fixed Income. He joined Putnam in 1997 and has been in the investment industry since 1989.

Albert Chan, CFA; Robert L. Davis, CFA; Brett S. Kozlowski, CFA; 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.

Understanding your fund's expenses

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

Review your fund's expenses

The two left-hand columns of the Expenses per \$1,000 table show the expenses you would have paid on a \$1,000 investment in your fund from 7/1/23 to 12/31/23. They also show how much a \$1,000 investment would be worth at the close of the period, assuming *actual returns and expenses*. To estimate the ongoing expenses you paid over the period, divide your account value by \$1,000, then multiply the result by the number in the first line for the class of shares you own.

Compare your fund's expenses with those of other funds

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

Expense ratios

	Class IA	Class IB
Net expenses for the fiscal year ended 12/31/22*†	0.82%	1.07%
Total annual operating expenses for the fiscal year ended 12/31/22†	0.84%	1.09%
Annualized expense ratio for the six-month period ended 12/31/23‡	0.81%	1.06%

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.

*Reflects Putnam Management's contractual obligation to limit certain fund expenses through 4/30/24.

†Restated to reflect current fees.

‡Expense ratios for each class are for the fund's most recent fiscal half year. As a result of this, ratios may differ from expense ratios based on one-year data in the financial highlights.

Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 12/31/23		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 12/31/23	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$4.19	\$5.48	\$4.13	\$5.40
Ending value (after expenses)	\$1,050.00	\$1,049.70	\$1,021.12	\$1,019.86

*Expenses for each share class are calculated using the fund's annualized expense ratio for each class, which represents the ongoing expenses as a percentage of average net assets for the six months ended 12/31/23. The expense ratio may differ for each share class.

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

Report of Independent Registered Public Accounting Firm

To the Board of Trustees of Putnam Variable Trust and Shareholders of
Putnam VT Diversified Income Fund:

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the fund's portfolio, of Putnam VT Diversified Income Fund (one of the funds constituting Putnam Variable Trust, referred to hereafter as the "Fund") as of December 31, 2023, the related statement of operations for the year ended December 31, 2023, the statement of changes in net assets for each of the two years in the period ended December 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2023 and the financial highlights for each of the five years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2023 by correspondence with the custodian, transfer agent, agent banks and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP
Boston, Massachusetts
February 12, 2024

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

The fund's portfolio 12/31/23

U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS (44.6%)*	Principal amount	Value
U.S. Government Guaranteed Mortgage Obligations (9.1%)		
Government National Mortgage Association Pass-Through Certificates		
5.50%, TBA, 1/1/54	\$3,000,000	\$3,018,611
5.50%, 5/20/49	14,484	14,753
5.00%, 5/20/49	42,924	43,077
4.50%, TBA, 1/1/54	4,000,000	3,905,073
4.00%, TBA, 1/1/54	3,000,000	2,865,993
3.50%, with due dates from 9/20/49 to 11/20/49	130,091	120,873
	9,968,380	
U.S. Government Agency Mortgage Obligations (35.5%)		
Federal National Mortgage Association Pass-Through Certificates		
5.00%, with due dates from 1/1/49 to 5/1/49	36,978	36,861
4.50%, 5/1/49	6,787	6,680
Uniform Mortgage-Backed Securities		
6.50%, TBA, 1/1/54	9,000,000	9,220,775
6.00%, TBA, 1/1/54	23,000,000	23,366,569
5.00%, TBA, 1/1/54	2,000,000	1,979,999
3.50%, TBA, 1/1/54	2,000,000	1,835,938
3.00%, TBA, 1/1/54	1,000,000	885,156
2.50%, TBA, 1/1/54	2,000,000	1,703,438
	39,035,416	
Total U.S. government and agency mortgage obligations (cost \$48,090,441)		\$49,003,796
U.S. TREASURY OBLIGATIONS (0.2%)*	Principal amount	Value
U.S. Treasury Notes		
0.625%, 8/15/30 ⁱ	\$136,000	\$110,834
0.25%, 7/31/25 ⁱ	120,000	112,502
Total U.S. treasury obligations (cost \$223,336)		\$223,336
MORTGAGE-BACKED SECURITIES (32.5%)*	Principal amount	Value
Agency collateralized mortgage obligations (13.2%)		
Federal Home Loan Mortgage Corporation		
REMICs Ser. 4077, Class IK, IO, 5.00%, 7/15/42	\$243,621	\$49,230
REMICs Ser. 5091, Class IL, IO, 4.50%, 3/25/51	2,205,097	454,278
REMICs Ser. 5093, Class YI, IO, 4.50%, 12/25/50	1,667,744	367,573
REMICs Ser. 5024, Class HI, IO, 4.50%, 10/25/50	2,363,721	514,361
REMICs Ser. 4000, Class PI, IO, 4.50%, 1/15/42	141,661	20,498
REMICs Ser. 5134, Class IC, IO, 4.00%, 8/25/51	3,022,616	552,277
REMICs Ser. 23-5349, Class IB, IO, 4.00%, 12/15/46	1,556,945	307,744
REMICs Ser. 4105, Class HI, IO, 3.50%, 7/15/41	213,366	14,822
Strips Ser. 304, Class C37, IO, 3.50%, 12/15/27	107,648	3,274
REMICs IFB Ser. 5011, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 6.14%), 0.798%, 9/25/50	2,202,052	298,906
REMICs IFB Ser. 4742, Class S, IO, ((-1 x US 30 Day Average SOFR) + 6.09%), 0.747%, 12/15/47	471,888	55,648
REMICs IFB Ser. 5002, Class SJ, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.648%, 7/25/50	2,146,389	258,810
REMICs IFB Ser. 4839, Class WS, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.647%, 8/15/56	1,744,166	231,643

MORTGAGE-BACKED SECURITIES (32.5%)* <i>cont.</i>	Principal amount	Value
Agency collateralized mortgage obligations <i>cont.</i>		
Federal Home Loan Mortgage Corporation		
REMICs IFB Ser. 4678, Class MS, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.647%, 4/15/47	\$425,747	\$51,837
REMICs IFB Ser. 4945, Class SL, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.598%, 1/25/50	1,624,799	176,266
Structured Pass-Through Certificates FRB Ser. 57, Class 1AX, IO, 0.379%, 7/25/43 ^w	517,086	6,997
Federal National Mortgage Association		
REMICs Ser. 16-3, Class NI, IO, 6.00%, 2/25/46	537,649	89,511
Interest Strip Ser. 374, Class 6, IO, 5.50%, 8/25/36	44,609	7,369
REMICs Ser. 15-30, IO, 5.50%, 5/25/45	866,745	136,920
Interest Strip Ser. 378, Class 19, IO, 5.00%, 6/25/35	131,051	18,407
REMICs Ser. 20-76, Class BI, IO, 4.50%, 11/25/50	2,187,749	389,063
REMICs Ser. 12-127, Class BI, IO, 4.50%, 11/25/42	105,501	20,451
REMICs Ser. 23-49, Class IC, IO, 4.00%, 11/25/49	681,885	114,904
REMICs Ser. 13-41, Class IP, IO, 4.00%, 5/25/43	351,940	49,821
REMICs Ser. 13-44, Class PI, IO, 4.00%, 1/25/43	261,071	33,373
REMICs IFB Ser. 10-35, Class SG, IO, ((-1 x US 30 Day Average SOFR) + 6.29%), 0.948%, 4/25/40	244,242	26,729
REMICs IFB Ser. 18-20, Class SB, IO, ((-1 x US 30 Day Average SOFR) + 6.14%), 0.798%, 3/25/48	1,277,503	114,209
REMICs IFB Ser. 18-38, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 6.09%), 0.748%, 6/25/48	1,658,150	205,569
REMICs IFB Ser. 15-42, Class LS, IO, ((-1 x US 30 Day Average SOFR) + 6.09%), 0.748%, 6/25/45	1,248,053	64,813
Grantor Trust Ser. 00-T6, IO, 0.717%, 11/25/40 ^w	365,724	1,333
REMICs IFB Ser. 17-32, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 6.04%), 0.698%, 5/25/47	2,612,699	274,229
REMICs IFB Ser. 16-96, Class ST, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.648%, 12/25/46	947,713	69,269
REMICs IFB Ser. 20-12, Class SK, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.598%, 3/25/50	1,265,845	147,306
REMICs IFB Ser. 19-43, Class JS, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.598%, 8/25/49	1,131,827	100,542
Government National Mortgage Association		
Ser. 16-42, IO, 5.00%, 2/20/46	466,389	88,021
Ser. 18-127, Class IC, IO, 5.00%, 10/20/44	848,550	189,914
Ser. 14-76, IO, 5.00%, 5/20/44	256,060	51,049
Ser. 12-146, IO, 5.00%, 12/20/42	431,668	82,962
Ser. 10-35, Class UI, IO, 5.00%, 3/20/40	139,927	28,768
Ser. 10-20, Class UI, IO, 5.00%, 2/20/40	212,073	42,846
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	930,998	193,471
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	531,065	109,511
Ser. 17-26, Class MI, IO, 5.00%, 11/20/39	823,027	162,495
Ser. 15-79, Class GI, IO, 5.00%, 10/20/39	172,599	34,342
Ser. 18-94, Class AI, IO, 4.50%, 7/20/48	1,127,000	217,862
Ser. 13-34, Class IH, IO, 4.50%, 3/20/43	618,904	121,487
Ser. 17-42, Class IC, IO, 4.50%, 8/20/41	342,465	67,264
Ser. 10-35, Class AI, IO, 4.50%, 3/20/40	392,662	63,606
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	392,070	73,085

MORTGAGE-BACKED SECURITIES (32.5%)* cont.	Principal amount	Value
Agency collateralized mortgage obligations cont.		
Government National Mortgage Association		
Ser. 15-186, Class AI, IO, 4.00%, 12/20/45	\$1,059,433	\$186,227
Ser. 15-64, Class YI, IO, 4.00%, 11/20/44	359,002	46,448
Ser. 13-165, Class IL, IO, 4.00%, 3/20/43	244,928	37,877
Ser. 21-156, IO, 3.50%, 7/20/51	3,228,794	543,733
Ser. 20-167, Class PI, IO, 3.50%, 11/20/50	2,527,712	468,232
Ser. 16-75, Class EI, IO, 3.50%, 8/20/45	304,068	48,141
Ser. 13-28, IO, 3.50%, 2/20/43	137,228	17,744
Ser. 13-54, Class JI, IO, 3.50%, 2/20/43	203,990	25,285
Ser. 12-140, Class IC, IO, 3.50%, 11/20/42	662,276	110,382
Ser. 12-128, Class IA, IO, 3.50%, 10/20/42	761,971	120,630
Ser. 21-59, Class IP, IO, 3.00%, 4/20/51	2,858,077	447,804
Ser. 16-H03, Class DI, IO, 2.051%, 12/20/65 W	1,799,027	71,788
Ser. 15-H25, Class EI, IO, 1.853%, 10/20/65 W	1,320,669	51,506
FRB Ser. 15-H08, Class CI, IO, 1.781%, 3/20/65 W	897,398	27,730
Ser. 15-H23, Class BI, IO, 1.724%, 9/20/65 W	1,931,663	59,688
Ser. 16-H14, IO, 1.655%, 6/20/66 W	915,532	24,175
Ser. 16-H24, Class CI, IO, 1.654%, 10/20/66 W	1,363,412	42,538
Ser. 13-H08, Class CI, IO, 1.616%, 2/20/63 W	1,008,086	32,964
Ser. 15-H25, Class AI, IO, 1.576%, 9/20/65 W	2,947,036	81,043
Ser. 14-H21, Class BI, IO, 1.524%, 10/20/64 W	1,577,883	48,441
IFB Ser. 21-98, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.828%, 6/20/51	1,726,402	224,225
IFB Ser. 21-77, Class SM, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.828%, 5/20/51	2,460,579	305,638
IFB Ser. 21-59, Class SQ, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.828%, 4/20/51	1,907,958	232,236
IFB Ser. 20-133, Class CS, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.828%, 9/20/50	2,270,178	292,258
Ser. 16-H22, Class AI, IO, 0.782%, 10/20/66 W	1,627,426	64,601
Ser. 16-H23, Class NI, IO, 0.769%, 10/20/66 W	4,816,672	205,672
FRB Ser. 21-116, Class ES, IO, ((-1 x CME Term SOFR 1 Month) + 6.09%), 0.727%, 11/20/47	2,672,018	352,628
Ser. 16-H24, Class JI, IO, 0.717%, 11/20/66 W	1,737,482	85,734
IFB Ser. 14-60, Class SD, IO, ((-1 x CME Term SOFR 1 Month) + 6.07%), 0.708%, 4/20/44	1,318,543	141,718
Ser. 16-H16, Class EI, IO, 0.693%, 6/20/66 W	1,232,742	46,721
IFB Ser. 20-97, Class QS, IO, ((-1 x CME Term SOFR 1 Month) + 6.04%), 0.678%, 7/20/50	2,111,001	270,277
IFB Ser. 18-139, Class SA, IO, ((-1 x CME Term SOFR 1 Month) + 6.04%), 0.678%, 10/20/48	1,123,587	106,186
IFB Ser. 20-63, Class PS, IO, ((-1 x CME Term SOFR 1 Month) + 5.99%), 0.628%, 4/20/50	2,231,081	262,553
IFB Ser. 19-96, Class SY, IO, ((-1 x CME Term SOFR 1 Month) + 5.99%), 0.628%, 8/20/49	3,621,243	409,092
IFB Ser. 19-83, Class SY, IO, ((-1 x CME Term SOFR 1 Month) + 5.99%), 0.628%, 7/20/49	1,549,282	167,570
IFB Ser. 19-89, Class PS, IO, ((-1 x CME Term SOFR 1 Month) + 5.99%), 0.628%, 7/20/49	2,306,896	225,762
IFB Ser. 20-7, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 5.94%), 0.578%, 1/20/50	1,169,555	126,145
IFB Ser. 19-152, Class ES, IO, ((-1 x CME Term SOFR 1 Month) + 5.94%), 0.578%, 12/20/49	954,142	99,554
IFB Ser. 20-63, Class AS, IO, ((-1 x CME Term SOFR 1 Month) + 5.89%), 0.528%, 8/20/43	1,862,108	177,180
Ser. 17-H11, Class DI, IO, 0.525%, 5/20/67 W	1,317,897	68,577
Ser. 16-H17, Class KI, IO, 0.398%, 7/20/66 W	749,001	33,103
Ser. 15-H24, Class AI, IO, 0.334%, 9/20/65 W	1,625,833	47,881
Ser. 17-H12, Class QI, IO, 0.299%, 5/20/67 W	1,394,865	52,441
Ser. 17-H11, Class TI, IO, 0.169%, 4/20/67 W	1,097,245	64,847

MORTGAGE-BACKED SECURITIES (32.5%)* cont.	Principal amount	Value
Agency collateralized mortgage obligations cont.		
Government National Mortgage Association		
IFB Ser. 14-119, Class SA, IO, ((-1 x CME Term SOFR 1 Month) + 5.49%), 0.128%, 8/20/44	\$573,899	\$50,813
Ser. 16-H09, Class BI, IO, 0.105%, 4/20/66 W	2,493,940	126,443
Ser. 18-H05, Class BI, IO, 0.097%, 2/20/68 W	1,827,924	85,534
Ser. 17-H16, Class JI, IO, 0.071%, 8/20/67 W	2,259,830	110,736
Ser. 15-H10, Class BI, IO, 0.047%, 4/20/65 W	1,203,726	54,408
Ser. 18-H05, Class AI, IO, 0.038%, 2/20/68 W	1,584,215	75,458
Ser. 16-H03, Class AI, IO, 0.035%, 1/20/66 W	1,269,741	46,216
Ser. 17-H02, Class BI, IO, 0.032%, 1/20/67 W	1,400,019	45,165
Ser. 16-H06, Class DI, IO, 0.032%, 7/20/65 W	2,276,008	57,651
Ser. 17-H10, Class MI, IO, 0.02%, 4/20/67 W	2,571,762	86,668
Ser. 18-H03, Class XI, IO, 0.019%, 2/20/68 W	1,695,347	86,124
Ser. 17-H08, Class NI, IO, 0.019%, 3/20/67 W	1,884,764	72,186
Ser. 17-H06, Class BI, IO, 0.015%, 2/20/67 W	1,473,766	45,483
Ser. 17-H09, IO, 0.014%, 4/20/67 W	1,969,277	60,213
Ser. 17-H16, Class IG, IO, 0.009%, 7/20/67 W	1,989,307	51,116
Ser. 16-H06, Class CI, IO, 0.002%, 2/20/66 W	2,645,047	49,341
Ser. 16-H10, Class AI, IO, zero %, 4/20/66 W	2,587,001	52,407
	14,465,602	
Commercial mortgage-backed securities (10.0%)		
Barclays Commercial Mortgage Trust 144A FRB		
Ser. 19-C5, Class F, 2.601%, 11/15/52 W	336,000	177,575
Benchmark Mortgage Trust 144A FRB Ser. 18-B3, Class D, 3.022%, 4/10/51 W		
	346,000	200,810
BWAY Mortgage Trust 144A FRB Ser. 22-26BW, Class F, 4.866%, 2/10/44 W		
	420,000	263,483
CD Commercial Mortgage Trust FRB Ser. 17-CD3, Class C, 4.538%, 2/10/50 W		
	319,000	137,558
CD Commercial Mortgage Trust 144A		
Ser. 17-CD3, Class D, 3.25%, 2/10/50	460,000	185,467
CFCRE Commercial Mortgage Trust 144A		
FRB Ser. 11-C2, Class E, 5.249%, 12/15/47 W	326,000	264,474
FRB Ser. 11-C2, Class F, 5.249%, 12/15/47 W	644,000	399,918
COMM Mortgage Trust		
Ser. 12-LC4, Class B, 4.934%, 12/10/44 W	143,525	128,598
FRB Ser. 14-CR16, Class C, 4.913%, 4/10/47 W	283,000	235,718
Ser. 13-CR12, Class AM, 4.30%, 10/10/46	276,000	226,452
Ser. 15-DC1, Class B, 4.035%, 2/10/48 W	264,000	230,374
COMM Mortgage Trust 144A		
FRB Ser. 14-CR17, Class D, 4.796%, 5/10/47 W	182,000	156,644
FRB Ser. 14-UBS3, Class D, 4.765%, 6/10/47 W	116,000	59,306
Ser. 12-CR3, Class F, 4.75%, 10/15/45 (In default) ↑ W	112,149	5,773
FRB Ser. 15-LC19, Class E, 4.213%, 2/10/48 W	257,000	178,049
Credit Suisse Mortgage Trust 144A FRB		
Ser. 22-NWPT, Class A, 8.505%, 9/9/24	158,000	159,683
CSAIL Commercial Mortgage Trust 144A FRB		
Ser. 15-C1, Class D, 3.75%, 4/15/50 W	307,000	204,898
Federal Home Loan Mortgage Corporation		
144A Multifamily Structured Credit Risk FRB		
Ser. 21-MN3, Class M2, 9.337%, 11/25/51	460,000	426,199
GS Mortgage Securities Corp., II 144A		
FRB Ser. 13-GC10, Class D, 4.537%, 2/10/46 W	237,000	211,824
Ser. 13-GC10, Class C, 4.285%, 2/10/46 W	130,357	124,909
GS Mortgage Securities Trust Ser. 14-GC18, Class B, 4.885%, 1/10/47 W		
	135,000	125,784
GS Mortgage Securities Trust 144A Ser. 19-GC38, Class D, 3.00%, 2/10/52		
	330,000	216,113

MORTGAGE-BACKED SECURITIES (32.5%)* cont.	Principal amount	Value
Commercial mortgage-backed securities cont.		
JPMBB Commercial Mortgage Securities Trust 144A		
FRB Ser. 14-C19, Class C19, 4.671%, 4/15/47 W	\$208,000	\$196,035
FRB Ser. 14-C18, Class D, 4.645%, 2/15/47 W	617,000	433,542
FRB Ser. 14-C18, Class E, 4.145%, 2/15/47 W	381,000	219,789
FRB Ser. 14-C25, Class D, 3.932%, 11/15/47 W	194,000	115,961
Ser. 14-C25, Class E, 3.332%, 11/15/47 W	589,000	151,888
JPMDB Commercial Mortgage Securities Trust		
FRB Ser. 18-C8, Class C, 4.764%, 6/15/51 W	138,000	110,043
Ser. 17-C5, Class C, 4.512%, 3/15/50 W	291,000	180,634
JPMorgan Chase Commercial Mortgage Securities Trust FRB Ser. 13-LC11, Class D, 4.161%, 4/15/46 W	127,000	45,897
JPMorgan Chase Commercial Mortgage Securities Trust 144A FRB Ser. 11-C3, Class F, 5.526%, 2/15/46 W	401,000	92,180
Mezz Cap Commercial Mortgage Trust 144A FRB Ser. 07-C5, Class X, IO, 6.571%, 12/15/49 W	11,396	—
Morgan Stanley Bank of America Merrill Lynch Trust Ser. 12-C6, Class C, 4.536%, 11/15/45 W	223,025	207,341
Morgan Stanley Bank of America Merrill Lynch Trust 144A		
FRB Ser. 13-C12, Class D, 7.432%, 10/15/46 W	275,000	225,633
FRB Ser. 13-C10, Class D, 3.997%, 7/15/46 W	478,000	168,232
Ser. 14-C17, Class E, 3.50%, 8/15/47	369,000	316,699
Ser. 14-C18, Class D, 3.389%, 10/15/47	230,000	193,224
Ser. 14-C19, Class D, 3.25%, 12/15/47	240,000	207,004
Morgan Stanley Capital I Trust		
Ser. 06-HQ10, Class B, 5.448%, 11/12/41 W	92,521	76,869
FRB Ser. 18-H3, Class C, 4.851%, 7/15/51 W	178,000	148,317
Multifamily Connecticut Avenue Securities Trust 144A		
FRB Ser. 20-01, Class M10, 9.202%, 3/25/50	575,381	554,636
FRB Ser. 19-01, Class M10, 8.702%, 10/25/49	324,803	315,856
Ready Capital Mortgage Financing, LLC 144A FRB Ser. 22-FL9, Class A, 7.823%, 6/25/37	282,017	281,821
RIAL Issuer, Ltd. 144A FRB Ser. 22-FL8, Class B, 8.608%, 1/19/37 (Bermuda)	217,000	207,844
TIAA Real Estate CDO, Ltd. 144A Ser. 03-1A, Class E, 8.00%, 12/28/38 (In default) †	472,775	5
Wells Fargo Commercial Mortgage Trust FRB Ser. 15-C29, Class D, 4.218%, 6/15/48 W	243,000	216,349
Wells Fargo Commercial Mortgage Trust 144A		
FRB Ser. 15-C30, Class D, 4.498%, 9/15/58 W	95,000	73,090
FRB Ser. 13-LC12, Class D, 3.954%, 7/15/46 W	513,000	134,515
Ser. 14-LC16, Class D, 3.938%, 8/15/50	828,000	41,994
Ser. 16-C33, Class D, 3.123%, 3/15/59	471,000	351,586
WF-RBS Commercial Mortgage Trust 144A		
Ser. 11-C4, Class F, 5.00%, 6/15/44 W	1,331,000	895,424
FRB Ser. 12-C10, Class D, 4.394%, 12/15/45 W	375,000	159,743
FRB Ser. 13-C15, Class D, 4.204%, 8/15/46 W	1,333,000	316,904
	10,958,664	
Residential mortgage-backed securities (non-agency) (9.3%)		
BCAP, LLC Trust 144A FRB Ser. 11-RR3, Class 3A6, 5.956%, 11/27/36 W	233,877	161,375
Bear Stearns Alt-A Trust FRB Ser. 05-8, Class 21A1, 4.795%, 10/25/35 W	132,588	108,895
Chevy Chase Funding, LLC Mortgage-Backed Certificates 144A FRB Ser. 06-4A, Class A2, (CME Term SOFR 1 Month + 0.29%), 5.65%, 11/25/47	99,636	71,612

MORTGAGE-BACKED SECURITIES (32.5%)* cont.	Principal amount	Value
Residential mortgage-backed securities (non-agency) cont.		
Countrywide Alternative Loan Trust		
FRB Ser. 05-38, Class A1, (Federal Reserve US 12 Month Cumulative Avg 1 yr CMT + 1.50%), 6.512%, 9/25/35	\$241,047	\$214,395
FRB Ser. 06-OA7, Class 1A2, (Federal Reserve US 12 Month Cumulative Avg 1 yr CMT + 0.94%), 5.952%, 6/25/46	149,561	125,094
FRB Ser. 06-OA10, Class 4A1, (CME Term SOFR 1 Month + 0.49%), 5.85%, 8/25/46	866,594	732,577
FRB Ser. 07-OH1, Class A1D, (CME Term SOFR 1 Month + 0.32%), 5.68%, 4/25/47	73,726	59,311
FRB Ser. 05-65CB, Class 2A1, (CME Term SOFR 1 Month + 0.54%), 5.50%, 12/25/35	294,076	180,597
FRB Ser. 06-OA7, Class 1A1, 3.534%, 6/25/46 W	539,929	479,031
Federal Home Loan Mortgage Corporation		
Structured Agency Credit Risk Debt FRN Ser. 16-DNA1, Class B, (US 30 Day Average SOFR + 10.11%), 15.452%, 7/25/28	1,018,994	1,134,324
Structured Agency Credit Risk Debt FRN Ser. 15-DNA3, Class B, (US 30 Day Average SOFR + 9.46%), 14.802%, 4/25/28	516,332	565,483
Structured Agency Credit Risk Debt FRN Ser. 15-HQA1, Class B, (US 30 Day Average SOFR + 8.91%), 14.252%, 3/25/28	323,650	334,185
Structured Agency Credit Risk Debt FRN Ser. 15-DNA2, Class B, (US 30 Day Average SOFR + 7.66%), 13.002%, 12/25/27	357,106	376,850
Federal Home Loan Mortgage Corporation 144A		
Structured Agency Credit Risk Trust FRB Ser. 18-HQA2, Class B2, (US 30 Day Average SOFR + 11.11%), 16.452%, 10/25/48	333,000	410,765
Structured Agency Credit Risk Trust FRB Ser. 19-DNA2, Class B2, (US 30 Day Average SOFR + 10.61%), 15.952%, 3/25/49	152,000	179,302
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA4, Class B2, (US 30 Day Average SOFR + 10.11%), 15.452%, 8/25/50	135,000	174,277
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA3, Class B2, (US 30 Day Average SOFR + 9.46%), 14.802%, 6/25/50	237,000	299,319
Structured Agency Credit Risk Trust FRB Ser. 18-DNA3, Class B2, (US 30 Day Average SOFR + 7.86%), 13.202%, 9/25/48	389,000	439,675
Seasoned Credit Risk Transfer Trust Ser. 19-2, Class M, 4.75%, 8/25/58 W	253,000	226,338
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C02, Class 1B, (US 30 Day Average SOFR + 12.36%), 17.702%, 9/25/28	966,975	1,127,596
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1B, (US 30 Day Average SOFR + 11.86%), 17.202%, 10/25/28	496,018	575,795
Connecticut Avenue Securities FRB Ser. 16-C05, Class 2B, (US 30 Day Average SOFR + 10.86%), 16.202%, 1/25/29	89,563	102,308
Federal National Mortgage Association 144A		
Connecticut Avenue Securities Trust FRB Ser. 22-R02, Class 2B1, (US 30 Day Average SOFR + 4.50%), 9.837%, 1/25/42	148,000	152,995
Connecticut Avenue Securities Trust FRB Ser. 19-R03, Class 1B1, (US 30 Day Average SOFR + 4.21%), 9.552%, 9/25/31	487,042	514,941

MORTGAGE-BACKED SECURITIES (32.5%)* cont.	Principal amount	Value
Residential mortgage-backed securities (non-agency) cont.		
Federal National Mortgage Association 144A Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1M2, (US 30 Day Average SOFR + 3.76%), 9.102%, 2/25/40	\$276,000	\$290,058
Connecticut Avenue Securities Trust FRB Ser. 20-R01, Class 1B1, (US 30 Day Average SOFR + 3.36%), 8.702%, 1/25/40	155,000	157,391
GSAA Home Equity Trust FRB Ser. 06-8, Class 2A2, (CME Term SOFR 1 Month + 0.47%), 5.83%, 5/25/36	504,940	118,777
GSR Mortgage Loan Trust FRB Ser. 07-OA1, Class 2A3A, (CME Term SOFR 1 Month + 0.42%), 5.78%, 5/25/37	118,129	65,730
HarborView Mortgage Loan Trust FRB Ser. 05-2, Class 1A, (CME Term SOFR 1 Month + 0.63%), 5.99%, 5/19/35	168,665	53,077
Morgan Stanley Re-REMIC Trust 144A FRB Ser. 10-R4, Class 4B, (CME Term SOFR 1 Month + 0.34%), 2.278%, 2/26/37	145,577	123,215
MortgageIT Trust FRB Ser. 05-3, Class M2, (CME Term SOFR 1 Month + 0.91%), 6.265%, 8/25/35	33,780	31,800
Structured Asset Mortgage Investments II Trust FRB Ser. 07-AR1, Class 2A1, (CME Term SOFR 1 Month + 0.29%), 5.65%, 1/25/37	192,503	165,511
Towd Point Mortgage Trust 144A Ser. 19-2, Class A2, 3.75%, 12/25/58 ^W	202,000	182,562
WaMu Asset-Backed Certificates Trust FRB Ser. 07-HE4, Class 1A, (CME Term SOFR 1 Month + 0.28%), 5.64%, 7/25/47	115,002	78,374
Washington Mutual Asset-Backed Certificates Trust FRB Ser. 06-HE2, Class A3, (CME Term SOFR 1 Month + 0.41%), 5.77%, 5/25/36	370,983	273,731
		10,287,266
Total mortgage-backed securities (cost \$41,349,352)		\$35,711,532

CORPORATE BONDS AND NOTES (23.0%)*	Principal amount	Value
Basic materials (2.3%)		
ArcelorMittal SA sr. unsec. unsub. notes 7.00%, 10/15/39 (France)	\$135,000	\$145,289
ATI, Inc. sr. unsec. notes 7.25%, 8/15/30	15,000	15,606
ATI, Inc. sr. unsec. notes 4.875%, 10/1/29	135,000	125,815
Axalta Coating Systems, LLC 144A company guaranty sr. unsec. notes 3.375%, 2/15/29	326,000	292,562
Boise Cascade Co. 144A company guaranty sr. unsec. notes 4.875%, 7/1/30	150,000	140,841
Builders FirstSource, Inc. 144A company guaranty sr. unsec. bonds 6.375%, 6/15/32	140,000	142,965
Builders FirstSource, Inc. 144A company guaranty sr. unsec. bonds 4.25%, 2/1/32	60,000	54,119
Celanese US Holdings, LLC company guaranty sr. unsec. notes 6.33%, 7/15/29 (Germany)	113,000	118,455
Commercial Metals Co. sr. unsec. notes 4.375%, 3/15/32	158,000	141,798
Constellium SE sr. unsec. notes Ser. REGS, 3.125%, 7/15/29 (France)	EUR 130,000	131,611

CORPORATE BONDS AND NOTES (23.0%)* cont.	Principal amount	Value
Basic materials cont.		
HTA Group, Ltd./Mauritius company guaranty sr. unsec. notes Ser. REGS, 7.00%, 12/18/25 (Tanzania)	\$200,000	\$198,000
HudBay Minerals, Inc. 144A company guaranty sr. unsec. notes 6.125%, 4/1/29 (Canada)	140,000	137,267
IHS Holding, Ltd. company guaranty sr. unsec. notes Ser. REGS, 6.25%, 11/29/28 (Nigeria)	320,000	258,800
Olympus Water US Holding Corp. 144A sr. notes 9.75%, 11/15/28	200,000	212,279
Resideo Funding, Inc. 144A company guaranty sr. unsec. unsub. notes 4.00%, 9/1/29	160,000	139,600
Smyrna Ready Mix Concrete, LLC 144A sr. notes 8.875%, 11/15/31	120,000	126,150
WR Grace Holdings, LLC 144A sr. notes 7.375%, 3/1/31	135,000	134,663
		2,515,820

Capital goods (1.7%)		
Benteler International AG 144A company guaranty sr. notes 10.50%, 5/15/28 (Austria)	270,000	285,525
Boeing Co. (The) sr. unsec. notes 2.70%, 2/1/27	92,000	86,746
Clarios Global LP/Clarios US Finance Co. company guaranty sr. notes Ser. REGS, 4.375%, 5/15/26	EUR 175,000	191,130
GFL Environmental, Inc. 144A company guaranty sr. unsec. notes 4.75%, 6/15/29 (Canada)	\$151,000	142,236
Great Lakes Dredge & Dock Corp. 144A company guaranty sr. unsec. notes 5.25%, 6/1/29	160,000	136,034
Howmet Aerospace, Inc. sr. unsec. unsub. bonds 5.95%, 2/1/37	120,000	125,259
Pactiv Evergreen Group Issuer, Inc./ Pactiv Evergreen Group Issuer, LLC 144A company guaranty sr. notes 4.00%, 10/15/27	150,000	140,250
Republic Services, Inc. sr. unsec. unsub. notes 4.875%, 4/1/29	260,000	264,849
Ritchie Bros Holdings, Inc. 144A company guaranty sr. unsec. unsub. notes 7.75%, 3/15/31	128,000	136,480
Roller Bearing Co. of America, Inc. 144A sr. notes 4.375%, 10/15/29	155,000	143,442
Spirit AeroSystems, Inc. 144A sr. unsub. notes 9.375%, 11/30/29	45,000	49,242
TransDigm, Inc. company guaranty sr. unsec. sub. notes 4.875%, 5/1/29	70,000	65,428
TransDigm, Inc. company guaranty sr. unsec. sub. notes 4.625%, 1/15/29	65,000	61,027
TransDigm, Inc. 144A sr. notes 6.875%, 12/15/30	90,000	92,700
		1,920,348

Communication services (1.8%)		
American Tower Corp. sr. unsec. sub. notes 2.75%, 1/15/27 ^R	275,000	257,768
AT&T, Inc. sr. unsec. notes 4.10%, 2/15/28	275,000	268,740
CCO Holdings, LLC/CCO Holdings Capital Corp. 144A sr. unsec. unsub. notes 4.75%, 2/1/32	380,000	335,145

CORPORATE BONDS AND NOTES (23.0%)* <i>cont.</i>	Principal amount	Value
Communication services <i>cont.</i>		
CSC Holdings, LLC 144A company guaranty sr. unsec. notes 5.50%, 4/15/27	\$200,000	\$184,859
DIRECTV Holdings, LLC/DIRECTV Financing Co., Inc. 144A sr. notes 5.875%, 8/15/27	96,000	90,199
SBA Communications Corp. sr. unsec. notes 3.125%, 2/1/29 ^R	160,000	143,759
T-Mobile USA, Inc. company guaranty sr. unsec. notes 3.375%, 4/15/29	545,000	506,361
Vmed O2 UK Financing I PLC sr. notes Ser. REGS, 3.25%, 1/31/31 (United Kingdom)	EUR 135,000	136,801
		1,923,632
Consumer cyclicals (5.6%)		
Bath & Body Works, Inc. 144A company guaranty sr. unsec. unsub. bonds 6.625%, 10/1/30	\$317,000	323,990
Block, Inc. sr. unsec. notes 3.50%, 6/1/31	165,000	146,512
Boyd Gaming Corp. 144A sr. unsec. bonds 4.75%, 6/15/31	155,000	142,263
Caesars Entertainment, Inc. 144A sr. notes 7.00%, 2/15/30	131,000	134,332
Carnival Holdings Bermuda, Ltd. 144A company guaranty sr. unsec. unsub. notes 10.375%, 5/1/28 (Bermuda)	171,000	186,120
Cinemark USA, Inc. 144A company guaranty sr. unsec. notes 5.25%, 7/15/28	155,000	142,198
Crocs, Inc. 144A company guaranty sr. unsec. notes 4.125%, 8/15/31	170,000	143,853
Dufry One BV company guaranty sr. unsec. notes Ser. REGS, 3.375%, 4/15/28 (Netherlands)	EUR 120,000	126,929
iHeartCommunications, Inc. company guaranty sr. notes 6.375%, 5/1/26	\$160,000	136,413
IHO Verwaltungs GmbH sr. unsub. notes Ser. REGS, 8.75%, 5/15/28 (Germany) ^{††}	EUR 270,000	324,893
JELD-WEN, Inc. 144A company guaranty sr. unsec. notes 4.875%, 12/15/27	\$150,000	141,750
Kontoor Brands, Inc. 144A company guaranty sr. unsec. notes 4.125%, 11/15/29	160,000	143,200
Las Vegas Sands Corp. sr. unsec. unsub. notes 3.90%, 8/8/29	150,000	138,211
Levi Strauss & Co. sr. unsec. notes 3.375%, 3/15/27	EUR 134,000	145,095
Light & Wonder International, Inc. 144A company guaranty sr. unsec. notes 7.25%, 11/15/29	\$310,000	317,412
Masonite International Corp. 144A company guaranty sr. unsec. notes 3.50%, 2/15/30	160,000	138,691
Mattamy Group Corp. 144A sr. unsec. notes 4.625%, 3/1/30 (Canada)	350,000	324,364
Mattel, Inc. 144A company guaranty sr. unsec. notes 3.75%, 4/1/29	155,000	141,576
McGraw-Hill Education, Inc. 144A sr. notes 5.75%, 8/1/28	155,000	149,459

CORPORATE BONDS AND NOTES (23.0%)* <i>cont.</i>	Principal amount	Value
Consumer cyclicals <i>cont.</i>		
Neptune Bidco US, Inc. 144A sr. notes 9.29%, 4/15/29	\$146,000	\$136,145
News Corp. 144A sr. unsec. notes 3.875%, 5/15/29	155,000	142,518
Nexstar Media, Inc. 144A company guaranty sr. unsec. notes 4.75%, 11/1/28	155,000	142,829
Outfront Media Capital, LLC/Outfront Media Capital Corp. 144A company guaranty sr. unsec. notes 5.00%, 8/15/27	145,000	140,157
Penn Entertainment, Inc. 144A sr. unsec. notes 4.125%, 7/1/29	165,000	141,075
PetSmart, Inc./PetSmart Finance Corp. 144A company guaranty sr. unsec. notes 7.75%, 2/15/29	250,000	243,204
Royal Caribbean Cruises, Ltd. 144A company guaranty sr. unsec. unsub. notes 9.25%, 1/15/29	130,000	139,831
SiriusXM Radio, Inc. 144A company guaranty sr. unsec. notes 4.125%, 7/1/30	170,000	151,483
Spectrum Brands, Inc. 144A company guaranty sr. unsec. bonds 5.00%, 10/1/29	151,000	144,073
Standard Industries, Inc. sr. unsec. notes Ser. REGS, 2.25%, 11/21/26	EUR 125,000	129,939
Station Casinos, LLC 144A sr. unsec. bonds 4.625%, 12/1/31	\$165,000	148,776
Taylor Morrison Communities, Inc. 144A sr. unsec. bonds 5.125%, 8/1/30	341,000	329,877
Taylor Morrison Communities, Inc. 144A sr. unsec. notes 5.75%, 1/15/28	105,000	105,482
Univision Communications, Inc. 144A sr. notes 7.375%, 6/30/30	139,000	138,601
Verisure Midholding AB company guaranty sr. unsec. notes Ser. REGS, 5.25%, 2/15/29 (Sweden)	EUR 285,000	301,292
Warnermedia Holdings, Inc. company guaranty sr. unsec. bonds 5.141%, 3/15/52	\$150,000	128,753
		6,111,296
Consumer staples (1.5%)		
1011778 BC ULC/New Red Finance, Inc. 144A bonds 4.00%, 10/15/30 (Canada)	160,000	143,504
Albertsons Cos., Inc./Safeway, Inc./New Albertsons LP/Albertsons, LLC 144A company guaranty sr. unsec. notes 3.50%, 3/15/29	158,000	143,461
Aramark Services, Inc. 144A company guaranty sr. unsec. notes 5.00%, 2/1/28	148,000	143,566
Avis Budget Finance PLC company guaranty sr. unsec. notes Ser. REGS, 7.25%, 7/31/30	EUR 100,000	117,992
Avis Budget Finance PLC 144A sr. unsec. notes 7.25%, 7/31/30	EUR 100,000	118,024
Herc Holdings, Inc. 144A company guaranty sr. unsec. notes 5.50%, 7/15/27	\$145,000	143,161
JBS USA LUX SA/JBS USA Food Co./JBS USA Finance, Inc. company guaranty sr. unsec. notes 3.00%, 2/2/29	73,000	64,210

CORPORATE BONDS AND NOTES (23.0%)* cont.	Principal amount	Value
Consumer staples cont.		
Lamb Weston Holdings, Inc. 144A company guaranty sr. unsec. notes 4.375%, 1/31/32	\$160,000	\$145,964
Lamb Weston Holdings, Inc. 144A company guaranty sr. unsec. notes 4.125%, 1/31/30	135,000	124,461
Loxam SAS company guaranty sr. notes Ser. EMTN, 6.375%, 5/15/28 (France) EUR	110,000	126,294
Match Group Holdings II, LLC 144A sr. unsec. notes 4.125%, 8/1/30	\$160,000	145,185
US Foods, Inc. 144A company guaranty sr. unsec. notes 4.75%, 2/15/29	149,000	141,512
VM Consolidated, Inc. 144A company guaranty sr. unsec. notes 5.50%, 4/15/29	145,000	136,936
		1,694,270
Energy (3.8%)		
Antero Resources Corp. 144A sr. unsec. notes 5.375%, 3/1/30	145,000	138,977
Callon Petroleum Co. 144A company guaranty sr. unsec. notes 7.50%, 6/15/30	141,000	142,201
Centennial Resource Production, LLC 144A company guaranty sr. unsec. notes 6.875%, 4/1/27	135,000	134,907
Civitas Resources, Inc. 144A company guaranty sr. unsec. notes 8.375%, 7/1/28	160,000	167,031
Civitas Resources, Inc. 144A company guaranty sr. unsec. unsub. notes 8.75%, 7/1/31	300,000	319,364
Ecopetrol SA sr. unsec. unsub. bonds 8.875%, 1/13/33 (Colombia)	360,000	391,133
Endeavor Energy Resources LP/EER Finance, Inc. 144A sr. unsec. bonds 5.75%, 1/30/28	140,000	140,132
Energo-Pro a.s. 144A sr. unsec. notes 11.00%, 11/2/28 (Czech Republic)	200,000	206,879
EnLink Midstream, LLC 144A company guaranty sr. unsec. unsub. notes 6.50%, 9/1/30	140,000	142,936
Hess Midstream Operations LP 144A company guaranty sr. unsec. notes 4.25%, 2/15/30	155,000	142,600
Kinetik Holdings LP 144A company guaranty sr. unsec. notes 5.875%, 6/15/30	145,000	142,253
Ovintiv, Inc. company guaranty sr. unsec. notes 5.65%, 5/15/28	131,000	133,665
Patterson-UTI Energy, Inc. sr. unsec. sub. notes 5.15%, 11/15/29	270,000	257,552
Petrobras Global Finance BV company guaranty sr. unsec. unsub. bonds 6.50%, 7/3/33 (Brazil)	123,000	124,813
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 6.25%, 3/17/24 (Brazil)	70,000	69,965
Petrobras Global Finance BV company guaranty sr. unsec. unsub. notes 5.299%, 1/27/25 (Brazil)	35,000	34,813

CORPORATE BONDS AND NOTES (23.0%)* cont.	Principal amount	Value
Energy cont.		
Petroleos Mexicanos company guaranty sr. unsec. notes Ser. REGS, 10.00%, 2/7/33 (Mexico)	\$80,000	\$80,324
Petroleos Mexicanos company guaranty sr. unsec. unsub. FRB 5.95%, 1/28/31 (Mexico)	180,000	143,730
Petroleos Mexicanos company guaranty sr. unsec. unsub. notes 6.70%, 2/16/32 (Mexico)	143,000	118,658
Petroleos Mexicanos company guaranty sr. unsec. unsub. notes 6.49%, 1/23/27 (Mexico)	420,000	394,068
Rockcliff Energy II, LLC 144A sr. unsec. notes 5.50%, 10/15/29	150,000	141,767
SM Energy Co. sr. unsec. unsub. notes 6.50%, 7/15/28	140,000	140,064
Southwestern Energy Co. company guaranty sr. unsec. notes 5.375%, 2/1/29	145,000	141,505
Venture Global LNG, Inc. 144A sr. notes 8.375%, 6/1/31	305,000	304,842
		4,154,179
Financials (2.3%)		
Air Lease Corp. sr. unsec. sub. notes 5.85%, 12/15/27	300,000	307,755
Aircastle, Ltd. 144A sr. unsec. notes 5.25%, 8/11/25	135,000	133,062
Alliant Holdings Intermediate, LLC/ Alliant Holdings Co-Issuer 144A sr. notes 4.25%, 10/15/27	149,000	143,196
Ares Capital Corp. sr. unsec. sub. notes 7.00%, 1/15/27	270,000	277,721
Bank of America Corp. sr. unsec. notes 6.204%, 11/10/28	285,000	297,295
Bank of Nova Scotia (The) sr. unsec. unsub. notes 5.35%, 12/7/26 (Canada)	170,000	172,840
JPMorgan Chase & Co. sr. unsec. unsub. notes 6.07%, 10/22/27	540,000	555,505
Morgan Stanley sr. unsec. notes 5.123%, 2/1/29	270,000	271,228
Protective Life Global Funding 144A 5.467%, 12/8/28	175,000	179,175
Toronto-Dominion Bank (The) sr. unsec. notes 5.264%, 12/11/26 (Canada)	95,000	96,867
Wells Fargo & Co. sr. unsec. unsub. FRN Ser. MTN, 5.574%, 7/25/29	135,000	137,844
		2,572,488
Health care (1.8%)		
Charles River Laboratories International, Inc. 144A company guaranty sr. unsec. notes 4.00%, 3/15/31	159,000	143,498
Charles River Laboratories International, Inc. 144A company guaranty sr. unsec. notes 3.75%, 3/15/29	45,000	41,288
Elanco Animal Health, Inc. sr. unsec. notes Ser. WI, 6.65%, 8/28/28	135,000	139,886
Mozart Debt Merger Sub, Inc. 144A sr. notes 3.875%, 4/1/29	155,000	140,142
Organon Finance I, LLC 144A sr. notes 4.125%, 4/30/28	200,000	184,092

CORPORATE BONDS AND NOTES (23.0%)* cont.	Principal amount	Value
Health care cont.		
Pharmacia, LLC company guaranty sr. unsec. notes 6.60%, 12/1/28	\$285,000	\$311,182
Service Corp. International sr. unsec. sub. notes 4.00%, 5/15/31	160,000	143,280
Tenet Healthcare Corp. 144A company guaranty sr. notes 6.75%, 5/15/31	310,000	316,836
Teva Pharmaceutical Finance Netherlands III BV company guaranty sr. unsec. unsub. notes 8.125%, 9/15/31 (Israel)	260,000	282,750
Thermo Fisher Scientific, Inc. sr. unsec. notes 5.00%, 1/31/29	245,000	251,480
		1,954,434
Technology (1.0%)		
Arches Buyer, Inc. 144A sr. notes 4.25%, 6/1/28	160,000	144,902
Broadcom Corp./Broadcom Cayman Finance, Ltd. company guaranty sr. unsec. unsub. notes 3.875%, 1/15/27	135,000	131,747
CrowdStrike Holdings, Inc. company guaranty sr. unsec. notes 3.00%, 2/15/29	156,000	140,981
Imola Merger Corp. 144A sr. notes 4.75%, 5/15/29	156,000	148,216
NCR Voyix Corp. 144A company guaranty sr. unsec. sub. notes 5.125%, 4/15/29	155,000	147,343
Seagate HDD Cayman company guaranty sr. unsec. notes 9.625%, 12/1/32 (Cayman Islands)	92,000	105,202
Twilio, Inc. company guaranty sr. unsec. notes 3.625%, 3/15/29	160,000	145,966
ZoomInfo Technologies, LLC/ ZoomInfo Finance Corp. 144A company guaranty sr. unsec. notes 3.875%, 2/1/29	163,000	147,840
		1,112,197
Transportation (0.1%)		
Air France-KLM sr. unsec. notes 8.125%, 5/31/28 (France)	EUR 100,000	125,136
		125,136
Utilities and power (1.1%)		
Aegea Finance SARL 144A company guaranty sr. unsec. notes 9.00%, 1/20/31 (Brazil)	\$200,000	212,200
Ameren Corp. sr. unsec. unsub. notes 5.00%, 1/15/29	110,000	110,493
Diamond II, Ltd. 144A company guaranty sr. notes 7.95%, 7/28/26 (India)	360,000	360,900
Electricite De France SA 144A jr. unsec. sub. FRB 9.125%, perpetual maturity (France)	200,000	221,750
PG&E Corp. sr. sub. notes 5.25%, 7/1/30	155,000	149,505
Vistra Operations Co., LLC 144A company guaranty sr. unsec. unsub. notes 4.375%, 5/1/29	155,000	144,694
		1,199,542
Total corporate bonds and notes (cost \$24,631,589)		\$25,283,342

FOREIGN GOVERNMENT AND AGENCY BONDS AND NOTES (8.5%)*	Principal amount	Value
Benin (Republic of) sr. unsec. bonds Ser. REGS, 4.95%, 1/22/35 (Benin)	EUR 310,000	\$268,150
Cameroon (Republic of) sr. unsec. unsub. notes Ser. REGS, 5.95%, 7/7/32 (Cameroon)	EUR 240,000	194,959
Colombia (Republic of) sr. unsec. unsub. notes 8.00%, 11/14/35 (Colombia)	\$350,000	382,718
Cote d'Ivoire (Republic of) sr. unsec. notes Ser. REGS, 4.875%, 1/30/32 (Cote d'Ivoire)	EUR 830,000	770,471
Cote d'Ivoire (Republic of) sr. unsec. unsub. bonds Ser. REGS, 6.125%, 6/15/33 (Cote d'Ivoire)	\$600,000	551,250
Cote d'Ivoire (Republic of) sr. unsec. unsub. notes Ser. REGS, 5.375%, 7/23/24 (Cote d'Ivoire)	275,000	271,219
Dominican (Republic of) sr. unsec. bonds Ser. REGS, 4.875%, 9/23/32 (Dominican Republic)	435,000	395,850
Dominican (Republic of) sr. unsec. unsub. notes Ser. REGS, 6.875%, 1/29/26 (Dominican Republic)	365,000	371,077
Dominican (Republic of) sr. unsec. unsub. notes Ser. REGS, 6.00%, 7/19/28 (Dominican Republic)	390,000	389,630
Dominican (Republic of) sr. unsec. unsub. notes Ser. REGS, 5.95%, 1/25/27 (Dominican Republic)	205,000	205,420
Egypt (Arab Republic of) sr. unsec. notes Ser. REGS, 7.60%, 3/1/29 (Egypt)	880,000	668,800
Gabon (Republic of) sr. unsec. notes Ser. REGS, 6.625%, 2/6/31 (Gabon)	230,000	191,188
Ghana (Republic of) sr. unsec. unsub. notes Ser. REGS, 8.125%, 1/18/26 (Ghana) (In default) †	670,000	307,363
Ghana (Republic of) sr. unsec. unsub. notes Ser. REGS, 6.375%, 2/11/27 (Ghana) (In default) †	850,000	378,250
Indonesia (Republic of) sr. unsec. unsub. bonds 2.85%, 2/14/30 (Indonesia)	1,285,000	1,161,319
Indonesia (Republic of) sr. unsec. unsub. notes 4.65%, 9/20/32 (Indonesia)	205,000	204,744
Kenya (Republic of) sr. unsec. unsub. notes Ser. REGS, 6.875%, 6/24/24 (Kenya)	260,000	252,200
Mongolia (Government of) sr. unsec. notes Ser. REGS, 5.125%, 4/7/26 (Mongolia)	200,000	194,250
Mozambique (Republic of) unsec. notes Ser. REGS, 9.00%, 9/15/31 (Mozambique)	200,000	169,750
Romania (Government of) sr. unsec. unsub. notes 7.125%, 1/17/33 (Romania)	260,000	280,280
Serbia (Republic of) sr. unsec. notes 6.25%, 5/26/28 (Serbia)	280,000	286,300
Turkey (Republic of) sr. unsec. unsub. notes 9.125%, 7/13/30 (Turkey)	200,000	220,500
United Mexican States sr. unsec. unsub. bonds 4.28%, 8/14/41 (Mexico)	390,000	321,907

FOREIGN GOVERNMENT AND AGENCY BONDS AND NOTES (8.5%)* cont.	Principal amount	Value
United Mexican States sr. unsec. unsub. notes 6.338%, 5/4/53 (Mexico)	\$330,000	\$335,947
Vietnam (Socialist Republic of) sr. unsec. notes Ser. REGS, 4.80%, 11/19/24 (Vietnam)	600,000	593,400
Total foreign government and agency bonds and notes (cost \$9,987,368)		\$9,366,942
CONVERTIBLE BONDS AND NOTES (3.2%)*	Principal amount	Value
Basic materials (—%)		
MP Materials Corp. 144A cv. sr. unsec. notes 0.25%, 4/1/26	\$26,000	\$23,059
		23,059
Capital goods (0.3%)		
Axon Enterprise, Inc. company guaranty cv. sr. unsec. notes 0.50%, 12/15/27	62,000	78,151
Granite Construction, Inc. 144A cv. sr. unsec. notes 3.75%, 5/15/28	34,000	43,251
John Bean Technologies Corp. cv. sr. unsec. notes 0.25%, 5/15/26	42,000	37,901
Middleby Corp. (The) cv. sr. unsec. notes 1.00%, 9/1/25	50,000	60,900
Tetra Tech, Inc. 144A cv. sr. unsec. notes 2.25%, 8/15/28	62,000	64,982
		285,185
Communication services (0.1%)		
Liberty Broadband Corp. 144A cv. sr. unsec. notes 3.125%, 3/31/53	77,000	76,084
		76,084
Consumer cyclical (0.5%)		
Block, Inc. cv. sr. unsec. sub. notes 0.25%, 11/1/27	55,000	45,169
Booking Holdings, Inc. cv. sr. unsec. notes 0.75%, 5/1/25	47,000	88,539
Carnival Corp. company guaranty cv. sr. unsec. unsub. notes 5.75%, 12/1/27	60,000	98,460
DraftKings, Inc. cv. sr. unsec. unsub. notes zero %, 3/15/28	55,000	44,083
Liberty Media Corp.-Liberty Formula One cv. sr. unsec. notes 2.25%, 8/15/27	64,000	64,923
Live Nation Entertainment, Inc. 144A cv. sr. unsec. notes 3.125%, 1/15/29	82,000	93,119
NCL Corp., Ltd. company guaranty cv. sr. unsec. notes 5.375%, 8/1/25	30,000	38,490
Patrick Industries, Inc. company guaranty cv. sr. unsec. notes 1.75%, 12/1/28	34,000	38,590
Rivian Automotive, Inc. 144A cv. sr. unsec. sub. notes 4.625%, 3/15/29	36,000	50,544
Shift4 Payments, Inc. cv. sr. unsec. sub. notes 0.50%, 8/1/27	48,000	44,731
		606,648
Consumer staples (0.4%)		
Airbnb, Inc. cv. sr. unsec. sub. notes zero %, 3/15/26	28,000	25,147
Etsy, Inc. cv. sr. unsec. notes 0.25%, 6/15/28	88,000	70,453
MGP Ingredients, Inc. company guaranty cv. sr. unsec. bonds 1.875%, 11/15/41	43,000	50,095
Shake Shack, Inc. cv. sr. unsec. notes zero %, 3/1/28	42,000	34,053
Uber Technologies, Inc. 144A cv. sr. unsec. notes 0.875%, 12/1/28	46,000	50,025
Wayfair, Inc. cv. sr. unsec. notes 0.625%, 10/1/25	43,000	38,915

CONVERTIBLE BONDS AND NOTES (3.2%)* cont.	Principal amount	Value
Consumer staples cont.		
Wayfair, Inc. cv. sr. unsec. unsub. notes 3.25%, 9/15/27	\$53,000	\$65,259
Zillow Group, Inc. cv. sr. unsec. sub. notes 1.375%, 9/1/26	67,000	91,321
		425,268
Energy (0.1%)		
Nabors Industries, Inc. 144A company guaranty cv. sr. unsec. unsub. notes 1.75%, 6/15/29	41,000	29,598
Northern Oil and Gas, Inc. cv. sr. unsec. notes 3.625%, 4/15/29	48,000	56,592
		86,190
Financials (0.1%)		
Welltower OP, LLC 144A company guaranty cv. sr. unsec. notes 2.75%, 5/15/28 ^R	74,000	81,814
		81,814
Health care (0.5%)		
Alnylam Pharmaceuticals, Inc. cv. sr. unsec. unsub. notes 1.00%, 9/15/27	37,000	36,353
BioMarin Pharmaceutical, Inc. cv. sr. unsec. sub. notes 1.25%, 5/15/27	38,000	39,022
BridgeBio Pharma, Inc. cv. sr. unsec. notes 2.50%, 3/15/27	24,000	28,932
CONMED Corp. cv. sr. unsec. notes 2.25%, 6/15/27	52,000	51,969
Dexcom, Inc. 144A cv. sr. unsec. unsub. notes 0.375%, 5/15/28	94,000	96,256
Exact Sciences Corp. cv. sr. unsec. sub. notes 0.375%, 3/1/28	91,000	85,085
Insulet Corp. cv. sr. unsec. notes 0.375%, 9/1/26	48,000	55,152
Integer Holdings Corp. 144A cv. sr. unsec. unsub. notes 2.125%, 2/15/28	41,000	52,316
Lantheus Holdings, Inc. company guaranty cv. sr. unsec. unsub. notes 2.625%, 12/15/27	55,000	61,633
Sarepta Therapeutics, Inc. cv. sr. unsec. unsub. notes 1.25%, 9/15/27	14,000	14,167
Shockwave Medical, Inc. 144A cv. sr. unsec. notes 1.00%, 8/15/28	34,000	33,099
		553,984
Technology (1.0%)		
Akamai Technologies, Inc. cv. sr. unsec. notes 0.375%, 9/1/27	93,000	103,556
Altair Engineering, Inc. cv. sr. unsec. sub. notes 1.75%, 6/15/27	41,000	52,993
Bentley Systems, Inc. cv. sr. unsec. sub. notes 0.375%, 7/1/27	47,000	42,042
Ceridian HCM Holding, Inc. cv. sr. unsec. notes 0.25%, 3/15/26	37,000	33,208
Datadog, Inc. cv. sr. unsec. notes 0.125%, 6/15/25	37,000	51,652
Dropbox, Inc. cv. sr. unsec. sub. notes zero %, 3/1/28	48,000	48,300
Envestnet, Inc. company guaranty cv. sr. unsec. notes 2.625%, 12/1/27	44,000	43,395
Evolent Health, Inc. 144A cv. sr. unsec. notes 3.50%, 12/1/29	10,000	11,660
HubSpot, Inc. cv. sr. unsec. notes 0.375%, 6/1/25	32,000	66,336
Impinj, Inc. cv. sr. unsec. notes 1.125%, 5/15/27	24,000	26,131
Lumentum Holdings, Inc. cv. sr. unsec. notes 0.50%, 12/15/26	66,000	58,806
MongoDB, Inc. cv. sr. unsec. notes 0.25%, 1/15/26	27,000	53,325
Okta, Inc. cv. sr. unsec. notes 0.375%, 6/15/26	79,000	69,836
ON Semiconductor Corp. 144A company guaranty cv. sr. unsec. notes 0.50%, 3/1/29	59,000	62,688

CONVERTIBLE BONDS AND NOTES (3.2%)* <i>cont.</i>	Principal amount	Value
Technology <i>cont.</i>		
Palo Alto Networks, Inc. cv. sr. unsec. notes 0.375%, 6/1/25	\$10,000	\$29,630
Progress Software Corp. cv. sr. unsec. notes 1.00%, 4/15/26	32,000	33,712
Seagate HDD Cayman 144A company guaranty cv. sr. unsec. notes 3.50%, 6/1/28 (Cayman Islands)	73,000	88,075
Snap, Inc. cv. sr. unsec. notes zero %, 5/1/27	52,000	41,668
Spotify USA, Inc. company guaranty cv. sr. unsec. notes zero %, 3/15/26	34,000	29,920
Tyler Technologies, Inc. cv. sr. unsec. sub. notes 0.25%, 3/15/26	65,000	65,553
Wolfspeed, Inc. cv. sr. unsec. notes 1.875%, 12/1/29	55,000	37,483
Workiva, Inc. 144A cv. sr. unsec. sub. notes 1.25%, 8/15/28	62,000	62,527
Zscaler, Inc. cv. sr. unsec. notes 0.125%, 7/1/25	31,000	46,981
		1,159,477
Utilities and power (0.2%)		
CMS Energy Corp. 144A cv. sr. unsec. notes 3.375%, 5/1/28	43,000	42,527
NRG Energy, Inc. company guaranty cv. sr. unsec. bonds 2.75%, 6/1/48	64,000	82,240
PG&E Corp. 144A cv. sr. notes 4.25%, 12/1/27	31,000	32,488
Southern Co. (The) 144A cv. sr. unsec. notes 3.875%, 12/15/25	55,000	55,028
		212,283
Total convertible bonds and notes (cost \$3,559,651)		\$3,509,992

SENIOR LOANS (1.8%)* ^c	Principal amount	Value
Ahead DB Holdings, LLC bank term loan FRN Ser. B, (CME Term SOFR 3 Month + 3.75%), 9.019%, 10/16/27	\$139,286	\$138,458
American Airlines, Inc. bank term loan FRN (CME Term SOFR 3 Month + 4.75%), 10.427%, 4/20/28	115,000	117,983
Chart Industries, Inc. bank term loan FRN (CME Term SOFR 1 Month + 3.25%), 8.691%, 3/17/30	245,113	245,316
Cloud Software Group, Inc. bank term loan FRN Ser. B, (CME Term SOFR 1 Month + 4.50%), 9.99%, 3/30/29	139,037	135,544
CQP Holdco LP bank term loan FRN Ser. B, (CME Term SOFR 1 Month + 3.00%), 8.36%, 12/31/30	306,788	307,172
DIRECTV Financing, LLC bank term loan FRN (CME Term SOFR 3 Month + 5.00%), 10.65%, 7/22/27	49,477	49,421
Gray Television, Inc. bank term loan FRN Ser. D, (CME Term SOFR 1 Month + 3.00%), 8.457%, 10/27/28	139,289	138,114
IRB Holding Corp. bank term loan FRN (CME Term SOFR 3 Month Plus CSA + 3.00%), 8.456%, 12/15/27	138,851	138,950
Nouryon Finance BV bank term loan FRN (EURIBOR 3 Month ACT/360 + 4.25%), 8.182%, 4/3/28 (Netherlands)	EUR 115,000	126,619
PetSmart, LLC bank term loan FRN Ser. B, (CME Term SOFR 1 Month + 3.75%), 9.206%, 1/29/28	\$292,754	289,094

SENIOR LOANS (1.8%)* ^c <i>cont.</i>	Principal amount	Value
Phoenix Newco, Inc. bank term loan FRN (CME Term SOFR 3 Month + 3.25%), 8.72%, 8/11/28	\$139,291	\$140,022
Proofpoint, Inc. bank term loan FRN Ser. B, (CME Term SOFR 3 Month + 3.25%), 8.519%, 6/9/28	139,289	139,144
Robertshaw US Holding Corp. bank term loan FRN (CME Term SOFR 1 Month + 8.00%), 13.448%, 2/28/27	55,000	6,600
Total senior loans (cost \$2,008,201)		\$1,972,437

ASSET-BACKED SECURITIES (0.9%)*	Principal amount	Value
Mello Warehouse Securitization Trust 144A FRB Ser. 21-3, Class E, (CME Term SOFR 1 Month + 3.36%), 8.72%, 10/22/24	\$469,000	\$464,248
FRB Ser. 21-3, Class D, (CME Term SOFR 1 Month + 2.11%), 7.47%, 10/22/24	350,000	345,141
NewRez Warehouse Securitization Trust 144A FRB Ser. 21-1, Class F, (CME Term SOFR 1 Month + 5.36%), 10.72%, 5/7/24	125,667	125,598
Total asset-backed securities (cost \$893,727)		\$934,987

COMMON STOCKS (—)*	Shares	Value
Texas Competitive Electric Holdings Co., LLC/ TCEH Finance, Inc. (Rights) †	10,369	\$11,925
Total common stocks (cost \$10,414)		\$11,925

SHORT-TERM INVESTMENTS (28.2%)*	Principal amount/ shares	Value
Fairway Finance Co., LLC asset-backed commercial paper 5.481%, 1/5/24 (Canada)	\$500,000	\$499,482
Putnam Government Money Market Fund Class G 5.08% ^L	988,147	988,147
Putnam Short Term Investment Fund Class P 5.53% ^L	Shares 26,886,899	26,886,899
State Street Institutional U.S. Government Money Market Fund, Premier Class 5.32% ^P	Shares 1,579,000	1,579,000
U.S. Treasury Bills 5.457%, 1/23/24 # Δ	\$1,000,000	996,926
Total short-term investments (cost \$30,950,506)		\$30,950,454

Total investments (cost \$161,704,585) \$156,968,743

Key to holding's currency abbreviations

AUD	Australian Dollar
CAD	Canadian Dollar
CHF	Swiss Franc
EUR	Euro
GBP	British Pound
NOK	Norwegian Krone
NZD	New Zealand Dollar
SEK	Swedish Krona
USD/\$	United States Dollar

Key to holding's abbreviations

bp	Basis Points
CME	Chicago Mercantile Exchange
DAC	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.
ICE	Intercontinental Exchange
IFB	Inverse Floating Rate Bonds, which are securities that pay interest rates that vary inversely to changes in the market interest rates. As interest rates rise, inverse floaters produce less current income. The rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor.
IO	Interest Only
LIBOR	London Interbank Offered Rate
MTN	Medium Term Notes
OTC	Over-the-counter
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.
REMICs	Real Estate Mortgage Investment Conduits
SOFR	Secured Overnight Financing Rate
TBA	To Be Announced Commitments

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2023 through December 31, 2023 (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 Franklin Resources, Inc., and references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures*.

* Percentages indicated are based on net assets of \$109,893,838.

† This security is non-income-producing.

‡ 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.

This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$212,212 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 9).

Δ This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at period end totaled \$334,757 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 9).

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).

i This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts (Note 1).

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

P This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts and TBA commitments. 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.

W The rate shown represents the weighted average coupon associated with the underlying mortgage pools. Rates may be subject to a cap or floor.

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

Debt obligations are considered secured unless otherwise indicated.

144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers.

See Note 1 to the financial statements regarding TBA commitments.

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

FORWARD CURRENCY CONTRACTS at 12/31/23 (aggregate face value \$21,455,207)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Bank of America N.A.						
	Euro	Sell	3/20/24	\$198,104	\$194,036	\$(4,068)
	Japanese Yen	Buy	2/21/24	320,562	304,125	16,437
	New Zealand Dollar	Sell	1/17/24	8,850	8,265	(585)
	Swedish Krona	Sell	3/20/24	88,091	84,891	(3,200)
Barclays Bank PLC						
	Canadian Dollar	Sell	1/17/24	51,104	49,321	(1,783)
	Euro	Sell	3/20/24	32,888	32,215	(673)
	Norwegian Krone	Sell	3/20/24	8,272	7,784	(488)
	Swiss Franc	Buy	3/20/24	40,983	39,584	1,399
Citibank, N.A.						
	Australian Dollar	Buy	1/17/24	63,744	62,732	1,012
	Canadian Dollar	Sell	1/17/24	38,422	35,240	(3,182)
	Euro	Sell	3/20/24	447,478	438,275	(9,203)
	New Zealand Dollar	Buy	1/17/24	80,033	78,193	1,840
	Norwegian Krone	Sell	3/20/24	67,458	63,471	(3,987)
	Swedish Krona	Sell	3/20/24	3,768	3,631	(137)

FORWARD CURRENCY CONTRACTS at 12/31/23 (aggregate face value \$21,455,207) cont.

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Goldman Sachs International						
	Canadian Dollar	Sell	1/17/24	\$4,454	\$4,299	\$(155)
	Japanese Yen	Sell	2/21/24	908,397	877,441	(30,956)
	Swiss Franc	Buy	3/20/24	938,058	906,102	31,956
HSBC Bank USA, National Association						
	Australian Dollar	Sell	1/17/24	496,592	472,434	(24,158)
	British Pound	Sell	3/20/24	515,791	509,753	(6,038)
	Canadian Dollar	Sell	1/17/24	16,531	15,956	(575)
	Euro	Sell	3/20/24	444,156	435,104	(9,052)
	Japanese Yen	Buy	2/21/24	641,135	608,803	32,332
	New Zealand Dollar	Buy	1/17/24	1,707	1,415	292
	Norwegian Krone	Sell	3/20/24	10,826	10,540	(286)
	Swedish Krona	Sell	3/20/24	33,842	32,696	(1,146)
	Swiss Franc	Buy	3/20/24	17,976	17,354	622
JPMorgan Chase Bank N.A.						
	British Pound	Sell	3/20/24	173,801	171,833	(1,968)
	Canadian Dollar	Sell	1/17/24	118,512	114,369	(4,143)
	Norwegian Krone	Sell	3/20/24	142,409	134,005	(8,404)
Morgan Stanley & Co. International PLC						
	Australian Dollar	Sell	1/17/24	282,520	264,485	(18,035)
	British Pound	Sell	3/20/24	493,986	488,513	(5,473)
	Euro	Sell	3/20/24	2,078,264	2,035,089	(43,175)
	New Zealand Dollar	Sell	1/17/24	929,990	868,344	(61,646)
	Norwegian Krone	Buy	3/20/24	177,232	182,299	(5,067)
	Swedish Krona	Buy	3/20/24	507,593	502,014	5,579
NatWest Markets PLC						
	British Pound	Buy	3/20/24	227,356	225,847	1,509
	Euro	Buy	3/20/24	780,235	778,229	2,006
	Japanese Yen	Sell	2/21/24	799,078	785,512	(13,566)
	New Zealand Dollar	Buy	1/17/24	340,172	343,344	(3,172)
	Norwegian Krone	Buy	3/20/24	3,333	3,033	300
	Swedish Krona	Sell	3/20/24	174,548	168,136	(6,412)
State Street Bank and Trust Co.						
	Australian Dollar	Sell	1/17/24	879,263	817,403	(61,860)
	British Pound	Buy	3/20/24	557,871	560,114	(2,243)
	Canadian Dollar	Buy	1/17/24	806,715	800,391	6,324
	Euro	Sell	3/20/24	1,544,745	1,512,933	(31,812)
	Japanese Yen	Buy	2/21/24	371,175	352,165	19,010
	New Zealand Dollar	Sell	1/17/24	14,540	13,586	(954)
	Norwegian Krone	Sell	3/20/24	169,483	159,369	(10,114)
	Swedish Krona	Sell	3/20/24	633,553	610,107	(23,446)
	Swiss Franc	Sell	3/20/24	664,959	652,964	(11,995)
Toronto-Dominion Bank						
	Australian Dollar	Buy	1/17/24	11,522	11,439	83
	British Pound	Sell	3/20/24	37,361	36,936	(425)
	Canadian Dollar	Sell	1/17/24	1,377,008	1,328,415	(48,593)
	Euro	Sell	3/20/24	6,312	6,182	(130)
	Japanese Yen	Buy	2/21/24	2,967	2,813	154
	Norwegian Krone	Sell	3/20/24	146,460	137,894	(8,566)
UBS AG						
	Australian Dollar	Sell	1/17/24	11,726	11,142	(584)
	Canadian Dollar	Sell	1/17/24	10,492	10,127	(365)
	Japanese Yen	Buy	2/21/24	1,239,835	1,199,083	40,752

FORWARD CURRENCY CONTRACTS at 12/31/23 (aggregate face value \$21,455,207) cont.

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
UBS AG cont.						
	New Zealand Dollar	Sell	1/17/24	\$33,505	\$31,287	\$(2,218)
	Swedish Krona	Sell	3/20/24	4,915	4,732	(183)
WestPac Banking Corp.						
	Australian Dollar	Buy	1/17/24	758,319	758,080	239
	British Pound	Sell	3/20/24	7,778	7,690	(88)
	Euro	Sell	3/20/24	72,642	71,157	(1,485)
	New Zealand Dollar	Buy	1/17/24	507	486	21
Unrealized appreciation						161,867
Unrealized (depreciation)						(475,794)
Total						\$(313,927)

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

FUTURES CONTRACTS OUTSTANDING at 12/31/23	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/ (depreciation)
U.S. Treasury Note 2 yr (Short)	128	\$26,357,000	\$26,357,000	Mar-24	\$(272,655)
U.S. Treasury Note Ultra 10 yr (Short)	11	1,298,172	1,298,172	Mar-24	(58,548)
Unrealized appreciation					—
Unrealized (depreciation)					(331,203)
Total					\$(331,203)

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 12/31/23

Counterparty	Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date	Expiration date/strike	Notional/ Contract amount	Premium receivable/ (payable)	Unrealized appreciation/ (depreciation)
Bank of America N.A.					
	1.8838/US SOFR/Apr-34 (Purchased)	Apr-24/1.8838	\$10,000,600	\$(73,146)	\$(66,904)
	3.1625/US SOFR/Mar-37 (Written)	Mar-27/3.1625	9,638,700	665,070	2,410
	(3.1625)/US SOFR/Mar-37 (Written)	Mar-27/3.1625	9,638,700	665,070	173,497
	0.60/US SOFR/Mar-40 (Purchased)	Mar-30/0.60	8,565,600	(43,685)	9,080
	(3.03)/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	4,256,400	(272,197)	3,873
	3.03/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	4,256,400	(272,197)	(100,366)
	(4.225)/US SOFR/Nov-36 (Purchased)	Nov-26/4.225	3,980,700	(203,812)	(70,140)
	3.725/US SOFR/Nov-36 (Purchased)	Nov-26/3.725	3,980,700	(194,656)	90,163
	(3.03)/US SOFR/Feb-33 (Written)	Feb-28/3.03	2,067,100	78,550	13,126
	3.03/US SOFR/Feb-33 (Written)	Feb-28/3.03	2,067,100	78,550	(12,465)
	(0.9876)/US SOFR/Mar-50 (Purchased)	Mar-30/0.9876	1,717,500	(554,682)	38,695
	0.9876/US SOFR/Mar-50 (Purchased)	Mar-30/0.9876	1,717,500	(37,307)	(11,095)
	(3.25)/US SOFR/Nov-39 (Written)	Nov-29/3.25	1,021,900	556,651	(16,074)
	(1.405)/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	799,300	(122,593)	133,283
	1.405/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	799,300	(122,593)	(86,181)
Barclays Bank PLC					
	3.00/US SOFR/Dec-48 (Purchased)	Dec-38/3.00	7,877,100	(522,252)	58,527
	(1.945)/US SOFR/Jun-51 (Purchased)	Jun-31/1.945	1,909,000	(404,708)	33,866
	1.945/US SOFR/Jun-51 (Purchased)	Jun-31/1.945	1,909,000	(102,895)	(19,434)
Citibank, N.A.					
	3.803/US SOFR/Mar-34 (Written)	Mar-24/3.803	4,407,500	40,586	12,077
	(3.233)/US SOFR/Mar-34 (Written)	Mar-24/3.233	4,407,500	41,320	(7,582)
	3.518/US SOFR/Mar-34 (Purchased)	Mar-24/3.518	4,407,500	(82,824)	15,868
	1.34/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	1,533,900	(128,081)	(20,278)
	(1.34)/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	1,533,900	(358,564)	22,257
	(3.18)/6 month EUR-EURIBOR/Mar-29 (Purchased)	Mar-24/3.18 EUR	8,591,200	(187,957)	(187,599)
	3.18/6 month EUR-EURIBOR/Mar-29 (Purchased)	Mar-24/3.18 EUR	8,591,200	(187,957)	174,700

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 12/31/23 cont.

Counterparty Fixed right or obligation % to receive or (pay)/ Floating rate index/Maturity date	Expiration date/strike	Notional/ Contract amount	Premium receivable/ (payable)	Unrealized appreciation/ (depreciation)
Deutsche Bank AG				
(3.19)/US SOFR/Mar-38 (Written)	Mar-28/3.19	\$2,855,000	\$198,851	\$39,485
3.19/US SOFR/Mar-38 (Written)	Mar-28/3.19	2,855,000	198,851	(14,789)
Goldman Sachs International				
2.40/US SOFR/May-57 (Purchased)	May-27/2.40	10,306,700	(313,324)	220,873
(2.525)/US SOFR/Mar-47 (Purchased)	Mar-27/2.525	596,900	(84,163)	10,720
2.525/US SOFR/Mar-47 (Purchased)	Mar-27/2.525	596,900	(35,128)	(9,712)
2.85/3 month EUR-EURIBOR/Mar-29 (Purchased)	Mar-28/2.85 EUR	12,234,100	(115,079)	26,066
(2.85)/3 month EUR-EURIBOR/Mar-29 (Purchased)	Mar-28/2.85 EUR	12,234,100	(115,079)	(44,299)
JPMorgan Chase Bank N.A.				
(3.515)/US SOFR/Dec-40 (Written)	Dec-30/3.515	\$6,887,200	486,236	(22,866)
3.515/US SOFR/Dec-40 (Written)	Dec-30/3.515	6,887,200	516,540	(826)
(3.475)/US SOFR/Dec-38 (Written)	Dec-28/3.475	4,745,000	318,390	(5,884)
3.475/US SOFR/Dec-38 (Written)	Dec-28/3.475	4,745,000	318,390	(7,118)
(3.3225)/US SOFR/Jul-38 (Written)	Jul-28/3.3225	3,609,900	244,029	23,212
3.3225/US SOFR/Jul-38 (Written)	Jul-28/3.3225	3,609,900	244,029	(13,176)
(3.1525)/US SOFR/Mar-40 (Written)	Mar-30/3.1525	2,132,200	168,977	38,017
3.1525/US SOFR/Mar-40 (Written)	Mar-30/3.1525	2,132,200	168,977	(13,582)
(4.178)/6 month AUD-BBR-BBSW/Apr-40 (Purchased)	Apr-33/4.178 AUD	4,261,600	(152,738)	22,594
4.178/6 month AUD-BBR-BBSW/Apr-40 (Purchased)	Apr-33/4.178 AUD	4,261,600	(152,738)	(29,128)
(4.344)/6 month AUD-BBR-BBSW/Mar-33 (Purchased)	Mar-28/4.344 AUD	2,971,900	(74,171)	(5,509)
4.344/6 month AUD-BBR-BBSW/Mar-33 (Purchased)	Mar-28/4.344 AUD	2,971,900	(74,171)	(8,648)
2.495/6 month AUD-BBR-BBSW/Nov-46 (Purchased)	Nov-26/2.495 AUD	2,121,400	(131,925)	(100,775)
(2.495)/6 month AUD-BBR-BBSW/Nov-46 (Purchased)	Nov-26/2.495 AUD	2,121,400	(131,925)	223,176
(1.445)/6 month AUD-BBR-BBSW/Mar-40 (Purchased)	Mar-30/1.445 AUD	1,311,400	(49,158)	135,362
1.445/6 month AUD-BBR-BBSW/Mar-40 (Purchased)	Mar-30/1.445 AUD	1,311,400	(49,158)	(41,555)
1.692/6 month AUD-BBR-BBSW/Jan-35 (Purchased)	Jan-25/1.692 AUD	941,400	(29,371)	(28,105)
(1.692)/6 month AUD-BBR-BBSW/Jan-35 (Purchased)	Jan-25/1.692 AUD	941,400	(29,371)	100,237
(1.441)/6 month AUD-BBR-BBSW/Jul-45 (Purchased)	Jul-25/1.441 AUD	628,200	(37,153)	121,881
1.441/6 month AUD-BBR-BBSW/Jul-45 (Purchased)	Jul-25/1.441 AUD	628,200	(37,153)	(34,598)
4.12/6 month AUD-BBR-BBSW/Jan-43 (Purchased)	Jan-33/4.12 AUD	180,000	(9,391)	(2,085)
(4.12)/6 month AUD-BBR-BBSW/Jan-43 (Purchased)	Jan-33/4.12 AUD	180,000	(9,391)	769
Mizuho Capital Markets LLC				
(4.0475)/US SOFR/Aug-36 (Purchased)	Aug-26/4.0475	\$3,333,700	(173,352)	(56,373)
3.5475/US SOFR/Aug-36 (Purchased)	Aug-26/3.5475	3,333,700	(166,852)	40,704
Toronto-Dominion Bank				
(2.118)/US SOFR/Mar-41 (Purchased)	Mar-31/2.118	487,500	(64,637)	4,856
2.118/US SOFR/Mar-41 (Purchased)	Mar-31/2.118	487,500	(16,234)	(2,316)
UBS AG				
(2.00)/6 month AUD-BBR-BBSW/Sep-46 (Purchased)	Sep-36/2.00 AUD	1,703,900	(90,690)	85,284
2.00/6 month AUD-BBR-BBSW/Sep-46 (Purchased)	Sep-36/2.00 AUD	1,703,900	(90,690)	(41,324)
(2.70)/6 month AUD-BBR-BBSW/Apr-47 (Purchased)	Apr-37/2.70 AUD	800,600	(48,611)	20,732
2.70/6 month AUD-BBR-BBSW/Apr-47 (Purchased)	Apr-37/2.70 AUD	800,600	(48,611)	(18,157)
1.05/6 month EUR-EURIBOR/Nov-48 (Purchased)	Nov-28/1.05 EUR	5,596,500	(160,338)	47,327
Unrealized appreciation				1,942,717
Unrealized (depreciation)				(1,098,943)
Total				\$843,774

**TBA SALE COMMITMENTS OUTSTANDING at 12/31/23
(proceeds receivable \$2,783,242)**

Agency	Principal amount	Settlement date	Value
Uniform Mortgage-Backed Securities, 4.50%, 1/1/54	\$1,000,000	1/16/24	\$970,156
Uniform Mortgage-Backed Securities, 4.00%, 1/1/54	2,000,000	1/16/24	1,892,811
Total			\$2,862,967

CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 12/31/23

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$96,890,000	\$3,589,775	\$(845,090)	12/20/28	US SOFR — Annually	4.35% — Annually	\$2,715,575
84,924,000	931,616 [£]	694,601	3/20/26	4.40% — Annually	US SOFR — Annually	(237,016)
11,992,000	365,876 [£]	312,102	3/20/29	4.10% — Annually	US SOFR — Annually	(53,774)
16,189,000	519,019 [£]	458,379	3/20/34	3.80% — Annually	US SOFR — Annually	(60,640)
500,000	20,520 [£]	19,786	3/20/54	3.50% — Annually	US SOFR — Annually	(734)
4,416,000	52,595 [£]	(51,539)	3/20/26	US SOFR — Annually	4.45% — Annually	1,056
5,806,000	210,293 [£]	215,677	3/20/34	3.85% — Annually	US SOFR — Annually	5,384
4,415,000	90,419	(58)	12/15/33	3.712% — Annually	US SOFR — Annually	(87,123)
AUD	1,557,400	29,344 [£]	3/20/34	6 month AUD-BBR-BBSW — Semiannually	4.52% — Semiannually	21,582
AUD	4,138,000	20,246 [£]	3/20/26	3 month AUD-BBR-BBSW — Quarterly	4.17% — Quarterly	18,161
CAD	2,276,000	44,711 [£]	3/20/34	3.34% — Semiannually	Canadian Overnight Repo Rate Average — Semiannually	(29,189)
CAD	3,739,000	31,773 [£]	3/20/26	Canadian Overnight Repo Rate Average — Semiannually	4.19% — Semiannually	20,187
CHF	1,471,000	2,693 [£]	3/20/34	Swiss Average Rate Overnight — Annually	1.18% — Annually	27
EUR	827,300	6,704 [£]	3/20/34	2.54% — Annually	6 month EUR-EURIBOR — Semiannually	(9,252)
EUR	3,265,000	26,997 [£]	3/20/26	6 month EUR-EURIBOR — Semiannually	2.96% — Annually	12,146
GBP	871,000	39,624 [£]	3/20/34	3.67% — Annually	Sterling Overnight Index Average — Annually	(33,207)
GBP	1,169,000	18,894 [£]	3/20/26	Sterling Overnight Index Average — Annually	4.45% — Annually	12,564
NOK	17,454,000	9,191 [£]	3/20/34	3.35% — Annually	6 month NOK-NIBOR-NIBR — Semiannually	(4,094)
NZD	3,092,000	79,572 [£]	3/20/34	3 month NZD-BBR-FRA — Quarterly	4.61% — Semiannually	69,993
SEK	17,242,000	30,258 [£]	3/20/34	2.51% — Annually	3 month SEK-STIBOR-SIDE — Quarterly	(23,489)
Total		\$780,252				\$2,338,157

[£] Extended effective date.

OTC TOTAL RETURN SWAP CONTRACTS OUTSTANDING at 12/31/23

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments received (paid) by fund	Total return received by or paid by fund	Unrealized appreciation/ (depreciation)
Morgan Stanley & Co. International PLC						
\$878,944	\$832,842	\$—	9/29/25	(0.165%) — Annually	Ephesus Funding DAC, 3.80%, Series 2020-01, 9/22/25 — Annually	\$(36,967)
854,414	792,543	—	7/17/24	3.825% (3 month USD-LIBOR-ICE minus 0.12%) — Quarterly	Pera Funding DAC, 3.825%, Series 2019-01, 7/10/24 — Quarterly	(66,643)
Upfront premium received		—		Unrealized appreciation		—
Upfront premium (paid)		—		Unrealized (depreciation)		(103,610)
Total		\$—		Total		\$(103,610)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 12/31/23

Swap counterparty/ Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
Bank of America N.A.							
CMBX NA BBB-.6 Index	BB/P	\$904	\$6,960	\$905	5/11/63	300 bp — Monthly	\$3
CMBX NA BBB-.6 Index	BB/P	5,468	37,119	4,829	5/11/63	300 bp — Monthly	661
Citigroup Global Markets, Inc.							
CMBX NA BB.13 Index	BB-/P	313,827	734,000	281,709	12/16/72	500 bp — Monthly	32,832
CMBX NA BB.6 Index	B+/P	125,015	428,208	125,765	5/11/63	500 bp — Monthly	(332)
CMBX NA BB.7 Index	B-/P	267,862	732,906	261,134	1/17/47	500 bp — Monthly	7,549
CMBX NA BBB-.11 Index	BBB-/P	2,310	11,000	1,823	11/18/54	300 bp — Monthly	494
CMBX NA BBB-.16 Index	BBB-/P	29,551	130,000	23,582	4/17/65	300 bp — Monthly	6,045
Credit Suisse International							
CMBX NA BB.7 Index	B-/P	22,204	134,881	48,058	1/17/47	500 bp — Monthly	(25,703)
CMBX NA BBB-.7 Index	BB/P	13,231	106,361	20,209	1/17/47	300 bp — Monthly	(6,895)
CMBX NA BBB-.7 Index	BB/P	34,676	313,734	59,609	1/17/47	300 bp — Monthly	(24,690)
Goldman Sachs International							
CMBX NA BB.9 Index	B/P	21,206	53,000	20,230	9/17/58	500 bp — Monthly	1,027
CMBX NA BBB-.11 Index	BBB-/P	186	1,000	166	11/18/54	300 bp — Monthly	21
CMBX NA BBB-.13 Index	BBB-/P	48,989	184,000	44,418	12/16/72	300 bp — Monthly	4,679
CMBX NA BBB-.16 Index	BBB-/P	13,964	68,000	12,335	4/17/65	300 bp — Monthly	1,668
CMBX NA BBB-.7 Index	BB/P	249,876	1,218,096	231,438	1/17/47	300 bp — Monthly	19,195
JPMorgan Securities LLC							
CMBX NA BB.10 Index	B-/P	8,906	111,000	47,408	5/11/63	500 bp — Monthly	(38,394)
CMBX NA BB.6 Index	B+/P	289,832	335,300	98,478	5/11/63	500 bp — Monthly	191,681
CMBX NA BBB-.11 Index	BBB-/P	2,864	26,000	4,308	11/18/54	300 bp — Monthly	(1,429)
CMBX NA BBB-.13 Index	BBB-/P	5,155	39,000	9,415	12/16/72	300 bp — Monthly	(4,237)
CMBX NA BBB-.8 Index	BB-/P	9,980	64,000	9,626	10/17/57	300 bp — Monthly	392
Merrill Lynch International							
CMBX NAA.13 Index	A-/P	17,571	132,000	12,725	12/16/72	200 bp — Monthly	4,898
CMBX NAA.13 Index	A-/P	17,205	132,000	12,725	12/16/72	200 bp — Monthly	4,531
CMBX NA BB.6 Index	B+/P	5,703	30,374	8,921	5/11/63	500 bp — Monthly	(3,188)
Morgan Stanley & Co. International PLC							
CMBX NA BB.13 Index	BB-/P	46,003	102,000	39,148	12/16/72	500 bp — Monthly	6,451
CMBX NA BB.6 Index	B+/P	59,279	198,321	58,247	5/11/63	500 bp — Monthly	1,225
CMBX NA BBB-.15 Index	BBB-/P	2,452	9,000	1,659	11/18/64	300 bp — Monthly	799
CMBX NA BBB-.16 Index	BBB-/P	3,637	16,000	2,902	4/17/65	300 bp — Monthly	744
CMBX NA BBB-.9 Index	BB/P	778	8,000	1,398	9/17/58	300 bp — Monthly	(620)
Upfront premium received		1,618,634					Unrealized appreciation
Upfront premium (paid)		—					Unrealized (depreciation)
Total		\$1,618,634		Total			\$179,407

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

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

*** Ratings for an underlying index represent the average of the ratings of all the securities included in that index. The Moody's, Standard & Poor's or Fitch ratings are believed to be the most recent ratings available at December 31, 2023. Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 12/31/23

Swap counterparty/ Referenced debt*	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
Citigroup Global Markets, Inc.						
CMBX NA BB.10 Index	\$(288,185)	\$621,000	\$265,229	11/17/59	(500 bp) — Monthly	\$(23,560)
CMBX NA BB.8 Index	(39,403)	87,943	36,004	10/17/57	(500 bp) — Monthly	(3,484)
CMBX NA BB.9 Index	(2,103)	5,000	1,908	9/17/58	(500 bp) — Monthly	(200)
CMBX NA BBB-.10 Index	(54,703)	182,000	43,644	11/17/59	(300 bp) — Monthly	(11,165)
CMBX NA BBB-.12 Index	(61,015)	215,000	50,353	8/17/61	(300 bp) — Monthly	(10,788)
CMBX NA BBB-.13 Index	(39,512)	138,000	33,313	12/16/72	(300 bp) — Monthly	(6,279)
CMBX NA BBB-.6 Index	(17,795)	44,079	5,735	5/11/63	(300 bp) — Monthly	(12,087)
CMBX NA BBB-.8 Index	(12,363)	64,000	9,626	10/17/57	(300 bp) — Monthly	(2,775)
CMBX NA BBB-.9 Index	(4,259)	18,000	3,146	9/17/58	(300 bp) — Monthly	(1,123)
Credit Suisse International						
CMBX NA BB.10 Index	(24,973)	210,000	89,691	11/17/59	(500 bp) — Monthly	64,514
CMBX NA BB.10 Index	(28,019)	210,000	89,691	11/17/59	(500 bp) — Monthly	61,468
CMBX NA BB.10 Index	(13,797)	111,000	47,408	11/17/59	(500 bp) — Monthly	33,503
CMBX NA BB.7 Index	(9,602)	323,985	95,154	5/11/63	(500 bp) — Monthly	85,237
CMBX NA BB.7 Index	(46,385)	229,135	81,641	1/17/47	(500 bp) — Monthly	34,999
CMBX NA BB.7 Index	(25,825)	113,755	40,531	1/17/47	(500 bp) — Monthly	14,578
CMBX NA BB.9 Index	(1,804)	18,000	6,871	9/17/58	(500 bp) — Monthly	5,049
Goldman Sachs International						
CMBX NA BB.10 Index	(18,466)	41,000	17,511	11/17/59	(500 bp) — Monthly	(995)
CMBX NA BB.6 Index	(28,297)	97,076	28,511	5/11/63	(500 bp) — Monthly	120
CMBX NA BB.7 Index	(124,846)	355,077	126,514	1/17/47	(500 bp) — Monthly	1,322
CMBX NA BBB-.12 Index	(7,912)	30,000	7,026	8/17/61	(300 bp) — Monthly	(903)
JPMorgan Securities LLC						
CMBX NA BB.7 Index	(78,835)	130,818	46,610	1/17/47	(500 bp) — Monthly	(32,371)
CMBX NA BB.9 Index	(14,826)	30,000	11,451	9/17/58	(500 bp) — Monthly	(3,404)
CMBX NA BBB-.12 Index	(1,802)	15,000	3,513	8/17/61	(300 bp) — Monthly	1,702
CMBX NA BBB-.7 Index	(499,810)	1,265,037	240,357	1/17/47	(300 bp) — Monthly	(260,434)
Merrill Lynch International						
CMBX NA BB.10 Index	(11,494)	202,000	86,274	11/17/59	(500 bp) — Monthly	74,584
CMBX NA BBB-.7 Index	(20,241)	146,766	27,885	1/17/47	(300 bp) — Monthly	7,531
Morgan Stanley & Co. International PLC						
CMBX NA BB.10 Index	(138,575)	292,000	124,713	11/17/59	(500 bp) — Monthly	(14,145)
CMBX NA BB.7 Index	(44,751)	120,255	42,847	1/17/47	(500 bp) — Monthly	(2,038)
CMBX NA BBB-.10 Index	(106,386)	329,000	78,894	11/17/59	(300 bp) — Monthly	(27,684)
CMBX NA BBB-.11 Index	(9,269)	38,000	6,297	11/18/54	(300 bp) — Monthly	(2,995)
CMBX NA BBB-.13 Index	(3,499)	11,000	2,655	12/16/72	(300 bp) — Monthly	(850)
CMBX NA BBB-.7 Index	(17,538)	79,028	15,015	1/17/47	(300 bp) — Monthly	(2,585)
Upfront premium received	—				Unrealized appreciation	384,607
Upfront premium (paid)	(1,796,290)				Unrealized (depreciation)	(419,865)
Total	\$(1,796,290)		Total			\$(35,258)

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

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

CENTRALLY CLEARED CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 12/31/23

Referenced debt*	Rating***	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
CDX NA HY Series 41 Index	B+/P	\$(28,604)	\$6,266,700	\$366,602	12/20/28	500 bp — Quarterly	\$348,443
Total		\$(28,604)					\$348,443

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

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

*** Ratings for an underlying index represent the average of the ratings of all the securities included in that index. The Moody's, Standard & Poor's or Fitch ratings are believed to be the most recent ratings available at December 31, 2023. Securities rated by Putnam are indicated by "/P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

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*			
Utilities and power	\$—	\$11,925	\$—
Total common stocks	—	11,925	—
Asset-backed securities	—	934,987	—
Convertible bonds and notes	—	3,509,992	—
Corporate bonds and notes	—	25,283,342	—
Foreign government and agency bonds and notes	—	9,366,942	—
Mortgage-backed securities	—	35,711,532	—
Senior loans	—	1,972,437	—
U.S. government and agency mortgage obligations	—	49,003,796	—
U.S. treasury obligations	—	223,336	—
Short-term investments	2,567,147	28,383,307	—
Totals by level	\$2,567,147	\$154,401,596	\$—

	Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(313,927)	\$—
Futures contracts	(331,203)	—	—
Forward premium swap option contracts	—	843,774	—
TBA sale commitments	—	(2,862,967)	—
Interest rate swap contracts	—	1,557,905	—
Total return swap contracts	—	(103,610)	—
Credit default contracts	—	698,852	—
Totals by level	\$(331,203)	\$(179,973)	\$—

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

Statement of assets and liabilities

12/31/23

Assets

Investment in securities, at value (Notes 1 and 9):	
Unaffiliated issuers (identified cost \$133,829,539)	\$129,093,697
Affiliated issuers (identified cost \$27,875,046) (Note 5)	27,875,046
Cash	28,211
Foreign currency (cost \$1,677) (Note 1)	1,679
Interest and other receivables	1,150,137
Receivable for shares of the fund sold	8,960
Receivable for investments sold	199,964
Receivable for sales of TBA securities (Note 1)	2,788,451
Receivable for variation margin on futures contracts (Note 1)	1,031
Receivable for variation margin on centrally cleared swap contracts (Note 1)	178,671
Unrealized appreciation on forward premium swap option contracts (Note 1)	1,942,717
Unrealized appreciation on forward currency contracts (Note 1)	161,867
Unrealized appreciation on OTC swap contracts (Note 1)	669,502
Premium paid on OTC swap contracts (Note 1)	1,796,290
Receivable from broker (Note 1)	3,665
Deposits with broker (Note 1)	1,322,586
Total assets	167,222,474

Liabilities

Payable for investments purchased	117,723
Payable for purchases of TBA securities (Note 1)	47,964,807
Payable for shares of the fund repurchased	202,875
Payable for compensation of Manager (Note 2)	43,544
Payable for custodian fees (Note 2)	20,726
Payable for investor servicing fees (Note 2)	12,642
Payable for Trustee compensation and expenses (Note 2)	88,250
Payable for administrative services (Note 2)	1,537
Payable for distribution fees (Note 2)	14,489
Payable for variation margin on futures contracts (Note 1)	16,031
Payable for variation margin on centrally cleared swap contracts (Note 1)	172,081
Unrealized depreciation on forward premium swap option contracts (Note 1)	1,098,943
Unrealized depreciation on OTC swap contracts (Note 1)	628,963
Premium received on OTC swap contracts (Note 1)	1,618,634
Unrealized depreciation on forward currency contracts (Note 1)	475,794
TBA sale commitments, at value (proceeds receivable \$2,783,242) (Note 1)	2,862,967
Collateral on certain derivative contracts and TBA commitments, at value (Notes 1 and 9)	1,802,336
Other accrued expenses	186,294
Total liabilities	57,328,636
Net assets	\$109,893,838

Represented by

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$200,919,636
Total distributable earnings (Note 1)	(91,025,798)
Total — Representing net assets applicable to capital shares outstanding	\$109,893,838

Computation of net asset value Class IA

Net assets	\$41,289,283
Number of shares outstanding	8,932,443
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$4.62

Computation of net asset value Class IB

Net assets	\$68,604,555
Number of shares outstanding	14,762,742
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$4.65

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

Statement of operations

Year ended 12/31/23

Investment income

Interest (including interest income of \$1,397,868 from investments in affiliated issuers) (Note 5)	\$7,536,764
Total investment income	7,536,764

Expenses

Compensation of Manager (Note 2)	606,472
Investor servicing fees (Note 2)	78,627
Custodian fees (Note 2)	79,546
Trustee compensation and expenses (Note 2)	4,937
Distribution fees (Note 2)	174,210
Administrative services (Note 2)	3,559
Auditing and tax fees	168,996
Other	54,545
Fees waived and reimbursed by Manager (Note 2)	(86,992)
Total expenses	1,083,900
Expense reduction (Note 2)	(5,439)
Net expenses	1,078,461
Net investment income	6,458,303

Realized and unrealized gain (loss)

Net realized gain (loss) on:

Securities from unaffiliated issuers (Notes 1 and 3)	(4,399,354)
Foreign currency transactions (Note 1)	(25,545)
Forward currency contracts (Note 1)	(189,976)
Futures contracts (Note 1)	873,936
Swap contracts (Note 1)	2,416,909
Written options (Note 1)	(500,306)
Total net realized loss	(1,824,336)

Change in net unrealized appreciation (depreciation) on:

Securities from unaffiliated issuers and TBA sale commitments	3,846,010
Assets and liabilities in foreign currencies	4,801
Forward currency contracts	(132,023)
Futures contracts	(292,017)
Swap contracts	(2,995,973)
Written options	67,651
Total change in net unrealized appreciation	498,449
Net loss on investments	(1,325,887)
Net increase in net assets resulting from operations	\$5,132,416

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

Statement of changes in net assets

	Year ended 12/31/23	Year ended 12/31/22
Decrease in net assets		
Operations:		
Net investment income	\$6,458,303	\$4,415,737
Net realized loss on investments and foreign currency transactions	(1,824,336)	(24,197,961)
Change in net unrealized appreciation of investments and assets and liabilities in foreign currencies	498,449	15,858,770
Net increase (decrease) in net assets resulting from operations	5,132,416	(3,923,454)
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(2,802,496)	(3,337,580)
Class IB	(4,244,802)	(7,198,629)
Net realized short-term gain on investments		
Class IA	—	(560,938)
Class IB	—	(1,262,917)
From capital gain on investments		
Net realized long-term gain on investments		
Class IA	—	(448,750)
Class IB	—	(1,010,334)
Decrease from capital share transactions (Note 4)	(5,309,039)	(28,479,592)
Total decrease in net assets	(7,223,921)	(46,222,194)
Net assets:		
Beginning of year	117,117,759	163,339,953
End of year	\$109,893,838	\$117,117,759

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

Financial highlights

(For a common share outstanding throughout the period)

INVESTMENT OPERATIONS:					LESS DISTRIBUTIONS:			RATIOS AND SUPPLEMENTAL DATA:					
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	From net realized gain on investments	Total distributions	Net asset value, end of period	Total return at net asset value (%) ^{b,c}	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) ^{b,d}	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%) ^e
Class IA													
12/31/23	\$4.70	.26	(.04)	.22	(.30)	—	(.30)	\$4.62	5.01	\$41,289	.81 ^f	5.92 ^f	1,395
12/31/22	5.26	.15	(.24)	(.09)	(.36)	(.11)	(.47)	4.70	(2.06)	45,181	.81 ^f	3.17 ^f	1,417
12/31/21	5.69	.23	(.61)	(.38)	(.05)	—	(.05)	5.26	(6.73)	50,798	.77	4.07	1,115
12/31/20	6.26	.22	(.33) ^g	(.11)	(.46)	—	(.46)	5.69	(.76) ^g	58,536	.79	4.06	1,184
12/31/19	5.82	.27	.39	.66	(.22)	—	(.22)	6.26	11.56	66,012	.79	4.53	987
Class IB													
12/31/23	\$4.72	.25	(.04)	.21	(.28)	—	(.28)	\$4.65	4.82	\$68,605	1.06 ^f	5.65 ^f	1,395
12/31/22	5.28	.14	(.25)	(.11)	(.34)	(.11)	(.45)	4.72	(2.35)	71,937	1.06 ^f	2.86 ^f	1,417
12/31/21	5.71	.21	(.60)	(.39)	(.04)	—	(.04)	5.28	(6.95)	112,542	1.02	3.81	1,115
12/31/20	6.27	.21	(.32) ^g	(.11)	(.45)	—	(.45)	5.71	(.90) ^g	124,933	1.04	3.80	1,184
12/31/19	5.83	.26	.38	.64	(.20)	—	(.20)	6.27	11.23	144,640	1.04	4.26	987

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

^b The charges and expenses at the insurance company separate account level are not reflected.

^c 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 Portfolio turnover includes TBA purchase and sale commitments.

^f Reflects an involuntary contractual expense limitation and/or waivers of certain fund expenses in connection with investments in Putnam Government Money Market Fund in effect during the period. As a result of such limitations and/or waivers, the expenses of each class reflect a reduction of the following amounts:

	Percentage of average net assets
12/31/23	0.08%
12/31/22	0.04

^g Reflects a non-recurring litigation payment received by the fund from an ISDA Fix Anti-Trust Settlement which amounted to the following amounts per share outstanding on May 4, 2020:

	Per share
Class IA	\$0.03
Class IB	0.03

This payment resulted in an increase to total returns of 0.52% for the period ended December 31, 2020.

Notes to financial statements 12/31/23

Unless otherwise noted, the “reporting period” represents the period from January 1, 2023 through December 31, 2023. The following table defines commonly used references within the Notes to financial statements:

References to	Represent
Franklin Templeton	Franklin Resources, Inc.
JPMorgan	JPMorgan Chase Bank, N.A.
OTC	over-the-counter
PIL	Putnam Investments Limited, an affiliate of Putnam Management
Putnam Management	Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Franklin Templeton
SEC	Securities and Exchange Commission
State Street	State Street Bank and Trust Company

Putnam VT Diversified Income 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 as high a level of current income as Putnam Management believes is consistent with preservation of capital. The fund invests mainly in bonds that are securitized debt instruments (such as mortgage-backed investments) and related derivative instruments, and other obligations of companies and governments worldwide, including bank loans, that are either investment-grade or below-investment-grade in quality (sometimes referred to as “junk bonds”) and have intermediate- to long-term maturities (three years or longer). The fund currently has significant investment exposure to residential and commercial mortgage-backed securities. 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. The fund typically uses to a significant extent derivatives, including credit default swaps, interest rate swaps, total return swaps, to-be-announced (TBA) commitments, futures, options and swaptions on mortgage-backed securities and indices, and certain foreign currency transactions and credit default, total return and interest rate swap contracts for both hedging and non-hedging purposes, including to obtain or adjust exposure to mortgage-backed investments.

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 Trust's Amended and Restated Agreement and Declaration of Trust, any claims asserted by a shareholder against or on behalf of the Trust (or its series), 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 fund follows the accounting and reporting guidance in Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 946, *Financial Services – Investment Companies* (ASC 946) and applies the specialized accounting and reporting guidance in U.S. Generally Accepted Accounting Principles (U.S. GAAP), including, but not limited to, ASC 946. 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, which has been designated as valuation designee pursuant to Rule 2a–5 under the Investment Company Act of 1940, in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury,

U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. Certain securities may be valued on the basis of a price provided by a single source. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

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

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

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

Interest income, net of any applicable withholding taxes, if any, is recorded on the accrual basis. Amortization and accretion of premiums and discounts on debt securities, if any, 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.

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

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

assets and liabilities other than investments at the period end, resulting from changes in the exchange rate.

Options contracts The fund uses options contracts to hedge duration and convexity, to isolate prepayment risk and to manage downside risks.

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

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

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

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

Futures contracts The fund uses futures contracts for hedging treasury term structure risk and for yield curve positioning.

The potential risk to the fund is that the change in value of futures contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments, if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. With futures, there is minimal counterparty credit risk to the fund since futures are exchange traded and the exchange's clearinghouse, as counterparty to all exchange traded futures, guarantees the futures against default. Risks may exceed amounts recognized on the Statement of assets and liabilities. When the contract is closed, the fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

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

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

Forward currency contracts The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts are used 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.

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

structure risk, for yield curve positioning and for gaining exposure to rates in various countries.

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

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

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

At the close of the reporting period, the fund has deposited cash valued at \$799,731 in a segregated account to cover margin requirements on open centrally cleared interest rate swap contracts.

Total return swap contracts The fund entered into OTC and/or centrally cleared total return swap contracts, which are arrangements to exchange a market-linked return for a periodic payment, both based on a notional principal amount, to hedge sector exposure, for gaining exposure to specific sectors, for hedging inflation and for gaining exposure to inflation.

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

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

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

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

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

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

At the close of the reporting period, the fund has deposited cash valued at \$522,856 in a segregated account to cover margin requirements on open centrally cleared credit default contracts.

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

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

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

in the value of the security prior to the settlement date as well as the risk that the counterparty to the transaction will not perform its obligations. Counterparty risk is mitigated by having a master agreement between the fund and the counterparty. Unsettled TBA commitments are valued at their fair value according to the procedures described under "Security valuation" above. The contract is marked to market daily and the change in fair value is recorded by the fund as an unrealized gain or loss. Based on market circumstances, Putnam Management will determine whether to take delivery of the underlying securities or to dispose of the TBA commitments prior to settlement.

TBA purchase commitments outstanding at period end, if any, are listed within the fund's portfolio and TBA sale commitments outstanding at period end, if any, are listed after the fund's portfolio.

Master agreements The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements that govern OTC derivative and foreign exchange contracts and Master Securities Forward Transaction Agreements that govern transactions involving mortgage-backed and other asset-backed securities that may result in delayed delivery (Master Agreements) with certain counterparties entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral pledged to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, are presented in the fund's portfolio.

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

With respect to ISDA Master Agreements, termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term or short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund had a net liability position of \$529,923 on open derivative contracts subject to the Master Agreements. Collateral pledged by the fund at period end for these agreements totaled \$334,757 and may include amounts related to unsettled 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.

Lines of credit The fund participates, along with other Putnam funds, in a \$320 million syndicated unsecured committed line of credit, provided by State Street (\$160 million) and JPMorgan (\$160 million), and a \$235.5 million unsecured uncommitted line of credit, provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the committed line of credit and 1.30% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the uncommitted line of credit. A closing fee equal to 0.04% of the committed line of credit and 0.04% of the uncommitted line of credit has been paid by the participating funds and a \$75,000 fee has been paid by the participating funds to State Street as agent of the syndicated committed line of credit. In addition, a commitment fee of 0.21% per annum on any unutilized portion of the committed line of credit is allocated to the participating funds based on their relative net assets and paid quarterly. During the reporting period, the fund had no borrowings against these arrangements.

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

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

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

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, 2023, 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
\$45,115,144	\$33,843,385	\$78,958,529

Distributions to shareholders Distributions to shareholders from net investment income, if any, are recorded by the fund on the ex-dividend date. Distributions from capital gains, if any, are recorded on the ex-dividend date and paid at least annually. The amount and character of income and gains to be distributed are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. These differences include temporary and/or permanent differences from foreign currency gains and losses, from defaulted bond interest, from realized and unrealized gains and losses on certain futures contracts, from income on swap contracts and from interest-only securities. Reclassifications are made to the fund's capital accounts to reflect income and gains available for distribution (or available capital loss carryovers) under income tax regulations. At the close of the reporting period, the fund reclassified \$480,675 to decrease undistributed net investment income, \$7,335 to increase paid-in capital and \$473,340 to decrease accumulated net realized loss.

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

Unrealized appreciation	\$10,844,418
Unrealized depreciation	(29,188,056)
Net unrealized depreciation	(18,343,638)
Undistributed ordinary income	6,477,820
Capital loss carryforward	(78,958,529)
Cost for federal income tax purposes	\$174,801,205

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 52.8% of the fund is owned by accounts of one insurance company.

Note 2 — Management fee, administrative services and other transactions

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

0.700%	of the first \$5 billion,
0.650%	of the next \$5 billion,
0.600%	of the next \$10 billion,
0.550%	of the next \$10 billion,
0.500%	of the next \$50 billion,
0.480%	of the next \$50 billion,
0.470%	of the next \$100 billion and
0.465%	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 0.540% of the fund's average net assets.

Putnam Management has contractually agreed, through April 30, 2025, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plan, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were reduced by \$86,021 as a result of this limit.

The fund invests in Putnam Government Money Market Fund, an open-end management investment company managed by Putnam Management. Management fees paid by the fund are reduced by an amount equal to the management fees paid by Putnam Government Money Market Fund with respect to assets invested by the fund in Putnam Government Money Market Fund. For the reporting period, management fees paid were reduced by \$971 relating to the fund's investment in Putnam Government Money Market Fund.

PIL 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 0.20% of the average net assets of the portion of the fund managed by PIL.

On January 1, 2024, a subsidiary of Franklin Templeton acquired Putnam U.S. Holdings I, LLC ("Putnam Holdings"), the parent company of Putnam Management and PIL, in a stock and cash transaction (the "Transaction"). As a result of the Transaction, Putnam Management (the investment manager to the fund and a wholly-owned subsidiary of Putnam Holdings) and PIL (sub-adviser to the fund and an indirect, wholly-owned subsidiary of Putnam Holdings) became indirect, wholly-owned subsidiaries of Franklin Templeton. The Transaction also resulted in the automatic termination of the investment management contract between the fund and Putnam Management and the sub-management contract for the fund between Putnam Management and PIL that were in place for the fund before the Transaction. However, Putnam Management and PIL continue to provide uninterrupted services with respect to the fund pursuant to new investment management and sub-management contracts that were approved by fund shareholders at a shareholder meeting held in connection with the Transaction and that took effect on January 1, 2024. The terms of the new investment management and sub-management contracts are substantially similar to those of the previous investment management and sub-management contracts, and the fee rates payable under the new investment management and sub-management contracts are the same as the fee rates under the previous investment management and sub-management contracts.

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	\$29,843
Class IB	48,784
Total	\$78,627

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 \$5,439 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$94, 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 from July 1, 1995 through December 31, 2023. 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 Franklin Templeton, 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)	\$2,146,279,739	\$2,009,916,207
U.S. government securities (Long-term)	—	—
Total	\$2,146,279,739	\$2,009,916,207

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

Note 4 — Capital shares

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

	Class IA shares				Class IB shares			
	Year ended 12/31/23		Year ended 12/31/22		Year ended 12/31/23		Year ended 12/31/22	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	266,920	\$1,210,615	412,415	\$1,947,799	831,799	\$3,774,985	2,286,108	\$11,188,924
Shares issued in connection with reinvestment of distributions	639,839	2,802,496	898,196	4,347,268	962,540	4,244,802	1,944,945	9,471,880
	906,759	4,013,111	1,310,611	6,295,067	1,794,339	8,019,787	4,231,053	20,660,804
Shares repurchased	(1,586,407)	(7,094,088)	(1,347,262)	(6,542,606)	(2,278,234)	(10,247,849)	(10,296,581)	(48,892,857)
Net decrease	(679,648)	\$(3,080,977)	(36,651)	\$(247,539)	(483,895)	\$(2,228,062)	(6,065,528)	\$(28,232,053)

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 12/31/22	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 12/31/23
Short-term investments					
Putnam Government Money Market Fund Class G**	\$—	\$7,825,509	\$6,837,362	\$17,626	\$988,147
Putnam Short Term Investment Fund Class P***	28,953,866	31,282,110	33,349,077	1,380,242	26,886,899
Total Short-term investments	\$28,953,866	\$39,107,619	\$40,186,439	\$1,397,868	\$27,875,046

**Management fees paid by the fund are reduced by an amount equal to the management fees paid by Putnam Government Money Market Fund with respect to assets invested by the fund in Putnam Government Money Market Fund (Note 2). There were no realized or unrealized gains or losses during the period.

***Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

Note 6 — Market, credit and other risks

In the normal course of business, the fund trades financial instruments and enters into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the contracting party to the transaction to perform (credit risk). The fund may be exposed to additional credit risk that an institution or other entity with which the fund has unsettled or open transactions will default. Investments in foreign securities involve certain risks, including those related to economic instability, unfavorable political developments, and currency fluctuations. The fund may invest in higher-yielding, lower-rated bonds that may have a higher rate of default. The fund may invest a significant portion of its assets in securitized debt instruments, including mortgage-backed and asset-backed investments. The yields and values of these investments are sensitive to changes in interest rates, the rate of principal payments on the underlying assets and the market's perception of the issuers. The market for these investments may be volatile and limited, which may make them difficult to buy or sell.

Note 7 — 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:

Purchased swap option contracts (contract amount)	\$284,200,000
Written swap option contracts (contract amount)	\$209,900,000
Futures contracts (number of contracts)	200
Forward currency contracts (contract amount)	\$19,600,000
Centrally cleared interest rate swap contracts (notional)	\$674,400,000
OTC total return swap contracts (notional)	\$1,700,000
OTC credit default contracts (notional)	\$15,300,000
Centrally cleared credit default contracts (notional)	\$1,600,000

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

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

Derivatives not accounted for as hedging instruments under ASC 815	Asset derivatives		Liability derivatives	
	Statement of assets and liabilities location	Fair value	Statement of assets and liabilities location	Fair value
Credit contracts	Receivables, Net assets — Unrealized appreciation	\$2,138,079*	Payables	\$1,542,837
Foreign exchange contracts	Receivables	161,867	Payables	475,794
Interest rate contracts	Receivables, Net assets — Unrealized appreciation	5,765,498*	Payables, Net assets — Unrealized depreciation	3,695,022*
Total		\$8,065,444		\$5,713,653

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

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

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

Derivatives not accounted for as hedging instruments under ASC 815	Options	Futures	Forward currency contracts	Swaps	Total
Credit contracts	\$—	\$—	\$—	\$(4,268)	\$(4,268)
Foreign exchange contracts	—	—	(189,976)	—	\$(189,976)
Interest rate contracts	1,907,970	873,936	—	2,421,177	\$5,203,083
Total	\$1,907,970	\$873,936	\$(189,976)	\$2,416,909	\$5,008,839

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	Options	Futures	Forward currency contracts	Swaps	Total
Credit contracts	\$—	\$—	\$—	\$677,810	\$677,810
Foreign exchange contracts	—	—	(132,023)	—	\$(132,023)
Interest rate contracts	(2,337,624)	(292,017)	—	(3,673,783)	\$(6,303,424)
Total	\$(2,337,624)	\$(292,017)	\$(132,023)	\$(2,995,973)	\$(5,757,637)

This page intentionally left blank.

Note 9 — Offsetting of financial and derivative assets and liabilities

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

	Bank of America N.A.	Barclays Bank PLC	Barclays Capital, Inc. (clearing broker)	Citibank, N.A.	Citigroup Global Markets, Inc.	Credit Suisse International	Deutsche Bank AG	Goldman Sachs International	HSBC Bank USA, National Association
Assets:									
Centrally cleared interest rate swap contracts [§]	\$—	\$—	\$178,671	\$—	\$—	\$—	\$—	\$—	\$—
OTC Total return swap contracts ^{**}	—	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection sold ^{**}	—	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection purchased ^{**}	—	—	—	—	447,877	449,753	—	179,065	—
Centrally cleared credit default contracts [§]	—	—	—	—	—	—	—	—	—
Futures contracts [§]	—	—	—	—	—	—	—	—	—
Forward currency contracts [#]	16,437	1,399	—	2,852	—	—	—	31,956	33,246
Forward premium swap option contracts [#]	464,127	92,393	—	224,902	—	—	39,485	257,659	—
Total Assets	\$480,564	\$93,792	\$178,671	\$227,754	\$447,877	\$449,753	\$39,485	\$468,680	\$33,246
Liabilities:									
Centrally cleared interest rate swap contracts [§]	\$—	\$—	\$167,636	\$—	\$—	\$—	\$—	\$—	\$—
OTC Total return swap contracts ^{**}	—	—	—	—	—	—	—	—	—
OTC Credit default contracts — protection sold ^{**}	5,708	—	—	—	691,977	127,399	—	307,631	—
OTC Credit default contracts — protection purchased ^{**}	—	—	—	—	—	—	—	—	—
Centrally cleared credit default contracts [§]	—	—	4,445	—	—	—	—	—	—
Futures contracts [§]	—	—	—	—	—	—	—	—	—
Forward currency contracts [#]	7,853	2,944	—	16,509	—	—	—	31,111	41,255
Forward premium swap option contracts [#]	363,225	19,434	—	215,459	—	—	14,789	54,011	—
Total Liabilities	\$376,786	\$22,378	\$172,081	\$231,968	\$691,977	\$127,399	\$14,789	\$392,753	\$41,255
Total Financial and Derivative Net Assets	\$103,778	\$71,414	\$6,590	\$(4,214)	\$(244,100)	\$322,354	\$24,696	\$75,927	\$(8,009)
Total collateral received (pledged) ^{†##}	\$103,778	\$71,414	\$—	\$—	\$(213,208)	\$290,000	\$—	\$75,927	\$—
Net amount	\$—	\$—	\$6,590	\$(4,214)	\$(30,892)	\$32,354	\$24,696	\$—	\$(8,009)

JPMorgan Chase Bank N.A.	JPMorgan Securities LLC	Merrill Lynch International	Mizuho Capital Markets LLC	Morgan Stanley & Co. International PLC	NatWest Markets PLC	State Street Bank and Trust Co.	Toronto-Dominion Bank	UBS AG	WestPac Banking Corp.	Total
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$178,671
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—
—	300,766	113,850	—	269,721	—	—	—	—	—	1,761,032
—	—	—	—	—	—	—	—	—	—	—
—	1,031	—	—	—	—	—	—	—	—	1,031
—	—	—	—	5,579	3,815	25,334	237	40,752	260	161,867
665,248	—	—	40,704	—	—	—	4,856	153,343	—	1,942,717
\$665,248	\$301,797	\$113,850	\$40,704	\$275,300	\$3,815	\$25,334	\$5,093	\$194,095	\$260	\$4,045,318
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$167,636
—	—	—	—	103,610	—	—	—	—	—	103,610
—	168,724	34,238	—	103,550	—	—	—	—	—	1,439,227
—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	4,445
—	16,031	—	—	—	—	—	—	—	—	16,031
14,515	—	—	—	133,396	23,150	142,424	57,714	3,350	1,573	475,794
313,855	—	—	56,373	—	—	—	2,316	59,481	—	1,098,943
\$328,370	\$184,755	\$34,238	\$56,373	\$340,556	\$23,150	\$142,424	\$60,030	\$62,831	\$1,573	\$3,305,686
\$336,878	\$117,042	\$79,612	\$(15,669)	\$(65,256)	\$(19,335)	\$(117,090)	\$(54,937)	\$131,264	\$(1,313)	\$739,632
\$336,878	\$117,042	\$79,612	\$—	\$—	\$—	\$(117,090)	\$—	\$60,000	\$—	
\$—	\$—	\$—	\$(15,669)	\$(65,256)	\$(19,335)	\$—	\$(54,937)	\$71,264	\$(1,313)	

	Bank of America N.A.	Barclays Bank PLC	Barclays Capital, Inc. (clearing broker)	Citibank, N.A.	Citigroup Global Markets, Inc.	Credit Suisse International	Deutsche Bank AG	Goldman Sachs International	HSBC Bank USA, National Association
<i>Controlled collateral received (including TBA commitments)**</i>	\$110,834	\$120,000	\$—	\$—	\$237,000	\$290,000	\$—	\$130,000	\$—
<i>Uncontrolled collateral received</i>	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
<i>Collateral (pledged) (including TBA commitments)**</i>	\$—	\$—	\$—	\$—	\$(213,208)	\$—	\$—	\$—	\$—

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

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

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

#Covered by master netting agreement (Note 1).

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

§Includes current day's variation margin only as reported on the Statement of assets and liabilities, which is not collateralized. Cumulative appreciation/ (depreciation) for futures contracts and centrally cleared swap contracts is represented in the tables listed after the fund's portfolio. Collateral pledged for initial margin on futures contracts and centrally cleared swap contracts, which is not included in the table above, amounted to \$212,212 and \$1,322,586, respectively.

JPMorgan Chase Bank N.A.	JPMorgan Securities LLC	Merrill Lynch International	Mizuho Capital Markets LLC	Morgan Stanley & Co. International PLC	NatWest Markets PLC	State Street Bank and Trust Co.	Toronto-Dominion Bank	UBSAG	WestPac Banking Corp.	Total
\$410,000	\$332,000	\$112,502	\$—	\$—	\$—	\$—	\$—	\$60,000	\$—	\$1,802,336
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$—	\$—	\$—	\$—	\$—	\$—	\$(121,549)	\$—	\$—	\$—	\$(334,757)

Shareholder meeting results (Unaudited)

October 20, 2023 special meeting

At the meeting, a new Management Contract for your fund with Putnam Investment Management, LLC was approved, as follows:

Votes for	Votes against	Abstentions/Votes withheld
23,218,896	743,713	1,106,336

At the meeting, a new Sub-Management Contract for your fund between Putnam Investment Management, LLC and Putnam Investments Limited was approved, as follows:

Votes for	Votes against	Abstentions/Votes withheld
23,029,406	796,962	1,242,577

All tabulations are rounded to the nearest whole number.

About the Trustees

Name Year of birth Position held	Principal occupations during past five years	Other directorships	
Independent Trustees			
Liaquat Ahamed Born 1952 Trustee since 2012	Author; won Pulitzer Prize for <i>Lords of Finance: The Bankers Who Broke the World</i> .	Chair of the Sun Valley Writers Conference, a literary not-for-profit organization, and a Trustee of the Journal of Philosophy.	
Barbara M. Baumann Born 1955 Trustee since 2010 Vice Chair since 2022	President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.	Director of Devon Energy Corporation, a publicly traded independent natural gas and oil exploration and production company; Director of National Fuel Gas Company, a publicly traded energy company that engages in the production, gathering, transportation, distribution, and marketing of natural gas; Senior Advisor to the energy private equity firm First Reserve; member of the Finance Committee of the Children's Hospital of Colorado; member of the Investment Committee of the Board of The Denver Foundation; and previously a Director of publicly traded companies Buckeye Partners LP, UNS Energy Corporation, CVR Energy Company, and SM Energy Corporation.	
Katinka Domotorffy Born 1975 Trustee since 2012	Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies.	Director of the Great Lakes Science Center and of College Now Greater Cleveland.	
Catharine Bond Hill Born 1954 Trustee since 2017	Managing Director of Ithaca S+R, a not-for-profit service that helps the academic community navigate economic and technological change. From 2006 to 2016, Dr. Hill served as the 10th president of Vassar College.	Director of Yale-NUS College and Trustee of Yale University.	
Kenneth R. Leibler Born 1949 Trustee since 2006 Vice Chair from 2016 to 2018, Chair since 2018	Vice Chair Emeritus of the Board of Trustees of Beth Israel Deaconess Hospital in Boston. Member of the Investment Committee of the Boston Arts Academy Foundation.	Director of Eversource Corporation, which operates New England's largest energy delivery system; previously the Chairman of the Boston Options Exchange, an electronic marketplace for the trading of listed derivatives securities; previously the Chairman and Chief Executive Officer of the Boston Stock Exchange; and previously the President and Chief Operating Officer of the American Stock Exchange.	
Jennifer Williams Murphy* Born 1964 Trustee since 2022	Chief Executive Officer and Founder of Runa Digital Assets, LLC, an institutional investment advisory firm specializing in active management of digital assets. Until 2021, Chief Operating Officer of Western Asset Management, LLC, a global investment adviser, and Chief Executive Officer and President of Western Asset Mortgage Capital Corporation, a mortgage finance real estate investment trust.	Previously, a Director of Western Asset Mortgage Capital Corporation.	
Marie Pillai Born 1954 Trustee since 2022	Senior Advisor, Hunter Street Partners, LP, an asset-oriented private investment firm; Specialty Leader and Member of the Curriculum Committee of the Center for Board Certified Fiduciaries, a public benefit corporation providing coursework for developing fiduciaries. Until 2019, Vice President, Chief Investment Officer, and Treasurer of General Mills, Inc., a global food company.	Member of the Investment Committee of the Bush Foundation, a nonprofit organization supporting community problem-solving in Minnesota, North Dakota, and South Dakota; Member of the Finance Council and Corporate Board of the Archdiocese of Saint Paul and Minneapolis; Director of Choice Bank, a private, community bank based in North Dakota; and previously a Board Member of Catholic Charities of St. Paul and Minneapolis; former Director of the Catholic Community Foundation of Minnesota; and former Investment Advisory Board Member of the University of Minnesota.	
George Putnam III Born 1951 Trustee since 1984	Chairman of New Generation Research, Inc., a publisher of financial advisory and other research services, and President of New Generation Advisors, LLC, a registered investment adviser to private funds.	Director of The Boston Family Office, LLC, a registered investment adviser; a Director of the Gloucester Marine Genomics Institute; a Trustee of the Lowell Observatory Foundation; and previously a Trustee of the Marine Biological Laboratory.	

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

Interested Trustees

Robert L. Reynolds† Born 1952 Trustee since 2008	Chair of Great-West Lifeco U.S. LLC. Prior to 2019, also President and Chief Executive Officer of Great-West Financial, a financial services company that provides retirement savings plans, life insurance, and annuity and executive benefits products, and of Great-West Lifeco U.S. LLC, a holding company that owns Putnam Investments and Great-West Financial, and a member of Great-West Financial's Board of Directors. Until 2023, President and Chief Executive Officer of Putnam Investments, President and Chief Executive Officer of Putnam Management, and member of Putnam Investments' Board of Directors.	Director of the Concord Museum; Director of Dana-Farber Cancer Institute; Director of the U.S. Ski & Snowboard Foundation; Chair of the Boston Advisory Board of the American Ireland Fund; Council Co-Chair of the American Enterprise Institute; Member of U.S. Chamber of Commerce, Center for Capital Markets Competitiveness; Chair of Massachusetts High Technology Council; Member of the Chief Executives Club of Boston; Member of the Massachusetts General Hospital President's Council; Chairman of the Board of Directors of the Ron Burton Training Village; Director and former Chair of the Massachusetts Competitive Partnership; former Chair of the West Virginia University Foundation; and former Executive Committee Member of the Greater Boston Chamber of Commerce.	
Jane E. Trust‡ Born 1962 Trustee since 2024	Since 2020, Senior Vice President, Fund Board Management, of Franklin Templeton. Since 2015, Officer and/or Trustee/Director of 127 funds associated with Legg Mason Partners Fund Advisor, LLC ("LMPFA") or its affiliates, and President and Chief Executive Officer of LMPFA. From 2018 to 2020, Senior Managing Director of Legg Mason & Co., LLC (Legg Mason & Co.). From 2016 to 2018, Managing Director of Legg Mason & Co. In 2015, Senior Vice President of LMPFA.	None.	

*Ms. Murphy is the founder, controlling member, and Chief Executive Officer of Runa Digital Assets, LLC ("RDA"), the investment manager of Runa Digital Partners, LP ("RDP"), a private investment fund. Ms. Murphy also holds a controlling interest in RDP's general partner and is a limited partner in RDP. A subsidiary of Franklin Templeton and certain individuals employed by Franklin Templeton or its affiliates have made passive investments as limited partners in RDP (one of whom serves on the advisory board for RDA, which has no governance or oversight authority over RDA), representing in the aggregate approximately 33% of RDP as of October 31, 2023. In addition, if certain conditions are met, Franklin Templeton will be entitled to receive a portion of any incentive compensation allocable to RDP's general partner. For so long as Franklin Templeton maintains its investment in RDP, Ms. Murphy also has agreed upon request to advise and consult with Franklin Templeton and its affiliates on the market for digital assets. Ms. Murphy provides similar service to other limited partners in RDP that request her advice. Ms. Murphy also is entitled to receive deferred cash compensation in connection with her prior employment by an affiliate of Franklin Templeton, which employment ended at the end of 2021. With regard to Ms. Murphy, the relationships described above may give rise to a potential conflict of interest with respect to the Funds.

†Mr. Reynolds is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Management. He is President of your fund and each of the other Putnam funds and holds direct beneficial interest in shares of Franklin Templeton, of which Putnam Management is an indirect wholly-owned subsidiary.

‡Ms. Trust is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Management by virtue of her positions with certain affiliates of Putnam Management.

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

As of December 31, 2023, there were 105 funds in the Putnam family of funds, including 89 mutual funds, 4 closed-end funds, and 12 exchange-traded funds. Each Trustee serves as Trustee of the 105 funds in the Putnam family of funds. Ms. Trust also serves as Trustee of 127 other funds that are advised by one or more affiliates of Putnam Management.

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

Officers

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

Kevin R. Blatchford *(Born 1967)*

Vice President and Assistant Treasurer

Since 2023

Director, Financial Reporting, Putnam Holdings

James F. Clark *(Born 1974)*

Vice President and Chief Compliance Officer

Since 2016

Chief Compliance Officer, Putnam Management and Putnam Holdings

Michael J. Higgins *(Born 1976)*

Vice President, Treasurer, and Clerk

Since 2010

Jonathan S. Horwitz *(Born 1955)*

Executive Vice President, Principal Executive Officer, and Compliance Liaison

Since 2004

Kelley Hunt *(Born 1984)*

AML Compliance Officer

Since 2023

Manager, U.S. Financial Crime Compliance, Franklin Templeton

Martin Lemaire *(Born 1984)*

Vice President and Derivatives Risk Manager

Since 2022

Risk Manager and Risk Analyst, Putnam Management

Alan G. McCormack *(Born 1964)*

Vice President and Derivatives Risk Manager

Since 2022

Head of Quantitative Equities and Risk, Putnam Management

Denere P. Poulack *(Born 1968)*

Assistant Vice President, Assistant Clerk, and Assistant Treasurer

Since 2004

Janet C. Smith *(Born 1965)*

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

Since 2007

Head of Fund Administration Services, Putnam Holdings and Putnam Management

Stephen J. Tate *(Born 1974)*

Vice President and Chief Legal Officer

Since 2021

General Counsel, Putnam Holdings, Putnam Management, and Putnam Retail Management

The principal occupations of the officers for the past five years have been with the employers as shown above, although in some cases they have held different positions with such employers. The address of each officer, other than Ms. Hunt, is 100 Federal Street, Boston, MA 02110. Ms. Hunt's address is 100 Fountain Parkway, St. Petersburg, FL 33716.

This page intentionally left blank.

Other important information

Proxy voting

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, 2023, 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 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.

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
Limited Partnership
100 Federal Street
Boston, MA 02110

Investor Servicing Agent

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

Custodian

State Street Bank and Trust Company

Legal Counsel

Ropes & Gray LLP

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP

Trustees

Kenneth R. Leibler, *Chair*
Barbara M. Baumann, *Vice Chair*
Liaquat Ahamed
Katinka Domotorffy
Catharine Bond Hill
Jennifer Williams Murphy
Marie Pillai
George Putnam III
Robert L. Reynolds
Manoj P. Singh
Mona K. Sutphen
Jane E. Trust

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.

