

A world of investing.®



Putnam Mortgage Securities Fund

Annual report

9 | 30 | 23



Income funds invest in bonds and other securities with the goal of providing a steady stream of income over time.

FUND SYMBOL
CLASS A
PGSIX

Putnam Mortgage Securities Fund

Annual report

9 | 30 | 23

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Message from the Trustees

November 6, 2023

Dear Fellow Shareholder:

Equity markets have risen from the depths of the 2022 downturn over the past 12 months. At the same time, the U.S. economy has continued to grow. However, both stocks and bonds have encountered headwinds recently. With the rate of inflation above the Federal Reserve's target of 2%, the Fed has made it clear that short-term interest rates will remain high heading into 2024. Many experts believe the Fed's restrictive policy keeps the risk of a recession alive.

Turning to bond markets, performance has been mostly lackluster over the past 12 months. The rise in bond yields since July has challenged many fixed income assets. Against this backdrop, investors are weighing the impact of high borrowing costs and tighter lending conditions at banks.

As active managers, your investment team continues to research attractive opportunities for your fund while monitoring risks. This report offers an update on their efforts.

Thank you for investing with Putnam.

Respectfully yours,



A handwritten signature in black ink that reads "Robert L. Reynolds".

Robert L. Reynolds
President and Chief Executive Officer
Putnam Investments

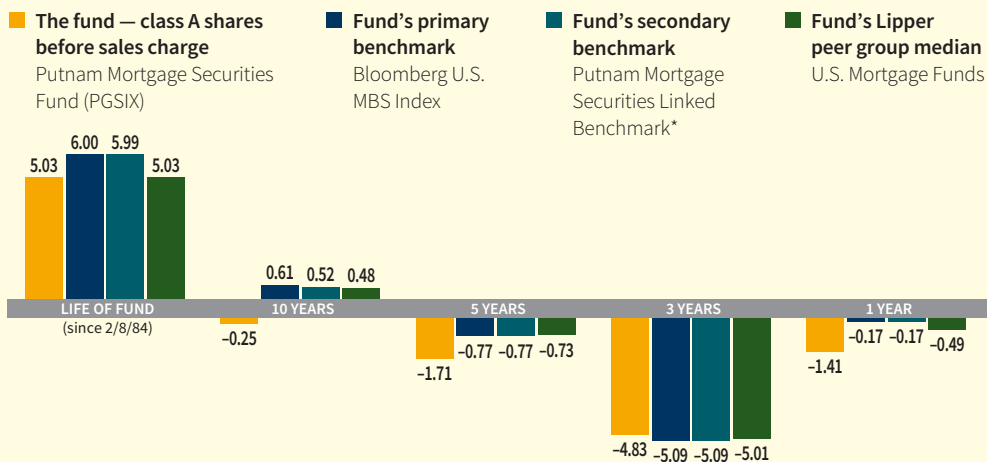


A handwritten signature in black ink that reads "Kenneth R. Leibler".

Kenneth R. Leibler
Chair, Board of Trustees

Performance history as of 9/30/23

Annualized total return (%) comparison



Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. Share price, principal value, and return will fluctuate, and you may have a gain or a loss when you sell your shares. Performance of class A shares assumes reinvestment of distributions and does not account for taxes. Fund returns in the bar chart do not reflect a sales charge of 4.00%; had they, returns would have been lower. See page 3 and pages 8–10 for additional performance information. For a portion of the periods, the fund had expense limitations, without which returns would have been lower. To obtain the most recent month-end performance, visit putnam.com.

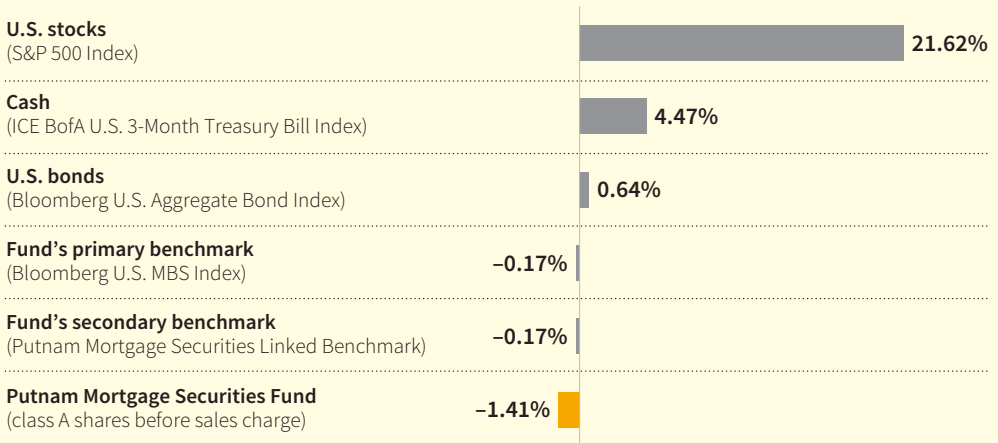
Before April 19, 2018, the fund was managed with a materially different investment strategy and may have achieved materially different performance results under its current investment strategy from that shown for periods before this date.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

Lipper peer group median is provided by Lipper, an LSEG company.

* The Putnam Mortgage Securities Linked Benchmark represents the performance of the Bloomberg GNMA Index through April 18, 2018, and the performance of the Bloomberg U.S. MBS Index thereafter.

Recent broad market index and fund performance



This comparison shows your fund's performance in the context of broad market indexes for the 12 months ended 9/30/23. See page 2 and pages 8–10 for additional fund performance information. Index descriptions can be found on page 13.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

Interview with your fund's portfolio manager

Mike Salm discusses the investing environment and strategies driving fund performance for the 12 months ended September 30, 2023, as well as his outlook for the fund.



Michael V. Salm
Portfolio Manager

Mike is Chief Investment Officer, Fixed Income. He has a B.S. in Applied Economics and Management from Cornell University. Mike joined Putnam in 1997 and has been in the investment industry since 1989.

Brett S. Kozlowski, CFA, and Jatin Misra, Ph.D., CFA, are also Portfolio Managers of the fund.

Mike, please describe investing conditions for the 12-month reporting period.

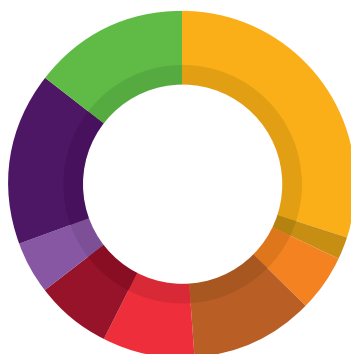
Bond markets were challenged by macro-driven headwinds. Stubborn inflation, banking turmoil, rising interest rates, and recessionary fears kept market volatility elevated.

At the start of the period, U.S. inflation remained high but was on the decline. By December 2022, inflation eased enough for the Federal Reserve to begin reducing the size and pace of its interest-rate hikes. The U.S. economy, buoyed by a strong labor market, remained in expansion. Risk appetite improved. Investors were encouraged that the Fed would avoid tipping the economy into a recession.

In calendar 2023, new risks emerged. A months-long debate over the U.S. debt ceiling rattled investor confidence. Sticky inflation supported the Fed's decision to keep interest rates higher for longer. The failure of several U.S. regional banks in March, followed by swift government intervention, also weighed on investor sentiment. In May, a resolution to the U.S. debt ceiling crisis pushed Treasury yields higher. In June, the Fed skipped a rate hike, but lifted rates in July. In August, Fitch Ratings downgraded the U.S. government's credit rating. The Fed

Credit quality overview

● AAA	30.0%
● AA	2.1
● A	5.3
● BBB	11.5
● BB	8.6
● B	7.1
● CCC and below	4.9
● Not rated	16.1
● Cash and net other assets	14.5



Credit qualities are shown as a percentage of the fund's net assets as of 9/30/23. A bond rated BBB or higher (A-3 or higher, for short-term debt) is considered investment grade. This chart reflects the highest security rating provided by one or more of Standard & Poor's, Moody's, and Fitch. Ratings and portfolio credit quality will vary over time. Due to rounding, percentages may not equal 100%.

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.

Sector weightings

	CASH INVESTMENTS	NON-CASH INVESTMENTS	TOTAL PORTFOLIO
Agency pass-throughs	0.0%	142.4%	142.4%
Commercial mortgage-backed securities	31.7%	-1.1%	30.5%
Agency collateralized mortgage obligations	29.8%	0.0%	29.8%
Non-agency residential mortgage-backed securities	22.9%	0.0%	22.9%
Asset-backed securities	1.1%	0.0%	1.1%
Cash and net other assets	14.5%	0.0%	14.5%

Allocations are shown as a percentage of the fund's net assets as of 9/30/23. 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 (non-cash investments) of certain derivatives (the economic value for purposes of calculating periodic payment obligations), including to-be-announced mortgage security trades, if any, in addition to the market value of securities. Holdings and allocations may vary over time.

held interest rates steady in September but cautioned that another rate hike was possible prior to year-end 2023. At period-end, the federal funds rate reached a 22-year high of 5.25%–5.50%.

The yield on the benchmark 10-year U.S. Treasury note increased from 3.83% at the start of the period to 4.59% at period-end. Short-term yields on Treasuries rose even more, keeping the yield curve inverted. Credit spreads largely tightened over the period. [Credit spreads are the yield advantage credit-sensitive bonds offer over comparable-maturity U.S. Treasuries. Bond prices generally rise as yield spreads tighten and decline as spreads widen.]

How did the fund perform for the 12 months ended September 30, 2023?

The fund's class A shares returned –1.41%, underperforming its primary benchmark, the Bloomberg U.S. MBS Index, which returned –0.17%.

Which holdings and strategies detracted from fund performance relative to the primary benchmark for the reporting period?

Our allocation to commercial mortgage-backed securities [CMBS] was the primary detractor to the fund's relative performance. CMBS markets generally underperformed comparable risk markets as investors mulled the impacts of an uncertain economic outlook, higher interest rates, and regional bank turmoil on commercial real estate. Additionally, poor technicals [supply/demand metrics] and negative headlines surrounding the future of office properties weighed on CMBS returns.

Interest-rate and yield curve positioning also dampened fund returns. The fund's duration positioning and quantitative model weighed on performance as Treasury yields rose sharply and interest-rate volatility remained elevated over the period.

“ While the U.S. economy has shown resilience, we believe a recession is likely in 2024. ”

What about contributors for the reporting period?

Exposure to residential mortgage credit, led by our seasoned credit risk transfer [CRT] holdings, marginally contributed to fund performance. CRT bonds performed well as they continued to be tendered by U.S. government agencies Fannie Mae and Freddie Mac and received some upgrades by rating agencies.

Prepayment strategies also were additive, led by our tactical mortgage basis positioning. The fund's long mortgage basis positioning is a strategy that capitalizes on the difference between longer-term U.S. Treasury yields and the interest rates on 30-year home mortgages. During the period, we shifted to a long position to the mortgage basis, which benefited returns as the mortgage basis tightened. Agency interest-only [IO] securities also helped results. IO securities benefited from low prepayment speeds and higher risk appetite.

How were derivatives used during the period?

We used futures to help hedge Treasury term structure risk and for yield curve positioning. Interest-rate swaps were used to hedge term structure risk and for yield curve positioning. Options also helped to hedge duration and convexity, isolate prepayment risk, and manage overall downside risks. Credit default swaps were used to hedge credit and market risks, and to gain exposure to specific sectors.

What are your current views on the various sectors in which the fund invests?

The commercial real estate market is facing meaningful headwinds and increased risks, in our view. While the U.S. economy has shown resilience, we believe a recession is likely in 2024. This view is supported by the Fed's

stance to keep interest rates higher for longer to counter stubborn inflation. In addition, the regional bank turmoil in early 2023 has tightened U.S. lending conditions and raised the cost of capital, which we believe negatively impacts the commercial real estate market.

We believe commercial property values will likely face pressure over the medium term but may vary significantly by geography and property type. Property types that can adjust rents, such as hotels and apartments, will hold their value, in our view. On the other hand, we believe property types with longer leases, greater exposure to rising capital costs, or in need of improvement will be more challenged. In our view, office properties represent the largest risk to the CMBS market. We believe much of this risk has been priced into the CMBS market based on substantial spread widening in the last 12 months. The most attractive relative value opportunities will require detailed loan-level analysis and security selection, in our view.

We believe U.S. homeowner balance sheets remain well positioned, supported by the combination of locked-in, ultra-low mortgage rates and substantial home price appreciation in recent years. We expect home prices to be flat for the remainder of 2023. However, we believe certain geographies that became overheated may be susceptible to retractions. Spreads have narrowed compared with 2022 but are wider than the tights of 2021. At current levels, we believe attractive risk-adjusted return opportunities can be found across the capital stack. Using conservative macro and housing assumptions in our modeling, we seek to invest in higher-quality bonds with shorter spread durations. We also favor bonds with seasoned collateral that we believe can withstand home price declines due to significant built-up home equity.

We expect mortgage prepayment speeds will be stable going forward. Prepayment-sensitive assets may provide good protection against a recession that could negatively impact home prices or employment levels. Many prepayment-sensitive assets, such as agency

IO securities, offer an attractive risk-adjusted return at current price levels, in our view. In addition, we believe these securities offer significant upside potential if rates stabilize and volatility declines, or prepayment speeds slow further.

We also find long-term value in agency mortgage-backed securities. We maintain a slightly long position overall but will remain tactical given near-term uncertainties. We will actively trade the basis as new information emerges and events occur.

What is the team's near-term outlook?

Overall, we have a cautious outlook. The U.S. economy has remained in expansion despite higher interest rates and a large federal deficit. Inflation continues to ease, and the U.S. labor market remains tight. However, we believe a recession may be unavoidable. In our view, an economic slowdown is likely delayed. We anticipate market volatility will remain elevated in the near term. We prefer to maintain a lower level of risk in this environment. That said, we would selectively take advantage of attractive opportunities as they arise.

Thank you, Mike, for your time and insights today.

The views expressed in this report are exclusively those of Putnam Management and are subject to change. They are not meant as investment advice.

Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future. Current and future portfolio holdings are subject to risk.

Of special interest

During the reporting period, the fund's portfolio generated a higher level of income. As a result, the fund's monthly dividend rate for class A shares was increased from \$0.041 to \$0.045 per share in October 2022 and from \$0.045 to \$0.050 per share in May 2023. Similar increases were made to other share classes of the fund.

Your fund's performance

This section shows your fund's performance, price, and distribution information for periods ended September 30, 2023, the end of its most recent fiscal year. In accordance with regulatory requirements for mutual funds, we also include expense information taken from the fund's current prospectus. Performance should always be considered in light of a fund's investment strategy. 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. For the most recent month-end performance, please visit the Individual Investors section at putnam.com or call Putnam at 1-800-225-1581. Class R, R6, and Y shares are not available to all investors.

Annualized fund performance Total return for periods ended 9/30/23

	Life of fund	10 years	5 years	3 years	1 year
Class A (2/8/84)					
Before sales charge	5.03%	-0.25%	-1.71%	-4.83%	-1.41%
After sales charge	4.92	-0.66	-2.51	-6.12	-5.36
Class B (4/27/92)					
Before CDSC	4.83	-0.84	-2.46	-5.58	-2.12
After CDSC	4.83	-0.84	-2.76	-6.36	-6.45
Class C (7/26/99)					
Before CDSC	4.87	-0.86	-2.44	-5.55	-2.07
After CDSC	4.87	-0.86	-2.44	-5.55	-2.94
Class R (1/21/03)					
Net asset value	4.75	-0.50	-1.94	-5.07	-1.58
Class R6 (4/20/18)					
Net asset value	5.24	0.06	-1.34	-4.49	-1.04
Class Y (4/11/94)					
Net asset value	5.22	-0.01	-1.46	-4.63	-1.17

Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. After-sales-charge returns for class A shares reflect the deduction of the maximum 4.00% sales charge levied at the time of purchase. Class B share returns after contingent deferred sales charge (CDSC) reflect the applicable CDSC, which is 5% in the first year, declining over time to 1% in the sixth year, and is eliminated thereafter. Class C share returns after CDSC reflect a 1% CDSC for the first year that is eliminated thereafter. Class R, R6, and Y shares have no initial sales charge or CDSC. Performance for class B, C, R, and Y shares before their inception is derived from the historical performance of class A shares, adjusted for the applicable sales charge (or CDSC) and the higher operating expenses for such shares, except for class Y shares, for which 12b-1 fees are not applicable. Performance for class R6 shares prior to their inception is derived from the historical performance of class Y shares and has not been adjusted for the lower investor servicing fees applicable to class R6 shares; had it, returns would have been higher.

Before April 19, 2018, the fund was managed with a materially different investment strategy and may have achieved materially different performance results under its current investment strategy from that shown for periods before this date.

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

Class B and C share performance reflects conversion to class A shares after eight years.

Comparative annualized index returns For periods ended 9/30/23

	Life of fund	10 years	5 years	3 years	1 year
Bloomberg U.S. MBS Index	6.00%	0.61%	-0.77%	-5.09%	-0.17%
Putnam Mortgage Securities Linked Benchmark*	5.99	0.52	-0.77	-5.09	-0.17
Lipper U.S. Mortgage Funds category median†	5.03	0.48	-0.73	-5.01	-0.49

Index and Lipper results should be compared with fund performance before sales charge, before CDSC, or at net asset value.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

Lipper peer group median is provided by Lipper, an LSEG company.

* The Putnam Mortgage Securities Linked Benchmark represents the performance of the Bloomberg GNMA Index through April 18, 2018, and the performance of the Bloomberg U.S. MBS Index thereafter.

† Over the 1-year, 3-year, 5-year, 10-year, and life-of-fund periods ended 9/30/23, there were 150, 135, 121, 88, and 3 funds, respectively, in this Lipper category.

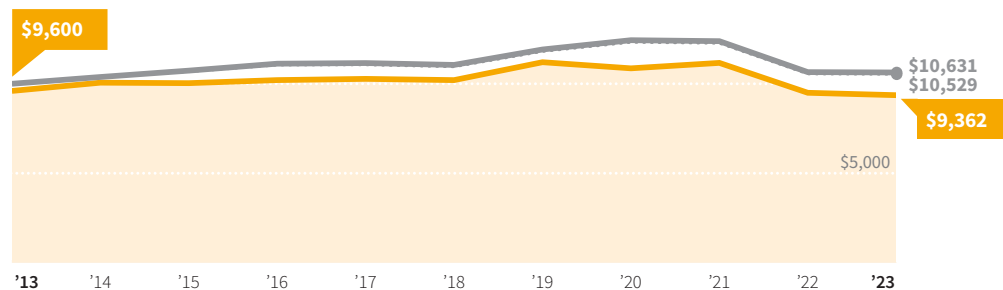
Change in the value of a \$10,000 investment (\$9,600 after sales charge)

Cumulative total return from 9/30/13 to 9/30/23

Putnam Mortgage Securities Fund class A shares after sales charge — \$9,362

Bloomberg U.S. MBS Index — \$10,631

Putnam Mortgage Securities Linked Benchmark* — \$10,529



Past performance does not indicate future results. At the end of the same time period, a \$10,000 investment in the fund's class B and C shares would have been valued at \$9,189 and \$9,177, respectively, and no contingent deferred sales charges would apply. A \$10,000 investment in the fund's class R, R6, and Y shares would have been valued at \$9,513, \$10,065, and \$9,992, respectively.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

* The Putnam Mortgage Securities Linked Benchmark represents the performance of the Bloomberg GNMA Index through April 18, 2018, and the performance of the Bloomberg U.S. MBS Index thereafter.

Fund price and distribution information For the 12-month period ended 9/30/23

Distributions	Class A		Class B	Class C	Class R	Class R6	Class Y
Number	12		12	12	12	12	12
Income	\$1.225		\$1.151	\$1.157	\$1.201	\$1.261	\$1.249
Capital gains	—		—	—	—	—	—
Total	\$1.225		\$1.151	\$1.157	\$1.201	\$1.261	\$1.249
Share value	Before sales charge	After sales charge	Net asset value	Net asset value	Net asset value	Net asset value	Net asset value
9/30/22	\$9.65	\$10.05	\$9.60	\$9.54	\$9.52	\$9.52	\$9.52
9/30/23	8.34	8.69	8.30	8.24	8.22	8.21	8.21
Current rate (end of period)	Before sales charge	After sales charge	Net asset value	Net asset value	Net asset value	Net asset value	Net asset value
Current dividend rate ¹	7.19%	6.90%	6.36%	6.55%	7.01%	7.75%	7.60%
Current 30-day SEC yield ²	N/A	6.79	6.31	6.30	6.82	7.51	7.33

The classification of distributions, if any, is an estimate. Before-sales-charge share value and current dividend rate for class A shares, if applicable, do not take into account any sales charge levied at the time of purchase. After-sales-charge share value, current dividend rate, and current 30-day SEC yield, if applicable, are calculated assuming that the maximum sales charge (4.00% for class A shares) was levied at the time of purchase. Final distribution information will appear on your year-end tax forms.

¹ Most recent distribution, including any return of capital and excluding capital gains, annualized and divided by share price before or after sales charge at period-end.

² Based only on investment income and calculated using the maximum offering price for each share class, in accordance with SEC guidelines.

Your fund's expenses

As a mutual fund investor, you pay ongoing expenses, such as management fees, distribution fees (12b-1 fees), and other expenses. Using the following information, you can estimate how these expenses affect your investment and compare them with the expenses of other funds. You may also pay one-time transaction expenses, including sales charges (loads) and redemption fees, which are not shown in this section and would have resulted in higher total expenses. For more information, see your fund's prospectus or talk to your financial representative.

Expense ratios

	Class A	Class B	Class C	Class R	Class R6	Class Y
Total annual operating expenses for the fiscal year ended 9/30/22	0.92%	1.67%	1.67%	1.17%	0.53%	0.67%
Annualized expense ratio for the six-month period ended 9/30/23*	0.98%	1.73%	1.73%	1.23%	0.57%	0.73%

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.

* 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

The following table shows the expenses you would have paid on a \$1,000 investment in each class of the fund from 4/1/23 to 9/30/23. It also shows how much a \$1,000 investment would be worth at the close of the period, assuming *actual returns* and expenses.

	Class A	Class B	Class C	Class R	Class R6	Class Y
Expenses paid per \$1,000*†	\$4.83	\$8.51	\$8.51	\$6.06	\$2.81	\$3.60
Ending value (after expenses)	\$966.00	\$962.80	\$963.00	\$965.30	\$967.50	\$966.80

* 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 9/30/23. The expense ratio may differ for each share class.

† Expenses are calculated by multiplying the expense ratio by the average account value for the period; then multiplying the result by the number of days in the period (183); and then dividing that result by the number of days in the year (365).

Estimate the expenses you paid

To estimate the ongoing expenses you paid for the six months ended 9/30/23, use the following calculation method. To find the value of your investment on 4/1/23, call Putnam at 1-800-225-1581.

How to calculate the expenses you paid

Value of your investment on 4/1/23 ÷ **\$1,000** X **Expenses paid per \$1,000** = **Total expenses paid**

Example Based on a \$10,000 investment in class A shares of your fund.

\$10,000 ÷ **\$1,000** X **\$4.83** (see preceding table) = **\$48.30**

Compare expenses using the SEC's method

The Securities and Exchange Commission (SEC) has established guidelines to help investors assess fund expenses. Per these guidelines, the following table shows 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 mutual fund shareholder reports 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.

	Class A	Class B	Class C	Class R	Class R6	Class Y
Expenses paid per \$1,000**†	\$4.96	\$8.74	\$8.74	\$6.23	\$2.89	\$3.70
Ending value (after expenses)	\$1,020.16	\$1,016.39	\$1,016.39	\$1,018.90	\$1,022.21	\$1,021.41

* 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 9/30/23. The expense ratio may differ for each share class.

† Expenses 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 (183); and then dividing that result by the number of days in the year (365).

Comparative index definitions

Bloomberg GNMA Index is an unmanaged index of Government National Mortgage Association bonds.

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

Bloomberg U.S. MBS Index is an unmanaged index of agency mortgage-backed pass-through securities (both fixed-rate and hybrid adjustable-rate mortgages) guaranteed by the Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac).

ICE BofA (Intercontinental Exchange Bank of America) U.S. 3-Month Treasury Bill Index is an unmanaged index that seeks to measure the performance of U.S. Treasury bills available in the marketplace.

Putnam Mortgage Securities Linked Benchmark represents the performance of the Bloomberg GNMA Index through April 18, 2018, and the performance of the Bloomberg U.S. MBS Index thereafter.

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

Indexes assume reinvestment of all distributions and do not account for fees. Securities and performance of a

fund and an index will differ. You cannot invest directly in an index.

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Lipper, an LSEG company, is a third-party industry-ranking entity that ranks funds. Its rankings do not reflect sales charges. Lipper rankings are based on total return at net asset value relative to other funds that have similar current investment styles or objectives as determined by Lipper. Lipper may change a fund's category assignment at its discretion. Lipper category medians reflect performance trends for funds within a category.

Other information for shareholders

Important notice regarding delivery of shareholder documents

In accordance with Securities and Exchange Commission (SEC) regulations, Putnam sends a single notice of internet availability, or a single printed copy, of annual and semiannual shareholder reports, prospectuses, and proxy statements to Putnam shareholders who share the same address, unless a shareholder requests otherwise. If you prefer to receive your own copy of these documents, please call Putnam at 1-800-225-1581 or, for exchange-traded funds only, 1-833-228-5577. We will begin sending individual copies within 30 days.

Proxy voting

Putnam is committed to managing our funds in the best interests of our shareholders. The Putnam funds' proxy voting guidelines and procedures, as well as information regarding how your fund voted proxies relating to portfolio securities during the 12-month period ended June 30, 2023, are available in the Individual Investors section of putnam.com and on the SEC's website, www.sec.gov. If you have questions about finding forms on the SEC's website, you may call the SEC at 1-800-SEC-0330. You may also obtain the Putnam funds' proxy voting guidelines and procedures at no charge by calling Putnam's Shareholder Services at 1-800-225-1581 or, for exchange-traded funds only, 1-833-228-5577.

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 on the SEC's website at www.sec.gov.

Trustee and employee fund ownership

Putnam employees and members of the Board of Trustees place their faith, confidence, and, most importantly, investment dollars in Putnam funds. As of September 30, 2023, Putnam employees had approximately \$477,000,000 and the Trustees had approximately \$65,000,000 invested in Putnam funds. These amounts include investments by the Trustees' and employees' immediate family members as well as investments through retirement and deferred compensation plans.

Liquidity risk management program

Putnam, as the administrator of the fund's liquidity risk management program (appointed by the Board of Trustees), presented the most recent annual report on the program to the Trustees in May 2023. The report covered the structure of the program, including the program documents and related policies and procedures adopted to comply with Rule 22e-4 under the Investment Company Act of 1940, and reviewed the operation of the program from January 2022 through December 2022. The report included a description of the annual liquidity assessment of the fund that Putnam performed in November 2022. The report noted that there were no material compliance exceptions identified under Rule 22e-4 during the period. The report included a review of the governance of the program and the methodology for classification of the fund's investments. Putnam concluded that the program has been operating effectively and adequately to ensure compliance with Rule 22e-4.

Important notice regarding Putnam's privacy policy

In order to conduct business with our shareholders, we must obtain certain personal information such as account holders' names, addresses, Social Security numbers, and dates of birth. Using this information, we are able to maintain accurate records of accounts and transactions.

It is our policy to protect the confidentiality of our shareholder information, whether or not a shareholder currently owns shares of our funds. In particular, it is our policy not to sell information about you or your accounts to outside marketing firms. We have safeguards in place designed to prevent unauthorized access

to our computer systems and procedures to protect personal information from unauthorized use.

Under certain circumstances, we must share account information with outside vendors who provide services to us, such as mailings and proxy solicitations. In these cases, the service providers enter into confidentiality agreements with us, and we provide only the information necessary to process transactions and perform other services related to your account. Finally, it is our policy to share account information with your financial representative, if you've listed one on your Putnam account.

Trustee approval of management contracts

Consideration of your fund's new and interim management and sub-management contracts

At their meeting on June 23, 2023, the Board of Trustees of your fund, including all of the Trustees who are not "interested persons" (as this term is defined in the Investment Company Act of 1940, as amended (the "1940 Act")) of the Putnam mutual funds, closed-end funds and exchange-traded funds (collectively, the "funds") (the "Independent Trustees") approved, subject to approval by your fund's shareholders, a new management contract with Putnam Investment Management ("Putnam Management") and a new sub-management contract between Putnam Management and its affiliate, Putnam Investments Limited ("PIL") (collectively, the "New Management Contracts"). The Trustees considered the proposed New Management Contracts in connection with the planned acquisition of Putnam U.S. Holdings I, LLC ("Putnam Holdings") by a subsidiary of Franklin Resources, Inc. ("Franklin Templeton"). The Trustees considered that, on May 31, 2023, Franklin Templeton and Great-West Lifeco Inc., the parent company of Putnam Holdings, announced that they had entered into a definitive agreement for a subsidiary of Franklin Templeton to acquire Putnam Holdings in a stock and cash transaction (the "Transaction"). The Trustees noted that Putnam Holdings was the parent company of Putnam Management and PIL. The Trustees were advised that the Transaction would result in a "change of control" of Putnam Management and PIL and would cause your fund's current Management Contract with Putnam Management and Sub-Management Contract with PIL (collectively, the "Current Management Contracts") to terminate in accordance with the 1940 Act. The Trustees considered that the New Management Contracts would take effect upon the closing of the Transaction, which was expected to occur in the fourth quarter of 2023.

In addition to the New Management Contracts, the Trustees also approved interim management and sub-management contracts with Putnam Management and PIL, respectively (the "Interim Management Contracts"), which would take effect in the event that for any reason shareholder approval of a New Management Contract was not received by the time of the Transaction closing. The Trustees considered that each Interim Management Contract that became effective would remain in effect until shareholders

approved the proposed New Management Contract, or until 150 days elapse after the closing of the Transaction, whichever occurred first. The considerations and conclusions discussed in connection with the Trustees' consideration of the New Management Contracts and the continuance of your fund's Current Management Contracts also apply to the Trustees' consideration of the Interim Management Contracts, supplemented by consideration of the terms, nature and reason for any Interim Management Contract.

The Independent Trustees met with their independent legal counsel, as defined in Rule 0-1(a)(6) under the 1940 Act (their "independent legal counsel"), and representatives of Putnam Management and its parent company, Power Corporation of Canada, to discuss the potential Transaction, including the timing and structure of the Transaction and its implications for Putnam Management and the funds, during their regular meeting on November 18, 2022, and the full Board of Trustees further discussed these matters with representatives of Putnam Management at its regular meeting on December 15, 2022. At a special meeting on December 20, 2022, the full Board of Trustees met with representatives of Putnam Management, Power Corporation of Canada and Franklin Templeton to further discuss the potential Transaction, including Franklin Templeton's strategic plans for Putnam Management's asset management business and the funds, potential sources of synergy between Franklin Templeton and Putnam Management, potential areas of partnership between Power Corporation of Canada and Franklin Templeton, Franklin Templeton's distribution capabilities, Franklin Templeton's existing service provider relationships and Franklin Templeton's recent acquisitions of other asset management firms.

In order to assist the Independent Trustees in their consideration of the New Management Contracts and other anticipated impacts of the Transaction on the funds and their shareholders, independent legal counsel for the Independent Trustees furnished an initial information request to Franklin Templeton (the "Initial Franklin Request"). At a special meeting of the full Board of Trustees held on January 25, 2023, representatives of Franklin Templeton addressed the firm's responses to the Initial Franklin Request. At the meeting, representatives of Franklin Templeton

discussed, among other things, the business and financial condition of Franklin Templeton and its affiliates, Franklin Templeton's U.S. registered fund operations, its recent acquisition history, Franklin Templeton's intentions regarding the operation of Putnam Management and the funds following the completion of the potential Transaction and expected benefits to the funds and Putnam Management that might result from the Transaction.

The Board of Trustees actively monitored developments with respect to the potential Transaction throughout the period leading up to the public announcement of a final sale agreement on May 31, 2023. The Independent Trustees met to discuss these matters at their regular meetings on January 27, April 20 and May 19, 2023. The full Board of Trustees also discussed developments at their regular meeting on February 23, 2023. Following the public announcement of the Transaction on May 31, 2023, independent legal counsel for the Independent Trustees furnished a supplemental information request (the "Supplemental Franklin Request") to Franklin Templeton. At the Board of Trustees' regular in-person meeting held on June 22–23, 2023, representatives of Putnam Management and Power Corporation of Canada provided further information regarding, among other matters, the final terms of the Transaction and efforts undertaken to retain Putnam employees. The Contract Committee of the Board of Trustees also met on June 22, 2023 to discuss Franklin Templeton's responses to the Supplemental Franklin Request. Mr. Reynolds, the only Trustee affiliated with Putnam Management, participated in portions of these meetings to provide the perspective of the Putnam organization, but did not otherwise participate in the deliberations of the Independent Trustees or the Contract Committee regarding the potential Transaction.

After the presentations and after reviewing the written materials provided, the Independent Trustees met at their in-person meeting on June 23, 2023 to consider the New Management Contracts for each fund, proposed to become effective upon the closing of the Transaction, and the filing of a preliminary proxy statement. At this meeting and throughout the process, the Independent Trustees also received advice from their independent legal counsel regarding their

responsibilities in evaluating the potential Transaction and the New Management Contracts. The Independent Trustees reviewed the terms of the proposed New Management Contracts and the differences between the New Management Contracts and the Current Management Contracts. They noted that the terms of the proposed New Management Contracts were substantially identical to the Current Management Contracts, except for certain changes designed largely to address differences among various of the existing contracts, which had been developed and implemented at different times in the past.

In considering the approval of the proposed New Management Contracts, the Board of Trustees took into account a number of factors, including:¹

- (i) Franklin Templeton's and Putnam Management's belief that the Transaction would not adversely affect the funds or their shareholders and their belief that the Transaction was likely to result in certain benefits (described below) for the funds and their shareholders;
- (ii) That Franklin Templeton did not intend to make any material change in Putnam Management's senior investment professionals (other than certain changes related to reporting structure and organization of personnel discussed below), including the portfolio managers of the funds, or to the firm's operating locations as a result of the Transaction;
- (iii) That Franklin Templeton intended for Putnam Management's equity investment professionals to continue to operate largely independently from Franklin Templeton, reporting to Franklin Templeton's Head of Public Markets following the Transaction;
- (iv) That, while Putnam Management's organizational structure was not expected to change immediately following the Transaction, Franklin Templeton intended to revise Putnam Management's reporting structure in order to include Putnam Management's fixed income investment professionals in Franklin Templeton's fixed income group and to include Putnam Management's Global Asset Allocation ("GAA") investment professionals in Franklin Templeton's investment solutions group, with both Franklin Templeton groups reporting to Franklin Templeton's Head of Public Markets;

¹All subsequent references to Putnam Management describing the Board of Trustees' considerations should be deemed to include references to PIL as necessary or appropriate in the context.

(v) Franklin Templeton's expectation that there would not be any changes in the investment objectives, strategies or portfolio holdings of the funds as a result of the Transaction;

(vi) That neither Franklin Templeton nor Putnam Management had any current plans to propose changes to the funds' existing management fees or expense limitations, or current plans to make changes to the funds' existing distribution arrangements;

(vii) Franklin Templeton's and Putnam Management's representations that, following the Transaction, there was not expected to be any diminution in the nature, quality and extent of services provided to the funds and their shareholders by Putnam Management and PIL, including compliance and other non-advisory services;

(viii) That Franklin Templeton did not currently plan to change the branding of the funds or to change the lineup of funds in connection with the Transaction but would continue to evaluate how best to position the funds in the market;

(ix) The possible benefits accruing to the funds and their shareholders as a result of the Transaction, including:

- a. That the scale of Franklin Templeton's investment operations platform would increase the investment and operational resources available to the funds;
- b. That the Putnam open-end funds would benefit from Franklin Templeton's large retail and institutional global distribution capabilities and significant network of intermediary relationships, which may provide additional opportunities for the funds to increase assets and reduce expenses by spreading expenses over a larger asset base; and
- c. Potential benefits to shareholders of the Putnam open-end funds that could result from the alignment of certain fund features and shareholder benefits with those of other funds sponsored by Franklin Templeton and its affiliates and access to a broader array of investment opportunities;

(x) The financial strength, reputation, experience and resources of Franklin Templeton and its investment advisory subsidiaries;

(xi) Franklin Templeton's expectation that the Transaction would not impact the capabilities or responsibilities of Putnam Management's

Investment Division (other than any impact related to reporting structure changes for Putnam Management's equity, fixed income and GAA investment groups and to including Putnam Management's fixed income and GAA investment professionals in existing Franklin Templeton investment groups, as discussed above) and that any changes to the Investment Division over the longer term would be made in order to achieve perceived operational efficiencies or improvements to the portfolio management process;

(xii) Franklin Templeton's commitment to maintaining competitive compensation arrangements to allow Putnam Management to continue to attract and retain highly qualified personnel and Putnam Management's and Franklin Templeton's efforts to retain personnel, including efforts implemented since the Transaction was announced;

(xiii) That the current senior management teams at Putnam Management and Power Corporation of Canada had indicated their strong support of the Transaction and that Putnam Management had recommended that the Board of Trustees approve the New Management Contracts; and

(xiv) Putnam Management's and Great-West Lifeco Inc.'s commitment to bear all expenses incurred by the funds in connection with the Transaction, including all costs associated with the proxy solicitation in connection with seeking shareholder approval of the New Management Contracts.

Finally, in considering the proposed New Management Contracts, the Board of Trustees also took into account their concurrent deliberations and conclusions, as described below, in connection with their annual review of the funds' Current Management Contracts and the approval of their continuance, effective July 1, 2023, and the extensive materials that they had reviewed in connection with that review process.

Based upon the foregoing considerations, on June 23, 2023, the Board of Trustees, including all of the Independent Trustees, unanimously approved the proposed New Management Contracts and determined to recommend their approval to the shareholders of the funds.

General conclusions — Current Management Contracts

The Board of Trustees oversees the management of each fund and, as required by law, determines

annually whether to approve the continuance of your fund's management contract with Putnam Management and the sub-management contract with respect to your fund between Putnam Management and PIL. (Because PIL is an affiliate of Putnam Management and Putnam Management remains fully responsible for all services provided by PIL, the Trustees did not attempt to evaluate PIL as a separate entity.) The Board of Trustees, with the assistance of its Contract Committee, requests and evaluates all information it deems reasonably necessary under the circumstances in connection with its annual contract review. The Contract Committee consists solely of Independent Trustees.

At the outset of the review process, members of the Board of Trustees' independent staff and independent legal counsel considered any possible changes to the annual contract review materials furnished to the Contract Committee during the course of the previous year's review and, as applicable, identified those changes to Putnam Management. Following these discussions and in consultation with the Contract Committee, the Independent Trustees' independent legal counsel requested that Putnam Management and its affiliates furnish specified information, together with any additional information that Putnam Management considered relevant, to the Contract Committee. Over the course of several months ending in June 2023, the Contract Committee met on a number of occasions with representatives of Putnam Management, and separately in executive session, to consider the information that Putnam Management provided. Throughout this process, the Contract Committee was assisted by the members of the Board of Trustees' independent staff and by independent legal counsel for the funds and the Independent Trustees.

At the Board of Trustees' June 2023 meeting, the Contract Committee met in executive session to discuss and consider its recommendations with respect to the continuance of the contracts. At that meeting, the Contract Committee also met in executive session with the other Independent Trustees to review a summary of the key financial, performance and other data that the Contract Committee considered in the course of its review. The Contract Committee recommended, and the Independent Trustees approved, the continuance of your fund's Current Management Contracts, effective July 1, 2023, and the approval of your fund's New Management Contracts and Interim Management Contracts, as discussed above.

The Independent Trustees' approvals were based on the following conclusions:

- That the fee schedule in effect for your fund represented reasonable compensation in light of the nature and quality of the services being provided to the fund, the fees paid by competitive funds, the costs incurred by Putnam Management in providing services to the fund and the application of certain reductions and waivers noted below; and
- That the fee schedule in effect for your fund represented an appropriate sharing between fund shareholders and Putnam Management of any economies of scale as may exist in the management of the fund at current asset levels.

These conclusions were based on a comprehensive consideration of all information provided to the Trustees and were not the result of any single factor. Some of the factors that figured particularly in the Trustees' deliberations and how the Trustees considered these factors are described below, although individual Trustees may have evaluated the information presented differently, giving different weights to various factors. It is also important to recognize that the management arrangements for your fund and the other Putnam mutual funds and closed-end funds are the result of many years of review and discussion between the Independent Trustees and Putnam Management, that some aspects of the arrangements may receive greater scrutiny in some years than others and that the Trustees' conclusions may be based, in part, on their consideration of fee arrangements in previous years. For example, with certain exceptions primarily involving newer funds (including the exchange-traded funds) or repositioned funds, the current fee arrangements under the vast majority of the funds' management contracts were first implemented at the beginning of 2010 following extensive review by the Contract Committee and discussions with representatives of Putnam Management, as well as approval by shareholders. The Trustees also took into account their concurrent deliberations and conclusions, and the materials that they had reviewed, in connection with their approval on June 23, 2023 of the Interim Management Contracts and the New Management Contracts, which had been proposed in light of the Transaction (which would cause the fund's Current Management Contracts to terminate in accordance with applicable law or the terms of each contract).

Management fee schedules and total expenses

The Trustees reviewed the management fee schedules in effect for all funds, including fee levels and any breakpoints. Under its management contract, your fund has the benefit of breakpoints in its management fee schedule that provide shareholders with reduced fee levels as assets under management in the Putnam family of funds increase. The Trustees also reviewed the total expenses of each Putnam fund, recognizing that in most cases management fees represented the major, but not the sole, determinant of total costs to fund shareholders. (Two mutual funds and each of the exchange-traded funds have implemented so-called “all-in” or unitary management fees covering substantially all routine fund operating costs.)

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

As in the past, the Trustees also focused on the competitiveness of each fund’s total expense ratio. The Trustees, Putnam Management and the funds’ investor servicing agent, Putnam Investor Services, Inc. (“PSERV”), have implemented expense limitations that were in effect during your fund’s fiscal year ending in 2022. These expense limitations were: (i) a contractual expense limitation applicable to specified mutual funds, including your fund, of 25 basis points on investor servicing fees and expenses and (ii) a contractual expense limitation applicable to specified mutual funds, including your fund, of 20 basis points on so-called “other expenses” (i.e., all expenses exclusive of management fees, distribution fees, investor servicing fees, investment-related expenses, interest, taxes, brokerage commissions, acquired fund fees and expenses and extraordinary expenses). These expense limitations attempt to maintain competitive expense levels for the funds. Most funds, including your fund, had sufficiently low expenses that these expense limitations were not operative during their fiscal

years ending in 2022. Putnam Management and PSERV have agreed to maintain these expense limitations until at least January 30, 2025. Putnam Management and PSERV’s commitment to these expense limitation arrangements, which were intended to support an effort to have the mutual fund expenses meet competitive standards, was an important factor in the Trustees’ decision to approve your fund’s New Management Contracts and Interim Management Contracts and the continuance of your fund’s Current Management Contracts.

The Trustees reviewed comparative fee and expense information for a custom group of competitive funds selected by Broadridge Financial Solutions, Inc. (“Broadridge”). This comparative information included your fund’s percentile ranking for effective management fees and total expenses (excluding any applicable 12b-1 fees), which provides a general indication of your fund’s relative standing. In the custom peer group, your fund ranked in the second quintile in effective management fees (determined for your fund and the other funds in the custom peer group based on fund asset size and the applicable contractual management fee schedule) and in the third quintile in total expenses (excluding any applicable 12b-1 fees) as of December 31, 2022. The first quintile represents the least expensive funds and the fifth quintile the most expensive funds. The fee and expense data reported by Broadridge as of December 31, 2022 reflected the most recent fiscal year-end data available in Broadridge’s database at that time.

In connection with their review of fund management fees and total expenses, the Trustees also reviewed the costs of the services provided and the profits realized by Putnam Management and its affiliates from their contractual relationships with the funds. This information included trends in revenues, expenses and profitability of Putnam Management and its affiliates relating to the investment management, investor servicing and distribution services provided to the funds, as applicable. In this regard, the Trustees also reviewed an analysis of the revenues, expenses and profitability of Putnam Management and its affiliates, allocated on a fund-by-fund basis, with respect to (as applicable) the funds’ management, distribution and investor servicing contracts. For each fund, the analysis presented information about revenues, expenses and profitability in 2022 for each of the applicable agreements separately

and for the agreements taken together on a combined basis. The Trustees concluded that, at current asset levels, the fee schedules in place for each of the funds, including the fee schedule for your fund, represented reasonable compensation for the services being provided and represented an appropriate sharing between fund shareholders and Putnam Management of any economies of scale as may exist in the management of the funds at that time.

The information examined by the Trustees in connection with their annual contract review for the funds included information regarding services provided and fees charged by Putnam Management and its affiliates to other clients, including collective investment trusts offered in the defined contribution and defined benefit retirement plan markets, sub-advised mutual funds, private funds sponsored by affiliates of Putnam Management, model-only separately managed accounts and Putnam Management's manager-traded separately managed account programs. This information included, in cases where a product's investment strategy corresponds with a fund's strategy, comparisons of those fees with fees charged to the funds, as well as an assessment of the differences in the services provided to these clients as compared to the services provided to the funds. The Trustees observed that the differences in fee rates between these clients and the funds are by no means uniform when examined by individual asset sectors, suggesting that differences in the pricing of investment management services to these types of clients may reflect, among other things, historical competitive forces operating in separate marketplaces. The Trustees considered the fact that in many cases fee rates across different asset classes are higher on average for 1940 Act-registered funds than for other clients, and the Trustees also considered the differences between the services that Putnam Management provides to the funds and those that it provides to its other clients. The Trustees did not rely on these comparisons to any significant extent in concluding that the management fees paid by your fund are reasonable.

Investment performance

The quality of the investment process provided by Putnam Management represented a major factor in the Trustees' evaluation of the quality of services provided by Putnam Management under your fund's management contract. The Trustees were assisted in their review of Putnam Management's

investment process and performance by the work of the investment oversight committees of the Trustees and the full Board of Trustees, which meet on a regular basis with individual portfolio managers and with senior management of Putnam Management's Investment Division throughout the year. The Trustees concluded that Putnam Management generally provides a high-quality investment process — based on the experience and skills of the individuals assigned to the management of fund portfolios, the resources made available to them and in general Putnam Management's ability to attract and retain high-quality personnel — but also recognized that this does not guarantee favorable investment results for every fund in every time period.

The Trustees considered that, in the aggregate, peer-relative and benchmark-relative Putnam fund performance was generally encouraging in 2022 against a backdrop of volatile equity and fixed income markets, driven by factors such as Russia's invasion of Ukraine, increased tensions with China, disruptions in energy markets and broader supply chains, rising inflation and the significant tightening of monetary policy by the Board of Governors of the Federal Reserve in an effort to combat inflation. The Trustees further noted that, in the face of these numerous economic headwinds, corporate earnings and employment data had been generally robust throughout 2022. For the one-year period ended December 31, 2022, the Trustees noted that the Putnam funds, on an asset-weighted basis, ranked in the 41st percentile of their peers as determined by Lipper Inc. ("Lipper") and, on an asset-weighted-basis, outperformed their benchmarks by 1.3% gross of fees over the one-year period. The Committee also noted that the funds' aggregate performance over longer-term periods continued to be strong, with the funds, on an asset-weighted basis, ranking in the 34th, 27th and 22nd percentiles of their Lipper peers over the three-year, five-year and ten-year periods ended December 31, 2022, respectively. The Trustees further noted that the funds, in the aggregate, outperformed their benchmarks on a gross basis for each of the three-year, five-year and ten-year periods. The Trustees also considered the Morningstar Inc. ratings assigned to the funds and that 40 funds were rated four or five stars at the end of 2022, which represented an increase of 15 funds year-over-year. The Trustees also considered that seven funds were five-star rated at the end of 2022, which was a year-over-year decrease of two funds, and that 83% of the funds'

aggregate assets were in four- or five-star rated funds at year end.

In addition to the performance of the individual Putnam funds, the Trustees considered, as they had in prior years, the performance of The Putnam Fund complex versus competitor fund complexes, as reported in the Barron's/Lipper Fund Families survey (the "Survey"). The Trustees noted that the Survey ranks mutual fund companies based on their performance across a variety of asset types, and that The Putnam Fund complex had performed exceptionally well in 2022. In this regard, the Trustees considered that the funds had ranked 9th out of 49 fund companies, 3rd out of 49 fund companies and 2nd out of 47 fund companies for the one-year, five-year and ten-year periods, respectively. The Trustees also noted that The Putnam Fund complex had been the only fund family to rank in the top ten in all three time periods. They also noted, however, the disappointing investment performance of some Putnam funds for periods ended December 31, 2022 and considered information provided by Putnam Management regarding the factors contributing to the underperformance and, where relevant, actions being taken to improve the performance of these particular funds. The Trustees indicated their intention to continue to monitor the performance of those funds.

For purposes of the Trustees' evaluation of the Putnam funds' investment performance, the Trustees generally focus on a competitive industry ranking of each fund's total net return over a one-year, three-year and five-year period. For a number of Putnam funds with relatively unique investment mandates for which Putnam Management informed the Trustees that meaningful competitive performance rankings are not considered to be available, the Trustees evaluated performance based on their total gross and net returns and comparisons of those returns to the returns of selected investment benchmarks. In the case of your fund, the Trustees considered that its class A share cumulative total return performance at net asset value was in the following quartiles of its Lipper peer group (Lipper U.S. Mortgage Funds) for the one-year, three-year and five-year periods ended December 31, 2022 (the first quartile representing the best-performing funds and the fourth quartile the worst-performing funds):

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

Over the one-year, three-year and five-year periods ended December 31, 2022, there were 147, 134 and 109 funds, respectively, in your fund's Lipper peer group. (When considering performance information, shareholders should be mindful that past performance is not a guarantee of future results.)

The Trustees expressed concern about your fund's fourth quartile performance over the three-year period ended December 31, 2022 (the fund was repositioned on April 19, 2018 and, therefore, the fund's performance prior to that date occurred when the fund was managed with a materially different investment strategy) and considered the circumstances that may have contributed to this disappointing performance. The Trustees considered Putnam Management's observation that significant underperformance in both the commercial mortgage sector and the prepayment-sensitive residential mortgage sector contributed to the fund's disappointing results, noting that prepayment strategies had suffered in 2021 as a result of significantly elevated refinancing (given strong home price appreciation and low interest rates) relative to expectations. The Trustees considered that the fund's underperformance was also driven by significant underperformance in the securitized products sector in 2020, which resulted from the outsized impact of the COVID-19 pandemic on the commercial mortgage sector. In addition, the Trustees considered the negative impact that the fund's term structure strategies had on performance in 2021.

The Trustees considered Putnam Management's observation regarding the portfolio managers' focus on diversification and on adding to the number of the fund's investment themes going forward. The Trustees also considered that the fund had strong performance relative to its peers and outperformed its benchmark in 2022, partly due to the solid performance of the commercial mortgage sector. The Trustees noted that Putnam Management remained confident in the fund's portfolio managers. The Trustees also considered Putnam Management's continued efforts to support fund performance through certain initiatives, including structuring compensation for portfolio managers to enhance accountability for fund performance, emphasizing accountability in the portfolio management process and affirming its commitment to a fundamental-driven approach to investing.

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

Brokerage and soft-dollar allocations; distribution and investor servicing

The Trustees considered various potential benefits that Putnam Management may receive in connection with the services it provides under the management contract with your fund. These include benefits related to brokerage allocation and the use of soft dollars, whereby a portion of the commissions paid by a fund for brokerage may be used to acquire research services that are expected to be useful to Putnam Management in managing the assets of the fund and of other clients. Subject to policies established by the Trustees, soft dollars generated by these means

are used predominantly to acquire brokerage and research services (including third-party research and market data) that enhance Putnam Management's investment capabilities and supplement Putnam Management's internal research efforts. The Trustees indicated their continued intent to monitor regulatory and industry developments in this area with the assistance of their Brokerage Committee. In addition, with the assistance of their Brokerage Committee, the Trustees indicated their continued intent to monitor the allocation of the funds' brokerage in order to ensure that the principle of seeking best price and execution remains paramount in the portfolio trading process.

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

Audited financial statements

These sections of the report, as well as the accompanying Notes, preceded by the Report of Independent Registered Public Accounting Firm, constitute the fund's audited financial statements.

The fund's portfolio lists all the fund's investments and their values as of the last day of the reporting period. Holdings are organized by asset type and industry sector, country, or state to show areas of concentration and diversification.

Statement of assets and liabilities shows how the fund's net assets and share price are determined. All investment and non-investment assets are added together. Any unpaid expenses and other liabilities are subtracted from this total. The result is divided by the number of shares to determine the net asset value per share, which is calculated separately for each class of shares. (For funds with preferred shares, the amount subtracted from total assets includes the liquidation preference of preferred shares.)

Statement of operations shows the fund's net investment gain or loss. This is done by first adding up all the fund's earnings — from dividends and interest income — and subtracting its operating expenses to determine net investment income

(or loss). Then, any net gain or loss the fund realized on the sales of its holdings — as well as any unrealized gains or losses over the period — is added to or subtracted from the net investment result to determine the fund's net gain or loss for the fiscal period.

Statement of changes in net assets shows how the fund's net assets were affected by the fund's net investment gain or loss, by distributions to shareholders, and by changes in the number of the fund's shares. It lists distributions and their sources (net investment income or realized capital gains) over the current reporting period and the most recent fiscal year-end. The distributions listed here may not match the sources listed in the Statement of operations because the distributions are determined on a tax basis and may be paid in a different period from the one in which they were earned.

Financial highlights provide an overview of the fund's investment results, per-share distributions, expense ratios, net investment income ratios, and portfolio turnover (not required for money market funds) in one summary table, reflecting the five most recent reporting periods. In a semiannual report, the highlights table also includes the current reporting period.

Report of Independent Registered Public Accounting Firm

To the Board of Trustees and Shareholders of
Putnam Mortgage Securities Fund:

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the fund's portfolio, of Putnam Mortgage Securities Fund (the "Fund") as of September 30, 2023, the related statement of operations for the year ended September 30, 2023, the statement of changes in net assets for each of the two years in the period ended September 30, 2023, including the related notes, and the financial highlights for each of the five years in the period ended September 30, 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 September 30, 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 September 30, 2023 and the financial highlights for each of the five years in the period ended September 30, 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 September 30, 2023 by correspondence with the custodian, transfer agent 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
November 6, 2023

We have served as the auditor of one or more investment companies in the Putnam Investments 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 9/30/23

U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS (144.3%)*	Principal amount	Value
U.S. Government Guaranteed Mortgage Obligations (27.2%)		
Government National Mortgage Association Adjustable Rate Mortgages (US Treasury Yield Curve Rate + 1.50%), 2.625%, 7/20/26	\$1,971	\$1,914
Government National Mortgage Association Pass-Through Certificates		
6.00%, TBA, 10/1/53	3,000,000	2,972,801
6.00%, 1/15/29	1	1
5.50%, TBA, 10/1/53	12,000,000	11,646,042
5.50%, 8/15/35	98	97
5.00%, TBA, 10/1/53	5,000,000	4,739,437
4.50%, TBA, 10/1/53	12,000,000	11,083,968
4.00%, TBA, 10/1/53	17,000,000	15,316,534
3.50%, TBA, 10/1/53	14,000,000	12,264,752
3.00%, TBA, 10/1/53	19,000,000	16,101,470
2.50%, TBA, 10/1/53	24,000,000	19,611,406
2.00%, TBA, 10/1/53	23,000,000	18,188,715
		111,927,137
U.S. Government Agency Mortgage Obligations (117.1%)		
Uniform Mortgage-Backed Securities		
6.50%, TBA, 10/1/53	19,000,000	19,090,816
6.00%, TBA, 10/1/53	96,400,000	95,153,529
5.50%, TBA, 10/1/53	2,000,000	1,933,126
5.00%, TBA, 10/1/53	19,000,000	17,929,035
4.50%, TBA, 10/1/53	26,000,000	23,876,317
4.00%, TBA, 10/1/53	30,000,000	26,718,738
3.50%, TBA, 10/1/53	52,000,000	44,711,867
3.50%, TBA, 10/1/38	2,000,000	1,847,032
3.00%, TBA, 10/1/53	35,000,000	28,936,537
3.00%, TBA, 10/1/38	4,000,000	3,614,690
2.50%, TBA, 10/1/53	122,000,000	96,765,947
2.50%, TBA, 10/1/38	9,000,000	7,922,107
2.00%, TBA, 10/1/53	116,000,000	88,177,458
2.00%, TBA, 10/1/38	18,000,000	15,415,594
1.50%, TBA, 10/1/38	11,000,000	9,155,850
		481,248,643
Total U.S. government and agency mortgage obligations (cost \$608,264,313)		\$593,175,780
U.S. TREASURY OBLIGATIONS (0.4%)*		
U.S. Treasury Notes		
1.625%, 5/15/31 ⁱ	\$1,249,000	\$1,021,657
0.625%, 8/15/30 ⁱ	405,000	311,162
0.125%, 1/15/24 ⁱ	153,000	150,757
Total U.S. treasury obligations (cost \$1,483,576)		\$1,483,576

MORTGAGE-BACKED SECURITIES (84.0%)*	Principal amount	Value
Agency collateralized mortgage obligations (29.5%)		
Federal Home Loan Mortgage Corporation		
REMICs Ser. 4018, Class DI, IO, 4.50%, 7/15/41	\$507,790	\$29,458
REMICs Ser. 5121, Class KI, IO, 4.00%, 6/25/51	7,424,795	1,614,936
REMICs Ser. 4953, Class AI, IO, 4.00%, 2/25/50	4,674,426	1,001,823
REMICs Ser. 23-5349, Class IB, IO, 4.00%, 12/15/46	5,111,819	942,604
REMICs Ser. 4019, Class JI, IO, 4.00%, 5/15/41	1,174,385	81,433
REMICs IFB Ser. 3408, Class EK, ((-4.024 x US 30 Day Average SOFR) + 25.33%), 3.952%, 4/15/37	135,564	146,178
Structured Pass-Through Certificates FRB Ser. 57, Class 2A1, 3.915%, 7/25/43 ^W	10,418	9,551
Structured Pass-Through Certificates FRB Ser. 59, Class 2A1, 3.773%, 10/25/43 ^W	5,551	4,198
REMICs IFB Ser. 3065, Class DC, ((-3 x US 30 Day Average SOFR) + 19.52%), 3.577%, 3/15/35	1,211,773	1,171,542
REMICs Ser. 5050, Class IM, IO, 3.50%, 10/25/50	10,838,177	1,979,680
REMICs Ser. 5080, Class IQ, IO, 3.50%, 4/25/50	22,630,613	4,691,478
REMICs Ser. 4136, Class IQ, IO, 3.50%, 11/15/42	3,223,951	446,567
Strips Ser. 304, Class C37, IO, 3.50%, 12/15/27	257,417	8,500
REMICs Ser. 5071, Class IV, IO, 3.00%, 12/25/50	18,757,713	3,228,851
REMICs Ser. 23-5349, Class IA, IO, 3.00%, 12/15/42	11,519,562	1,003,803
REMICs IFB Ser. 5003, Class DS, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.671%, 8/25/50	7,458,653	737,776
REMICs IFB Ser. 4326, Class GS, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.622%, 4/15/44	8,979,214	672,727
REMICs IFB Ser. 4915, Class SD, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.621%, 9/25/49	9,231,288	754,877
REMICs IFB Ser. 4933, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 5.89%), 0.571%, 12/25/49	6,337,613	615,903
REMICs Ser. 3369, Class BO, PO, zero %, 9/15/37	1,922	1,477
REMICs Ser. 3391, PO, zero %, 4/15/37	25,155	20,350
REMICs Ser. 3210, PO, zero %, 5/15/36	784	763
REMICs FRB Ser. 3117, Class AF, zero %, 2/15/36	12,364	10,302
Federal National Mortgage Association		
REMICs Trust FRB Ser. 04-W7, Class A2, 6.472%, 3/25/34 ^W	2,411	2,385
REMICs Ser. 15-58, Class KI, IO, 6.00%, 3/25/37	4,483,471	782,581
REMICs FRB Ser. 03-W11, Class A1, 5.72%, 6/25/33 ^W	235	234
REMICs Ser. 15-86, Class MI, IO, 5.50%, 11/25/45	3,918,488	630,328
REMICs Ser. 18-51, Class BI, IO, 5.50%, 7/25/38	4,106,180	350,854
REMICs Ser. 17-19, Class IH, IO, 5.00%, 3/25/47	4,304,266	612,368
REMICs Ser. 20-31, IO, 4.50%, 5/25/50	10,602,957	2,142,039
REMICs FRB Ser. 03-W14, Class 2A, 4.339%, 1/25/43 ^W	6,740	6,264
Trust FRB Ser. 03-W3, Class 1A4, 4.08%, 8/25/42 ^W	15,391	14,033
REMICs Ser. 20-60, Class NI, IO, 4.00%, 9/25/50	6,631,560	1,306,704
REMICs Ser. 23-49, Class IC, IO, 4.00%, 11/25/49	1,012,925	163,655
REMICs Ser. 12-104, Class HI, IO, 4.00%, 9/25/27	1,226,240	48,260
Trust FRB Ser. 04-W2, Class 4A, 3.853%, 2/25/44 ^W	3,483	3,322
REMICs Ser. 21-25, Class IJ, IO, 3.50%, 5/25/51	22,085,214	4,152,241
REMICs Ser. 20-20, Class IK, IO, 3.50%, 3/25/50	8,276,093	1,171,205
REMICs Ser. 20-62, Class MI, IO, 3.50%, 5/25/49	29,949,772	5,303,248
REMICs Ser. 23-49, Class IB, IO, 3.50%, 3/25/47	7,535,741	1,144,950

MORTGAGE-BACKED SECURITIES (84.0%)* <i>cont.</i>	Principal amount	Value
Agency collateralized mortgage obligations <i>cont.</i>		
Federal National Mortgage Association		
REMICs IFB Ser. 08-24, Class SP, ((-3.667 x US 30 Day Average SOFR) + 22.86%), 3.375%, 2/25/38	\$390,397	\$377,082
REMICs Ser. 20-96, IO, 3.00%, 1/25/51	8,339,738	1,365,966
REMICs Ser. 23-49, Class IA, IO, 3.00%, 8/25/46	10,173,761	1,155,312
REMICs Ser. 21-3, Class IB, IO, 2.50%, 2/25/51	6,332,191	1,027,398
REMICs Ser. 21-3, Class NI, IO, 2.50%, 2/25/51	14,149,498	1,897,636
REMICs IFB Ser. 11-123, Class KS, IO, ((-1 x US 30 Day Average SOFR) + 6.49%), 1.171%, 10/25/41	271,093	16,580
REMICs IFB Ser. 18-20, Class SB, IO, ((-1 x US 30 Day Average SOFR) + 6.14%), 0.821%, 3/25/48	4,736,408	329,180
REMICs IFB Ser. 20-41, Class SE, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.671%, 6/25/50	5,339,397	491,376
REMICs IFB Ser. 16-50, Class SM, IO, ((-1 x US 30 Day Average SOFR) + 5.99%), 0.671%, 8/25/46	8,295,007	421,025
REMICs IFB Ser. 19-51, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.621%, 9/25/49	7,673,323	641,594
REMICs IFB Ser. 16-8, Class SA, IO, ((-1 x US 30 Day Average SOFR) + 5.94%), 0.621%, 3/25/46	8,125,195	670,963
REMICs IFB Ser. 19-71, Class CS, IO, ((-1 x US 30 Day Average SOFR) + 5.89%), 0.571%, 11/25/49	2,616,835	304,309
REMICs IFB Ser. 19-83, Class QS, IO, ((-1 x US 30 Day Average SOFR) + 5.84%), 0.521%, 1/25/50	15,156,888	1,467,694
REMICs Ser. 01-79, Class BI, IO, 0.237%, 3/25/45 ^W	691,406	1,729
REMICs Ser. 03-34, PO, zero %, 4/25/43	35,965	29,250
REMICs Ser. 08-53, Class DO, PO, zero %, 7/25/38	84,466	66,523
REMICs Ser. 07-14, Class KO, PO, zero %, 3/25/37	2,887	2,241
REMICs Ser. 06-84, Class OT, PO, zero %, 9/25/36	870	669
Government National Mortgage Association		
Ser. 16-75, Class LI, IO, 6.00%, 1/20/40	2,946,340	495,436
Ser. 20-167, Class IT, IO, 5.00%, 9/20/47	5,304,903	1,053,585
Ser. 15-89, Class LI, IO, 5.00%, 12/20/44	3,673,739	722,110
Ser. 14-76, IO, 5.00%, 5/20/44	2,083,082	412,362
Ser. 13-51, Class QI, IO, 5.00%, 2/20/43	2,615,756	351,634
Ser. 13-6, Class OI, IO, 5.00%, 1/20/43	5,987,302	1,106,932
Ser. 10-35, Class UI, IO, 5.00%, 3/20/40	999,987	204,417
Ser. 10-9, Class UI, IO, 5.00%, 1/20/40	4,893,516	1,007,771
Ser. 09-121, Class UI, IO, 5.00%, 12/20/39	2,919,742	596,941
Ser. 18-1, IO, 4.50%, 1/20/48	4,109,781	813,935
Ser. 13-34, Class HI, IO, 4.50%, 3/20/43	3,507,449	636,607
Ser. 13-39, Class IJ, IO, 4.50%, 3/20/43	4,585,710	852,698
Ser. 10-35, Class AI, IO, 4.50%, 3/20/40	3,174,298	538,795
Ser. 10-35, Class DI, IO, 4.50%, 3/20/40	4,977,306	907,363
Ser. 10-35, Class QI, IO, 4.50%, 3/20/40	1,237,238	214,391
Ser. 09-121, Class CI, IO, 4.50%, 12/16/39	3,247,640	594,951
Ser. 15-53, Class MI, IO, 4.00%, 4/16/45	3,247,040	598,429
Ser. 14-2, Class IL, IO, 4.00%, 1/16/44	622,487	102,621
Ser. 14-100, Class NI, IO, 4.00%, 6/20/43	2,077,461	129,126
Ser. 13-165, Class IL, IO, 4.00%, 3/20/43	1,066,254	164,154
Ser. 12-56, Class IB, IO, 4.00%, 4/20/42	2,921,576	495,870

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Agency collateralized mortgage obligations cont.		
Government National Mortgage Association		
Ser. 12-38, Class MI, IO, 4.00%, 3/20/42	\$5,606,770	\$945,470
Ser. 14-182, Class BI, IO, 4.00%, 1/20/39	4,729,011	458,496
Ser. 21-177, Class IG, IO, 3.50%, 10/20/51	15,996,387	2,348,985
Ser. 20-175, Class JI, IO, 3.50%, 11/20/50	11,349,504	1,973,261
Ser. 15-168, Class IG, IO, 3.50%, 3/20/43	1,848,004	240,200
Ser. 12-136, IO, 3.50%, 11/20/42	5,465,684	782,778
Ser. 14-102, Class IG, IO, 3.50%, 3/16/41	675,792	29,805
Ser. 15-52, Class KI, IO, 3.50%, 11/20/40	1,217,042	75,822
Ser. 21-176, Class GI, IO, 3.00%, 10/20/51	7,970,811	1,151,702
Ser. 21-188, Class IU, IO, 3.00%, 10/20/51	5,223,267	1,022,573
Ser. 21-188, Class IW, IO, 3.00%, 10/20/51	8,399,262	1,342,664
Ser. 21-76, Class NI, IO, 3.00%, 8/20/50	11,307,408	1,767,348
Ser. 14-174, Class AI, IO, 3.00%, 11/16/29	1,490,870	72,754
IFB Ser. 23-140, Class JS, IO, ((-2.488 x US 30 Day Average SOFR) + 16.05%), 2.936%, 9/20/53	1,265,308	1,143,513
Ser. 16-H13, Class IK, IO, 2.66%, 6/20/66 ^W	10,868,975	886,332
Ser. 21-7, Class MI, IO, 2.50%, 1/20/51	12,485,411	1,693,575
Ser. 21-8, Class IP, IO, 2.50%, 1/20/51	27,692,227	3,818,678
Ser. 20-162, Class UI, IO, 2.50%, 10/20/50	8,149,973	1,056,141
Ser. 20-138, Class IB, IO, 2.50%, 9/20/50	17,961,768	2,319,901
Ser. 16-H04, Class HI, IO, 2.357%, 7/20/65 ^W	6,868,083	183,378
Ser. 16-H07, Class PI, IO, 2.293%, 3/20/66 ^W	18,963,847	1,242,385
Ser. 16-H24, IO, 2.156%, 9/20/66 ^W	12,673,684	957,961
IFB Ser. 23-66, Class PS, ((-2.5 x US 30 Day Average SOFR) + 15.38%), 2.089%, 5/20/53	2,825,448	2,656,209
Ser. 15-H23, Class TI, IO, 1.88%, 9/20/65 ^W	12,223,804	499,954
Ser. 15-H23, Class DI, IO, 1.854%, 9/20/65 ^W	3,924,782	177,400
Ser. 17-H23, Class BI, IO, 1.821%, 11/20/67 ^W	7,854,230	354,226
IFB Ser. 23-20, Class SP, IO, ((-1 x US 30 Day Average SOFR) + 7.00%), 1.686%, 2/20/53	23,229,309	1,306,821
Ser. 14-H25, Class BI, IO, 1.608%, 12/20/64 ^W	10,988,571	285,022
IFB Ser. 23-84, Class UA, ((-2 x US 30 Day Average SOFR) + 12.00%), 1.371%, 6/20/53	1,640,582	1,341,450
IFB Ser. 13-182, Class SP, IO, ((-1 x CME Term SOFR 1 Month) + 6.59%), 1.261%, 12/20/43	2,791,582	246,999
IFB Ser. 11-156, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 6.49%), 1.161%, 4/20/38	4,069,264	370,386
Ser. 17-H14, Class LI, IO, 0.983%, 6/20/67 ^W	6,144,357	278,917
IFB Ser. 21-98, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.861%, 6/20/51	9,588,239	959,591
IFB Ser. 21-77, Class SM, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.861%, 5/20/51	10,582,360	1,042,020
IFB Ser. 20-133, Class CS, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.861%, 9/20/50	9,512,438	997,626
IFB Ser. 20-112, Class MS, IO, ((-1 x CME Term SOFR 1 Month) + 6.19%), 0.861%, 8/20/50	5,182,985	531,308
Ser. 17-H20, Class AI, IO, 0.848%, 10/20/67 ^W	19,365,235	716,998
IFB Ser. 13-87, Class SA, IO, ((-1 x CME Term SOFR 1 Month) + 6.09%), 0.761%, 6/20/43	6,894,334	522,713

MORTGAGE-BACKED SECURITIES (84.0%)* <i>cont.</i>	Principal amount	Value
Agency collateralized mortgage obligations <i>cont.</i>		
Government National Mortgage Association		
Ser. 15-H20, Class CI, IO, 0.749%, 8/20/65 ^W	\$18,055,497	\$893,747
FRB Ser. 16-H19, Class AI, IO, 0.73%, 9/20/66 ^W	20,362,242	761,100
FRB Ser. 15-H16, Class XI, IO, 0.724%, 7/20/65 ^W	7,655,960	362,893
IFB Ser. 19-56, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 6.04%), 0.711%, 5/20/49	4,577,056	352,534
IFB Ser. 10-20, Class SC, IO, ((-1 x CME Term SOFR 1 Month) + 6.04%), 0.711%, 2/20/40	435,883	32,691
IFB Ser. 19-158, Class AS, IO, ((-1 x CME Term SOFR 1 Month) + 6.04%), 0.705%, 9/16/43	5,512,408	425,961
Ser. 15-H14, Class AI, IO, 0.692%, 6/20/65 ^W	20,772,877	737,099
IFB Ser. 16-80, Class SD, IO, ((-1 x CME Term SOFR 1 Month) + 5.99%), 0.661%, 6/20/46	6,561,358	547,276
IFB Ser. 23-56, Class SK, IO, ((-1 x CME Term SOFR 1 Month) + 5.94%), 0.611%, 4/20/51	12,697,931	1,015,917
IFB Ser. 19-125, Class SG, IO, ((-1 x CME Term SOFR 1 Month) + 5.94%), 0.611%, 10/20/49	7,989,414	825,553
IFB Ser. 19-110, Class SQ, IO, ((-1 x CME Term SOFR 1 Month) + 5.94%), 0.611%, 9/20/49	5,859,144	478,972
Ser. 16-H18, Class QI, IO, 0.57%, 6/20/66 ^W	12,024,225	515,394
IFB Ser. 19-121, Class SD, IO, ((-1 x CME Term SOFR 1 Month) + 5.89%), 0.561%, 10/20/49	7,975,551	853,440
IFB Ser. 20-47, Class SA, IO, ((-1 x CME Term SOFR 1 Month) + 5.89%), 0.561%, 5/20/44	11,007,033	750,680
IFB Ser. 23-40, Class SP, IO, ((-1 x US 30 Day Average SOFR) + 5.65%), 0.336%, 3/20/53	36,017,622	1,112,826
IFB Ser. 23-43, Class S, IO, ((-1 x US 30 Day Average SOFR) + 5.60%), 0.286%, 3/20/53	49,874,558	1,393,804
IFB Ser. 22-209, Class SG, IO, ((-1 x US 30 Day Average SOFR) + 5.60%), 0.286%, 12/20/52	33,067,250	1,482,051
Ser. 18-H19, Class JI, IO, 0.276%, 10/20/68 ^W	13,107,119	405,090
Ser. 15-H13, Class AI, IO, 0.246%, 6/20/65 ^W	11,645,404	449,163
Ser. 17-H08, Class GI, IO, 0.229%, 2/20/67 ^W	8,674,234	690,462
Ser. 17-H03, Class KI, IO, 0.178%, 1/20/67 ^W	14,356,307	1,111,178
IFB Ser. 14-119, Class SA, IO, ((-1 x CME Term SOFR 1 Month) + 5.49%), 0.161%, 8/20/44	3,118,310	200,988
Ser. 18-H01, Class XI, IO, 0.107%, 1/20/68 ^W	11,618,172	695,454
Ser. 16-H27, Class GI, IO, 0.102%, 12/20/66 ^W	16,680,609	743,505
Ser. 15-H22, Class AI, IO, 0.098%, 9/20/65 ^W	18,067,159	805,795
Ser. 17-H25, Class CI, IO, 0.097%, 12/20/67 ^W	12,931,008	722,984
Ser. 16-H24, Class JI, IO, 0.091%, 11/20/66 ^W	3,630,576	167,861
Ser. 15-H10, Class HI, IO, 0.075%, 4/20/65 ^W	15,075,413	539,700
Ser. 16-H06, Class DI, IO, 0.07%, 7/20/65 ^W	11,979,033	225,481
Ser. 17-H06, Class MI, IO, 0.064%, 2/20/67 ^W	14,569,281	454,314
Ser. 18-H02, Class IM, IO, 0.059%, 2/20/68 ^W	8,855,757	475,150
Ser. 14-H21, Class AI, IO, 0.052%, 10/20/64 ^W	13,840,268	376,857
Ser. 17-H04, Class BI, IO, 0.038%, 2/20/67 ^W	9,889,956	355,277
Ser. 16-H03, Class AI, IO, 0.034%, 1/20/66 ^W	9,663,778	301,041
Ser. 16-H23, Class NI, IO, 0.03%, 10/20/66 ^W	20,716,580	776,872
Ser. 17-H25, IO, 0.027%, 11/20/67 ^W	8,900,349	276,463

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Agency collateralized mortgage obligations cont.		
Government National Mortgage Association		
Ser. 15-H04, Class AI, IO, 0.023%, 12/20/64 ^W	\$11,968,062	\$308,001
Ser. 17-H10, Class MI, IO, 0.021%, 4/20/67 ^W	10,516,186	276,576
Ser. 17-H08, Class NI, IO, 0.019%, 3/20/67 ^W	9,149,480	269,910
Ser. 17-H09, IO, 0.014%, 4/20/67 ^W	9,356,191	220,525
Ser. 18-H04, Class JI, IO, zero %, 3/20/68 ^W	11,848,293	427,723
Ser. 16-H10, Class AI, IO, zero %, 4/20/66 ^W	16,753,946	246,484
		121,142,257
Commercial mortgage-backed securities (31.6%)		
BANK 144A Ser. 18-BN11, Class D, 3.00%, 3/15/61	839,000	492,097
Barclays Commercial Mortgage Trust 144A Ser. 19-C4, Class E, 3.25%, 8/15/52	2,034,000	1,153,648
Benchmark Mortgage Trust FRB Ser. 18-B1, Class C, 4.329%, 1/15/51 ^W	1,099,000	766,967
Benchmark Mortgage Trust 144A		
FRB Ser. 18-B3, Class D, 3.176%, 4/10/51 ^W	3,362,000	1,824,313
Ser. 19-B11, Class D, 3.00%, 5/15/52	2,608,000	1,588,595
Ser. 18-B1, Class E, 3.00%, 1/15/51 ^W	1,840,000	963,866
Ser. 19-B13, Class D, 2.50%, 8/15/57	1,579,000	870,819
BWAY Mortgage Trust 144A FRB Ser. 22-26BW, Class F, 5.029%, 2/10/44 ^W	2,305,000	1,372,321
CD Commercial Mortgage Trust		
FRB Ser. 17-CD3, Class C, 4.696%, 2/10/50 ^W	1,638,000	881,886
Ser. 17-CD3, Class B, 3.984%, 2/10/50 ^W	826,000	535,155
CD Commercial Mortgage Trust 144A		
Ser. 17-CD3, Class D, 3.25%, 2/10/50	2,287,000	1,023,818
Ser. 19-CD8, Class D, 3.00%, 8/15/57	1,450,000	898,275
Citigroup Commercial Mortgage Trust FRB Ser. 15-GC27, Class C, 4.566%, 2/10/48 ^W	1,731,000	1,530,475
Citigroup Commercial Mortgage Trust 144A		
FRB Ser. 15-GC27, Class D, 4.566%, 2/10/48 ^W	1,018,000	870,513
Ser. 15-P1, Class D, 3.225%, 9/15/48	2,419,000	1,932,895
Ser. 15-GC27, Class E, 3.00%, 2/10/48	1,664,000	1,056,390
FRB Ser. 12-GC8, Class C, 2.577%, 9/10/45 ^W	1,239,489	1,134,113
COMM Mortgage Trust		
FRB Ser. 14-CR16, Class C, 5.08%, 4/10/47 ^W	1,741,904	1,466,066
FRB Ser. 13-CR13, Class C, 4.95%, 11/10/46 ^W	1,414,000	1,275,315
FRB Ser. 14-UBS3, Class C, 4.893%, 6/10/47 ^W	956,000	812,305
FRB Ser. 14-UBS4, Class C, 4.806%, 8/10/47 ^W	1,053,060	842,013
Ser. 13-CR12, Class AM, 4.30%, 10/10/46	1,570,000	1,366,937
Ser. 15-DC1, Class B, 4.035%, 2/10/48 ^W	1,285,000	1,115,533
FRB Ser. 15-CR26, Class D, 3.614%, 10/10/48 ^W	1,696,375	1,128,748
COMM Mortgage Trust 144A		
FRB Ser. 13-LC13, Class D, 5.387%, 8/10/46 ^W	2,546,000	2,222,302
FRB Ser. 14-CR17, Class D, 5.006%, 5/10/47 ^W	3,623,000	3,279,124
FRB Ser. 13-CR13, Class D, 4.95%, 11/10/46 ^W	1,906,000	1,484,687
FRB Ser. 14-UBS4, Class D, 4.868%, 8/10/47 ^W	757,000	526,701
FRB Ser. 14-CR19, Class D, 4.853%, 8/10/47 ^W	1,317,000	1,176,439
FRB Ser. 13-CR7, Class D, 4.398%, 3/10/46 ^W	846,617	732,324

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Commercial mortgage-backed securities cont.		
COMM Mortgage Trust 144A		
FRB Ser. 15-LC19, Class E, 4.354%, 2/10/48 ^W	\$1,786,000	\$1,341,451
Ser. 12-CR4, Class B, 3.703%, 10/15/45	2,219,000	1,356,505
Ser. 13-LC6, Class E, 3.50%, 1/10/46	701,000	549,995
Ser. 17-COR2, Class D, 3.00%, 9/10/50	1,765,000	1,200,200
FRB Ser. 18-COR3, Class D, 2.961%, 5/10/51 ^W	869,000	444,006
Ser. 15-LC19, Class D, 2.867%, 2/10/48	1,240,000	1,084,722
CSAIL Commercial Mortgage Trust		
FRB Ser. 15-C3, Class C, 4.497%, 8/15/48 ^W	922,000	668,039
FRB Ser. 15-C2, Class C, 4.314%, 6/15/57 ^W	1,876,000	1,416,584
FRB Ser. 15-C2, Class D, 4.314%, 6/15/57 ^W	3,030,000	1,714,307
CSAIL Commercial Mortgage Trust 144A		
FRB Ser. 18-C14, Class D, 5.064%, 11/15/51 ^W	1,300,000	839,758
Ser. 19-C17, Class D, 2.50%, 9/15/52	1,828,000	961,699
DBUBS Mortgage Trust 144A FRB Ser. 11-LC3A, Class D, 5.537%, 8/10/44 ^W		
	3,130,228	2,774,922
Federal Home Loan Mortgage Corporation 144A Multifamily Structured Credit Risk FRB Ser. 21-MN3, Class M2, 9.315%, 11/25/51		
	2,289,000	2,172,203
GS Mortgage Securities Corp., II 144A FRB Ser. 13-GC10, Class D, 4.688%, 2/10/46 ^W		
	2,209,000	1,910,595
GS Mortgage Securities Trust		
FRB Ser. 14-GC18, Class C, 5.234%, 1/10/47 ^W	4,153,000	2,284,150
FRB Ser. 14-GC22, Class C, 4.842%, 6/10/47 ^W	1,431,000	1,089,938
GS Mortgage Securities Trust 144A		
FRB Ser. 10-C1, Class D, 6.57%, 8/10/43 ^W	742,000	588,765
FRB Ser. 14-GC24, Class D, 4.657%, 9/10/47 ^W	4,747,000	2,042,452
Ser. 17-GS5, Class D, 3.509%, 3/10/50 ^W	1,021,000	480,921
JPMBB Commercial Mortgage Securities Trust FRB Ser. 14-C22, Class C, 4.70%, 9/15/47 ^W		
	2,294,000	1,989,499
JPMBB Commercial Mortgage Securities Trust 144A		
FRB Ser. 14-C19, Class C19, 4.781%, 4/15/47 ^W	732,000	680,759
FRB Ser. C14, Class D, 4.385%, 8/15/46 ^W	4,088,000	2,123,445
FRB Ser. 13-C12, Class E, 4.101%, 7/15/45 ^W	1,235,000	801,515
JPMCC Commercial Mortgage Securities Trust 144A FRB Ser. 17-JP7, Class D, 4.529%, 9/15/50 ^W		
	1,453,000	986,822
JPMDB Commercial Mortgage Securities Trust		
FRB Ser. 18-C8, Class C, 4.923%, 6/15/51 ^W	504,000	403,200
Ser. 17-C5, Class C, 4.512%, 3/15/50 ^W	1,858,000	1,309,304
JPMDB Commercial Mortgage Securities Trust 144A FRB Ser. 16-C2, Class D, 3.481%, 6/15/49 ^W		
	2,330,000	1,404,523
JPMorgan Chase Commercial Mortgage Securities Trust		
Ser. 06-LDP9, Class AMS, 5.337%, 5/15/47	1,656,986	1,560,723
FRB Ser. 13-LC11, Class D, 4.261%, 4/15/46 ^W	2,891,000	1,781,516
FRB Ser. 13-C10, Class C, 4.25%, 12/15/47 ^W	1,191,831	1,038,946
Ser. 13-LC11, Class B, 3.499%, 4/15/46	725,000	633,291
JPMorgan Chase Commercial Mortgage Securities Trust 144A		
FRB Ser. 11-C3, Class D, 5.71%, 2/15/46 ^W	2,164,000	1,472,111
FRB Ser. 11-C3, Class E, 5.71%, 2/15/46 ^W	1,629,000	618,651
FRB Ser. 13-C16, Class D, 5.10%, 12/15/46 ^W	1,295,000	1,133,181

MORTGAGE-BACKED SECURITIES (84.0%)* <i>cont.</i>	Principal amount	Value
Commercial mortgage-backed securities <i>cont.</i>		
Morgan Stanley Bank of America Merrill Lynch Trust		
FRB Ser. 15-C25, Class C, 4.668%, 10/15/48 ^W	\$1,824,000	\$1,598,009
FRB Ser. 14-C16, Class B, 4.438%, 6/15/47 ^W	1,695,000	1,549,230
FRB Ser. 15-C22, Class C, 4.341%, 4/15/48 ^W	1,539,000	1,348,064
FRB Ser. 17-C34, Class C, 4.314%, 11/15/52 ^W	751,000	597,330
FRB Ser. 13-C9, Class C, 3.884%, 5/15/46 ^W	946,000	756,800
Morgan Stanley Bank of America Merrill Lynch Trust 144A		
FRB Ser. 13-C12, Class D, 5.074%, 10/15/46 ^W	479,000	397,222
FRB Ser. 13-C12, Class E, 5.074%, 10/15/46 ^W	2,040,618	1,599,936
FRB Ser. 12-C6, Class E, 4.531%, 11/15/45 ^W	1,677,000	1,090,050
FRB Ser. 12-C6, Class G, 4.50%, 11/15/45 ^W	1,288,000	448,482
FRB Ser. 15-C24, Class E, 4.468%, 5/15/48 ^W	1,780,000	1,301,180
FRB Ser. 15-C23, Class D, 4.276%, 7/15/50 ^W	1,524,000	1,281,413
FRB Ser. 13-C10, Class F, 4.095%, 7/15/46 ^W	2,316,000	116,300
FRB Ser. 13-C9, Class D, 3.972%, 5/15/46 ^W	1,122,000	830,280
Ser. 14-C19, Class D, 3.25%, 12/15/47	1,810,000	1,494,895
Morgan Stanley Capital I Trust 144A		
FRB Ser. 12-C4, Class E, 5.336%, 3/15/45 ^W	2,436,000	1,759,036
FRB Ser. 11-C3, Class E, 5.109%, 7/15/49 ^W	2,770,977	2,586,714
Multifamily Connecticut Avenue Securities Trust 144A FRB		
Ser. 19-01, Class M10, 8.679%, 10/25/49	5,770,097	5,620,404
PFP, Ltd. 144A FRB Ser. 21-8, Class A, 6.446%, 8/9/37 (Cayman Islands)		
	824,474	812,476
Ready Capital Mortgage Financing, LLC 144A FRB Ser. 22-FL9, Class A, 7.787%, 6/25/37		
	1,081,422	1,080,596
UBS Commercial Mortgage Trust		
FRB Ser. 18-C11, Class C, 5.035%, 6/15/51 ^W	1,439,000	1,066,440
FRB Ser. 17-C3, Class C, 4.535%, 8/15/50 ^W	3,138,000	2,509,201
UBS Commercial Mortgage Trust 144A		
FRB Ser. 12-C1, Class E, 5.00%, 5/10/45 ^W	1,698,804	1,262,211
FRB Ser. 18-C11, Class D, 3.00%, 6/15/51 ^W	2,564,000	1,555,736
Wells Fargo Commercial Mortgage Trust		
FRB Ser. 16-NXS5, Class D, 5.143%, 1/15/59 ^W	1,174,000	627,795
FRB Ser. 18-C46, Class C, 5.136%, 8/15/51 ^W	823,000	656,497
FRB Ser. 15-C31, Class C, 4.748%, 11/15/48 ^W	1,373,000	1,208,917
FRB Ser. 15-SG1, Class B, 4.601%, 9/15/48 ^W	2,091,000	1,828,926
FRB Ser. 15-C29, Class D, 4.359%, 6/15/48 ^W	1,407,000	1,206,579
FRB Ser. 20-C57, Class C, 4.157%, 8/15/53 ^W	418,000	328,325
Ser. 15-C31, Class D, 3.852%, 11/15/48	1,248,000	938,877
Ser. 16-BNK1, Class C, 3.071%, 8/15/49 ^W	790,000	447,825
Wells Fargo Commercial Mortgage Trust 144A		
FRB Ser. 15-C31, Class E, 4.748%, 11/15/48 ^W	1,550,000	904,901
FRB Ser. 15-C30, Class D, 4.648%, 9/15/58 ^W	522,500	389,912
Ser. 17-RB1, Class D, 3.401%, 3/15/50	1,983,000	896,693
Ser. 16-C33, Class D, 3.123%, 3/15/59	1,822,000	1,297,557
Ser. 20-C55, Class D, 2.50%, 2/15/53	1,820,000	901,524
WF-RBS Commercial Mortgage Trust Ser. 14-C21, Class C, 4.234%, 8/15/47 ^W		
	2,558,000	2,145,858

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Commercial mortgage-backed securities cont.		
WF-RBS Commercial Mortgage Trust 144A		
Ser. 11-C4, Class E, 4.993%, 6/15/44 ^W	\$1,659,568	\$1,128,007
FRB Ser. 12-C9, Class D, 4.876%, 11/15/45 ^W	980,430	932,174
FRB Ser. 12-C9, Class E, 4.876%, 11/15/45 ^W	730,000	630,300
FRB Ser. 13-C11, Class D, 4.195%, 3/15/45 ^W	2,116,000	1,482,399
		129,798,409
Residential mortgage-backed securities (non-agency) (22.9%)		
American Home Mortgage Investment Trust FRB Ser. 07-1, Class GA1C, (CME Term SOFR 1 Month + 0.30%), 5.624%, 5/25/47	5,127,555	2,992,469
Arroyo Mortgage Trust 144A Ser. 19-3, Class M1, 4.204%, 10/25/48 ^W	750,000	613,600
Bayview Financial Mortgage Pass-Through Trust Ser. 06-C, Class 1A3, 6.528%, 11/28/36	3,343,825	3,104,728
Bear Stearns Alt-A Trust		
FRB Ser. 05-10, Class 11A1, (CME Term SOFR 1 Month + 0.61%), 5.934%, 1/25/36	203,754	180,842
FRB Ser. 05-8, Class 21A1, 4.749%, 10/25/35 ^W	359,244	295,369
Carrington Mortgage Loan Trust FRB Ser. 06-NC2, Class A4, (CME Term SOFR 1 Month + 0.59%), 5.914%, 6/25/36	2,988,758	2,813,441
Countrywide Alternative Loan Trust FRB Ser. 06-OA19, Class A1, (CME Term SOFR 1 Month + 0.29%), 5.619%, 2/20/47	1,858,003	1,406,877
Countrywide Asset-Backed Certificates FRB Ser. 07-10, Class 1A1, (CME Term SOFR 1 Month + 0.29%), 5.614%, 6/25/47	3,754,661	3,474,194
CSMC Trust 144A FRB Ser. 20-RPL2, Class A12, 3.513%, 2/25/60 ^W	1,864,874	1,869,153
Eagle Re, Ltd. 144A FRB Ser. 20-1, Class B1, (ICE LIBOR USD 1 Month + 2.85%), 8.284%, 1/25/30 (Bermuda)	765,000	765,151
Federal Home Loan Mortgage Corporation		
Structured Agency Credit Risk Debt FRN Ser. 15-DNA3, Class B, (US 30 Day Average SOFR + 9.46%), 14.779%, 4/25/28	329,248	359,207
Structured Agency Credit Risk Debt FRN Ser. 15-HQA1, Class B, (US 30 Day Average SOFR + 8.91%), 14.229%, 3/25/28	2,714,238	2,797,092
Structured Agency Credit Risk Debt FRN Ser. 16-DNA3, Class M3, (US 30 Day Average SOFR + 5.11%), 10.429%, 12/25/28	2,351,314	2,510,104
Federal Home Loan Mortgage Corporation 144A		
Structured Agency Credit Risk Trust FRB Ser. 19-HQA2, Class B2, (US 30 Day Average SOFR + 11.36%), 16.679%, 4/25/49	637,000	762,619
Structured Agency Credit Risk Trust FRB Ser. 18-HQA2, Class B2, (US 30 Day Average SOFR + 11.11%), 16.429%, 10/25/48	2,108,000	2,589,668
Structured Agency Credit Risk Trust FRB Ser. 19-DNA1, Class B2, (US 30 Day Average SOFR + 10.86%), 16.179%, 1/25/49	4,520,000	5,525,766
Structured Agency Credit Risk Trust FRB Ser. 19-DNA2, Class B2, (US 30 Day Average SOFR + 10.61%), 15.929%, 3/25/49	282,000	331,086
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA4, Class B2, (US 30 Day Average SOFR + 10.11%), 15.429%, 8/25/50	2,647,000	3,386,506
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B2, (US 30 Day Average SOFR + 10.11%), 15.429%, 7/25/50	916,000	1,143,855
Structured Agency Credit Risk Trust REMICs FRB Ser. 22-DNA3, Class B2, (US 30 Day Average SOFR + 9.75%), 15.065%, 4/25/42	350,000	377,817
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA2, Class B2, (US 30 Day Average SOFR + 7.71%), 13.029%, 3/25/50	1,000,000	1,099,304
Structured Agency Credit Risk Trust FRB Ser. 19-DNA4, Class B2, (US 30 Day Average SOFR + 6.36%), 11.679%, 10/25/49	1,070,000	1,135,945

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Residential mortgage-backed securities (non-agency) cont.		
Federal Home Loan Mortgage Corporation 144A		
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA3, Class B1, (US 30 Day Average SOFR + 5.86%), 11.179%, 7/25/50	\$1,821,077	\$1,983,620
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA4, Class B1, (US 30 Day Average SOFR + 5.36%), 10.679%, 9/25/50	759,116	819,242
Structured Agency Credit Risk Trust FRB Ser. 19-FTR3, Class FTR3, (US 30 Day Average SOFR + 4.91%), 10.202%, 9/25/47	371,000	365,899
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-DNA5, Class B1, (US 30 Day Average SOFR + 4.80%), 10.115%, 10/25/50	3,100,000	3,371,734
Structured Agency Credit Risk Trust REMICs FRB Ser. 21-DNA1, Class B2, (US 30 Day Average SOFR + 4.75%), 10.065%, 1/25/51	1,330,000	1,304,231
Structured Agency Credit Risk Trust REMICs FRB Ser. 20-HQA2, Class B1, (US 30 Day Average SOFR + 4.21%), 9.529%, 3/25/50	3,276,000	3,556,161
Seasoned Credit Risk Transfer Trust Ser. 19-2, Class M, 4.75%, 8/25/58 ^W	1,129,000	1,002,197
Seasoned Credit Risk Transfer Trust FRB Ser. 18-3, Class 3, 4.75%, 8/25/57 ^W	876,000	766,087
Seasoned Credit Risk Transfer Trust Ser. 19-4, Class M, 4.50%, 2/25/59 ^W	2,085,000	1,766,100
Federal National Mortgage Association		
Connecticut Avenue Securities FRB Ser. 16-C03, Class 2B, (US 30 Day Average SOFR + 12.86%), 18.179%, 10/25/28	466,863	550,671
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1B, (US 30 Day Average SOFR + 11.86%), 17.179%, 10/25/28	2,821,463	3,286,701
Connecticut Avenue Securities FRB Ser. 16-C04, Class 1B, (US 30 Day Average SOFR + 10.36%), 15.679%, 1/25/29	780,833	883,473
Connecticut Avenue Securities FRB Ser. 16-C06, Class 1B, (US 30 Day Average SOFR + 9.36%), 14.679%, 4/25/29	505,041	563,185
Connecticut Avenue Securities FRB Ser. 17-C02, Class 2B1, (US 30 Day Average SOFR + 5.61%), 10.929%, 9/25/29	1,518,000	1,679,033
Connecticut Avenue Securities FRB Ser. 16-C03, Class 1M2, (US 30 Day Average SOFR + 5.41%), 10.729%, 10/25/28	365,308	386,945
Connecticut Avenue Securities FRB Ser. 17-C07, Class 2B1, (US 30 Day Average SOFR + 4.56%), 9.879%, 5/25/30	2,739,000	2,964,612
Connecticut Avenue Securities FRB Ser. 17-C06, Class 1B1, (US 30 Day Average SOFR + 4.26%), 9.579%, 2/25/30	3,742,000	3,998,632
Connecticut Avenue Securities FRB Ser. 17-C07, Class 1B1, (US 30 Day Average SOFR + 4.11%), 9.429%, 5/25/30	3,800,000	4,074,512
Connecticut Avenue Securities FRB Ser. 18-C06, Class 1B1, (US 30 Day Average SOFR + 3.86%), 9.179%, 3/25/31	1,687,000	1,806,009
Federal National Mortgage Association 144A		
Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1B1, (US 30 Day Average SOFR + 6.86%), 12.179%, 2/25/40	3,455,000	3,536,868
Connecticut Avenue Securities Trust FRB Ser. 19-R01, Class 2B1, (US 30 Day Average SOFR + 4.46%), 9.779%, 7/25/31	3,187,000	3,380,212
Connecticut Avenue Securities Trust FRB Ser. 19-R03, Class 1B1, (US 30 Day Average SOFR + 4.21%), 9.529%, 9/25/31	947,000	994,770
Connecticut Avenue Securities Trust FRB Ser. 20-SBT1, Class 1M2, (US 30 Day Average SOFR + 3.76%), 9.079%, 2/25/40	1,887,000	1,963,527
Connecticut Avenue Securities Trust FRB Ser. 20-R01, Class 1B1, (US 30 Day Average SOFR + 3.36%), 8.679%, 1/25/40	347,000	349,164

MORTGAGE-BACKED SECURITIES (84.0%)* cont.	Principal amount	Value
Residential mortgage-backed securities (non-agency) cont.		
Federal National Mortgage Association 144A		
Connecticut Avenue Securities Trust FRB Ser. 20-R02, Class 2B1, (US 30 Day Average SOFR + 3.11%), 8.429%, 1/25/40	\$311,000	\$311,305
Connecticut Avenue Securities Trust FRB Ser. 22-R02, Class 2M2, (US 30 Day Average SOFR + 3.00%), 8.315%, 1/25/42	2,198,000	2,213,799
Connecticut Avenue Securities Trust FRB Ser. 19-R01, Class 2M2, (US 30 Day Average SOFR + 2.56%), 7.879%, 7/25/31	6,911	6,939
HarborView Mortgage Loan Trust FRB Ser. 05-2, Class 1A, (CME Term SOFR 1 Month + 0.63%), 5.962%, 5/19/35	951,045	290,478
Home Re, Ltd. 144A FRB Ser. 21-2, Class B1, (US 30 Day Average SOFR + 4.15%), 9.465%, 1/25/34 (Bermuda)	1,000,000	938,525
JPMorgan Alternative Loan Trust FRB Ser. 06-A6, Class 1A1, (CME Term SOFR 1 Month + 0.43%), 5.754%, 11/25/36	1,204,160	996,121
LHOME Mortgage Trust 144A		
Ser. 23-RTL2, Class A1, 8.00%, 6/25/28	641,000	636,353
Ser. 21-RTL1, Class A1, 2.09%, 2/25/26 ^W	118,554	117,883
Morgan Stanley ABS Capital I, Inc. Trust FRB Ser. 04-HE9, Class M2, (CME Term SOFR 1 Month + 1.04%), 6.364%, 11/25/34	175,638	163,845
Oaktown Re III, Ltd. 144A		
FRB Ser. 19-1A, Class B1B, (US 30 Day Average SOFR + 4.46%), 9.779%, 7/25/29 (Bermuda)	695,000	689,276
FRB Ser. 19-1A, Class B1A, (US 30 Day Average SOFR + 3.61%), 8.929%, 7/25/29 (Bermuda)	574,000	567,954
Radnor Re, Ltd. 144A Mortgage Insurance-Linked FRN Ser. 20-1, Class B1, (ICE LIBOR USD 1 Month + 3.00%), 8.434%, 1/25/30 (Bermuda)	430,000	431,978
Structured Asset Mortgage Investments II Trust FRB Ser. 06-AR7, Class A1BG, (CME Term SOFR 1 Month + 0.23%), 5.554%, 8/25/36	221,163	188,661
Towd Point Mortgage Trust 144A Ser. 19-2, Class A2, 3.75%, 12/25/58 ^W	862,000	737,013
WaMu Mortgage Pass-Through Certificates Trust FRB Ser. 05-AR8, Class 2AC2, (CME Term SOFR 1 Month + 1.03%), 6.354%, 7/25/45	546,689	484,674
Wells Fargo Home Equity Asset-Backed Securities Trust FRB Ser. 07-2, Class A3, (CME Term SOFR 1 Month + 0.57%), 5.894%, 4/25/37	607,483	582,109
		94,245,291
Total mortgage-backed securities (cost \$385,242,236)		\$345,185,957
ASSET-BACKED SECURITIES (1.1%)*		
Mello Warehouse Securitization Trust 144A		
FRB Ser. 21-3, Class E, (CME Term SOFR 1 Month + 3.36%), 8.684%, 10/22/24	\$1,286,000	\$1,269,925
FRB Ser. 21-3, Class D, (CME Term SOFR 1 Month + 2.11%), 7.434%, 10/22/24	1,410,000	1,391,494
FRB Ser. 21-3, Class A, (CME Term SOFR 1 Month + 0.96%), 6.284%, 10/22/24	510,000	506,290
Station Place Securitization Trust 144A FRB Ser. 23-2, Class A1, (CME Term SOFR 1 Month + 0.95%), 6.27%, 6/29/24	1,375,000	1,374,758
Total asset-backed securities (cost \$4,491,000)		\$4,542,467

SHORT-TERM INVESTMENTS (15.5%)*		Principal amount/ shares	Value
Putnam Short Term Investment Fund Class P 5.57% ^L	Shares	34,720,456	\$34,720,456
State Street Institutional U.S. Government Money Market Fund, Premier Class 5.29% ^P	Shares	15,096,000	15,096,000
U.S. Treasury Bills 4.995%, 11/2/23 # ^{ΔΦ}		\$7,480,000	7,445,927
U.S. Treasury Bills 5.323%, 11/16/23 ^{ΔΦ}		5,200,000	5,165,583
U.S. Treasury Bills 5.454%, 10/26/23 ^Δ		1,000,000	996,478
U.S. Treasury Bills 5.398%, 12/7/23 ^{ΔΦ}		400,000	396,102
Total short-term investments (cost \$63,823,054)			\$63,820,546

TOTAL INVESTMENTS	
Total investments (cost \$1,063,304,179)	\$1,008,208,326

Key to holding's abbreviations

bp	Basis Points
CME	Chicago Mercantile Exchange
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
OTC	Over-the-counter
PO	Principal Only
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 October 1, 2022 through September 30, 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 Putnam Investments, LLC and references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures*.

* Percentages indicated are based on net assets of \$411,001,702.

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 \$985,050 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

Δ This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at period end totaled \$3,023,177 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

Φ This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain TBA commitments at the close of the reporting period. Collateral at period end totaled \$7,387,855 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).

- 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. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- 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.

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.

FUTURES CONTRACTS OUTSTANDING at 9/30/23

	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation/(depreciation)
U.S. Treasury Note 2yr (Short)	602	\$122,031,985	\$122,031,985	Dec-23	\$469,019
Unrealized appreciation					469,019
Unrealized (depreciation)					—
Total					\$469,019

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 9/30/23

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.				
(0.7988)/US SOFR/Apr-34 (Written)	Apr-24/0.7988	\$115,721,600	\$142,892	\$136,551
(3.63)/US SOFR/Mar-26 (Written)	Mar-24/3.63	64,065,500	797,615	671,406
3.63/US SOFR/Mar-26 (Written)	Mar-24/3.63	64,065,500	797,615	(488,179)
1.8838/US SOFR/Apr-34 (Purchased)	Apr-24/1.8838	57,860,800	(423,202)	(393,453)
(3.073)/US SOFR/Jun-37 (Written)	Jun-27/3.073	53,614,900	3,900,484	2,023,426
3.073/US SOFR/Jun-37 (Written)	Jun-27/3.073	53,614,900	3,900,484	(2,005,733)
(3.32)/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	39,112,600	(3,109,452)	1,066,209
3.32/US SOFR/Oct-39 (Purchased)	Oct-29/3.32	39,112,600	(3,109,452)	(1,124,878)
(3.17)/US SOFR/Dec-35 (Purchased)	Dec-25/3.17	32,653,500	(1,697,982)	1,373,733
2.67/US SOFR/Dec-35 (Purchased)	Dec-25/2.67	32,653,500	(1,665,329)	(1,111,525)
(3.18)/US SOFR/Dec-35 (Purchased)	Dec-25/3.18	31,673,900	(1,599,532)	1,358,810
2.68/US SOFR/Dec-35 (Purchased)	Dec-25/2.68	31,673,900	(1,599,532)	(1,059,809)
(3.1625)/US SOFR/Mar-37 (Written)	Mar-27/3.1625	30,797,700	2,125,041	1,040,654
3.1625/US SOFR/Mar-37 (Written)	Mar-27/3.1625	30,797,700	2,125,041	(1,080,999)
(1.0035)/US SOFR/Mar-34 (Written)	Mar-24/1.0035	28,930,400	43,826	42,238
(3.49)/US SOFR/May-40 (Purchased)	May-30/3.49	23,214,700	(1,729,495)	593,368
3.49/US SOFR/May-40 (Purchased)	May-30/3.49	23,214,700	(1,729,495)	(438,061)
(3.101)/US SOFR/Jun-39 (Written)	Jun-29/3.101	21,231,500	1,658,180	713,166

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 9/30/23 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)
Bank of America N.A. cont.				
3.101/US SOFR/Jun-39 (Written)	Jun-29/3.101	\$21,231,500	\$1,658,180	\$(784,292)
2.0035/US SOFR/Mar-34 (Purchased)	Mar-24/2.0035	20,251,300	(157,277)	(149,455)
(3.03)/US SOFR/Feb-33 (Written)	Feb-28/3.03	19,485,700	740,457	284,686
3.03/US SOFR/Feb-33 (Written)	Feb-28/3.03	19,485,700	740,457	(497,275)
(3.03)/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	13,654,800	(873,224)	551,381
3.03/US SOFR/Mar-36 (Purchased)	Mar-26/3.03	13,654,800	(873,224)	(519,156)
(0.9876)/US SOFR/Mar-50 (Purchased)	Mar-30/0.9876	12,942,000	(4,179,735)	895,975
0.9876/US SOFR/Mar-50 (Purchased)	Mar-30/0.9876	12,942,000	(281,122)	(118,160)
(3.095)/US SOFR/Mar-36 (Written)	Mar-26/3.095	12,807,700	847,870	495,914
3.095/US SOFR/Mar-36 (Written)	Mar-26/3.095	12,807,700	847,870	(447,501)
(2.558)/US SOFR/Dec-57 (Purchased)	Dec-27/2.558	12,352,300	(1,825,670)	1,146,664
2.558/US SOFR/Dec-57 (Purchased)	Dec-27/2.558	12,352,300	(1,825,670)	(1,053,281)
(3.857)/US SOFR/Sep-38 (Written)	Sep-28/3.857	9,493,100	653,600	81,451
(3.887)/US SOFR/Sep-40 (Written)	Sep-30/3.887	9,493,100	713,881	71,863
3.887/US SOFR/Sep-40 (Written)	Sep-30/3.887	9,493,100	713,881	(116,765)
3.857/US SOFR/Sep-38 (Written)	Sep-28/3.857	9,493,100	653,600	(130,530)
(2.47)/US SOFR/Dec-57 (Purchased)	Dec-27/2.47	9,034,500	(1,341,623)	921,519
2.47/US SOFR/Dec-57 (Purchased)	Dec-27/2.47	9,034,500	(1,341,623)	(804,161)
(1.405)/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	2,526,100	(387,441)	553,519
1.405/US SOFR/Dec-58 (Purchased)	Dec-28/1.405	2,526,100	(387,441)	(273,930)
(3.343)/US SOFR/Dec-35 (Purchased)	Dec-25/3.343	700	(1,293,952)	15
3.343/US SOFR/Dec-35 (Purchased)	Dec-25/3.343	700	(1,293,952)	(23)
Barclays Bank PLC				
(1.945)/US SOFR/Jun-51 (Purchased)	Jun-31/1.945	12,539,500	(2,658,374)	759,141
1.945/US SOFR/Jun-51 (Purchased)	Jun-31/1.945	12,539,500	(675,879)	(233,862)
(3.09)/US SOFR/Dec-42 (Purchased)	Dec-32/3.09	4,715,100	(383,573)	157,390
3.09/US SOFR/Dec-42 (Purchased)	Dec-32/3.09	4,715,100	(383,573)	(126,836)
Citibank, N.A.				
(1.99)/US SOFR/Feb-42 (Purchased)	Feb-32/1.99	23,191,700	(1,826,346)	1,941,145
1.99/US SOFR/Feb-42 (Purchased)	Feb-32/1.99	23,191,700	(1,826,346)	(991,445)
(1.826)/US SOFR/Jan-42 (Purchased)	Jan-32/1.826	17,079,100	(1,261,292)	1,628,834
1.826/US SOFR/Jan-42 (Purchased)	Jan-32/1.826	17,079,100	(1,261,292)	(700,072)
(1.34)/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	14,080,100	(3,291,364)	525,047
1.34/US SOFR/Jan-61 (Purchased)	Jan-41/1.34	14,080,100	(1,175,688)	(236,686)
(3.49)/US SOFR/Oct-33 (Purchased)	Oct-23/3.49	10,317,100	(182,613)	460,143
4.05/US SOFR/Oct-33 (Written)	Oct-23/4.05	10,317,100	41,268	(160,121)
3.77/US SOFR/Oct-33 (Written)	Oct-23/3.77	10,317,100	88,727	(324,266)
(2.00)/US SOFR/Mar-51 (Purchased)	Mar-41/2.00	8,587,600	(999,597)	193,822
2.00/US SOFR/Mar-51 (Purchased)	Mar-41/2.00	8,587,600	(563,347)	(108,805)
(2.14)/US SOFR/Jun-41 (Purchased)	Jun-31/2.14	6,879,800	(887,769)	292,254
2.14/US SOFR/Jun-41 (Purchased)	Jun-31/2.14	6,879,800	(266,936)	(96,317)

FORWARD PREMIUM SWAP OPTION CONTRACTS OUTSTANDING at 9/30/23 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				
(2.98)/US SOFR/Mar-35 (Written)	Mar-30/2.98	\$68,872,500	\$3,188,797	\$1,275,519
2.98/US SOFR/Mar-35 (Written)	Mar-30/2.98	68,872,500	3,188,797	(1,584,068)
(3.19)/US SOFR/Mar-38 (Written)	Mar-28/3.19	5,530,300	385,185	161,540
3.19/US SOFR/Mar-38 (Written)	Mar-28/3.19	5,530,300	385,185	(207,607)
Goldman Sachs International				
(2.525)/US SOFR/Mar-47 (Purchased)	Mar-27/2.525	4,497,500	(634,148)	342,979
2.525/US SOFR/Mar-47 (Purchased)	Mar-27/2.525	4,497,500	(264,678)	(132,946)
JPMorgan Chase Bank N.A.				
(1.70)/US SOFR/Jan-29 (Written)	Jan-24/1.70	27,464,600	586,026	576,207
1.70/US SOFR/Jan-29 (Written)	Jan-24/1.70	27,464,600	586,026	(2,535,257)
(3.0175)/US SOFR/Dec-42 (Purchased)	Dec-32/3.0175	24,704,500	(2,081,354)	839,706
3.0175/US SOFR/Dec-42 (Purchased)	Dec-32/3.0175	24,704,500	(2,081,354)	(746,076)
(3.115)/US SOFR/Mar-43 (Written)	Mar-33/3.115	18,773,300	1,584,467	521,335
3.115/US SOFR/Mar-43 (Written)	Mar-33/3.115	18,773,300	1,584,467	(561,134)
(1.75)/US SOFR/Feb-41 (Purchased)	Feb-31/1.75	18,355,000	(2,861,545)	784,676
1.75/US SOFR/Feb-41 (Purchased)	Feb-31/1.75	18,355,000	(453,369)	(142,618)
(3.0925)/US SOFR/Mar-43 (Written)	Mar-33/3.0925	13,402,000	1,125,768	374,452
3.0925/US SOFR/Mar-43 (Written)	Mar-33/3.0925	13,402,000	1,125,768	(414,792)
(3.1525)/US SOFR/Mar-40 (Written)	Mar-30/3.1525	5,166,700	409,461	159,341
3.1525/US SOFR/Mar-40 (Written)	Mar-30/3.1525	5,166,700	409,461	(179,233)
(1.81)/US SOFR/Jan-37 (Written)	Jan-27/1.81	4,234,200	250,241	188,422
1.81/US SOFR/Jan-37 (Written)	Jan-27/1.81	4,234,200	250,241	(506,580)
Toronto-Dominion Bank				
(2.118)/US SOFR/Mar-41 (Purchased)	Mar-31/2.118	2,820,300	(373,938)	116,507
2.118/US SOFR/Mar-41 (Purchased)	Mar-31/2.118	2,820,300	(93,916)	(29,699)
Unrealized appreciation				25,321,008
Unrealized (depreciation)				(22,615,586)
Total				\$2,705,422

TBA SALE COMMITMENTS OUTSTANDING at 9/30/23 (proceeds receivable \$7,345,195)

Agency	Principal amount	Settlement date	Value
Uniform Mortgage-Backed Securities, 2.50%, 10/1/53	\$9,000,000	10/12/23	\$7,138,472
Total			\$7,138,472

OTC INTEREST RATE SWAP CONTRACTS OUTSTANDING at 9/30/23

Swap counterparty/ Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
Morgan Stanley & Co. International PLC						
\$50,000,000	\$2,110,500	\$1,162,857	9/21/27	3.30%— Annually	US SOFR— Annually	\$3,301,277
370,000,000	7,181,700	2,201,886	9/21/24	3.40%— Annually	US SOFR— Annually	9,579,913
Upfront premium received		3,364,743		Unrealized appreciation		12,881,190
Upfront premium (paid)		—		Unrealized (depreciation)		—
Total		\$3,364,743		Total		\$12,881,190

CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 9/30/23

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$6,576,000	\$222,926	\$(53)	1/6/28	3.5615%— Annually	US SOFR— Annually	\$291,493
3,461,000	593,908	(118)	1/25/53	3.007%— Annually	US SOFR— Annually	641,545
7,521,000	366,799	(99)	2/23/33	US SOFR— Annually	3.6405%— Annually	(432,304)
2,147,000	91,333	(28)	3/3/33	US SOFR— Annually	3.723%— Annually	(108,490)
7,298,000	585,737	(96)	3/15/33	3.234%— Annually	US SOFR— Annually	661,357
3,775,000	285,164	(50)	3/24/33	US SOFR— Annually	3.2975%— Annually	(321,740)
7,266,000	692,304	(96)	4/6/33	3.45%— Annually	US SOFR— Annually	767,823
6,831,000	526,875	(90)	4/20/33	US SOFR— Annually	3.283%— Annually	(585,590)
5,621,000	447,881	(74)	5/3/33	3.253%— Annually	US SOFR— Annually	493,656
6,065,000	288,633	(49)	5/17/28	US SOFR— Annually	3.261%— Annually	(333,760)
9,009,000	465,585	(103)	5/23/30	US SOFR— Annually	3.4095%— Annually	(524,946)
213,450,000	1,731,080	(65,537)	6/23/25	US SOFR— Annually	4.625%— Annually	(2,162,127)
192,994,000	5,297,685	102,327	6/23/28	3.753%— Annually	US SOFR— Annually	6,197,968
26,232,000	1,654,715	41,175	6/23/33	3.475%— Annually	US SOFR— Annually	1,824,606
38,696,000	5,562,550	(174,079)	6/23/53	US SOFR— Annually	3.17%— Annually	(5,959,288)
5,966,000	231,004	(79)	7/12/33	US SOFR— Annually	3.786%— Annually	(251,000)
6,570,000	255,179	(87)	8/4/33	US SOFR— Annually	3.7865%— Annually	(271,551)
6,028,000	123,393	(80)	8/21/33	US SOFR— Annually	4.018%— Annually	(132,401)

CENTRALLY CLEARED INTEREST RATE SWAP CONTRACTS OUTSTANDING at 9/30/23 cont.

Notional amount	Value	Upfront premium received (paid)	Termination date	Payments made by fund	Payments received by fund	Unrealized appreciation/ (depreciation)
\$5,007,000	\$75,756	\$(47)	9/5/28	4.041% — Annually	US SOFR — Annually	\$80,313
37,333,000	7,093 ^E	(27,962)	12/20/25	4.80% — Annually	US SOFR — Annually	(20,868)
183,749,000	718,459 ^E	770,295	12/20/28	4.40% — Annually	US SOFR — Annually	51,836
76,845,000	1,464,666 ^E	(1,239,904)	12/20/33	4.00% — Annually	US SOFR — Annually	224,760
16,002,000	1,043,170 ^E	(947,061)	12/20/53	3.60% — Annually	US SOFR — Annually	96,110
3,403,000	25,897	(116)	9/27/53	US SOFR — Annually	3.965% — Annually	(26,518)
6,984,000	62,716	(237)	9/28/53	3.957% — Annually	US SOFR — Annually	63,267
35,712,000	56,068	(134)	10/2/25	5.055% — Annually	US SOFR — Annually	(56,202)
8,073,000	56,188	(107)	10/2/33	US SOFR — Annually	4.358% — Annually	56,082
Total		\$(1,542,489)				\$264,031

^E Extended effective date.

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 9/30/23

Swap counterparty/ Referenced debt [†]	Rating ^{***}	Upfront premium received (paid) ^{**}	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
Citigroup Global Markets, Inc.							
CMBX NA BB.11 Index	BB-/P	\$42,375	\$75,000	\$28,553	11/18/54	500 bp — Monthly	\$13,885
CMBX NA BB.13 Index	BB-/P	75,581	756,000	306,180	12/16/72	500 bp — Monthly	(229,969)
CMBX NA BB.13 Index	BB-/P	78,819	865,000	350,325	12/16/72	500 bp — Monthly	(270,786)
CMBX NA BB.13 Index	BB-/P	82,147	901,000	364,905	12/16/72	500 bp — Monthly	(282,007)
CMBX NA BB.13 Index	BB-/P	129,386	1,371,000	555,255	12/16/72	500 bp — Monthly	(424,726)
CMBX NA BB.6 Index	B/P	617,410	920,534	292,269	5/11/63	500 bp — Monthly	325,908
CMBX NA BB.9 Index	B/P	36,851	181,000	71,658	9/17/58	500 bp — Monthly	(34,656)
CMBX NA BB.9 Index	B/P	287,137	1,406,000	556,635	9/17/58	500 bp — Monthly	(268,327)
CMBX NA BB.9 Index	B/P	1,102,022	1,964,000	777,548	9/17/58	500 bp — Monthly	326,111
CMBX NA BBB-.10 Index	BB+/P	89,090	718,000	198,312	11/17/59	300 bp — Monthly	(108,862)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 9/30/23 cont.

Swap counterparty/ Referenced debt [†]	Rating ^{***}	Upfront premium received (paid) ^{**}	Notional amount	Value	Termi- nation date	Payments received by fund	Unrealized appreciation/ (depreciation)
Citigroup Global Markets, Inc. cont.							
CMBXNA BBB-.10 Index	BB+/P	\$96,874	\$888,000	\$245,266	11/17/59	300 bp — Monthly	\$(147,947)
CMBXNA BBB-.11 Index	BBB-/P	59,693	953,000	191,077	11/18/54	300 bp — Monthly	(130,907)
CMBXNA BBB-.13 Index	BBB-/P	57,739	314,000	87,323	12/16/72	300 bp — Monthly	(29,427)
CMBXNA BBB-.15 Index	BBB-/P	136,753	512,000	122,214	11/18/64	300 bp — Monthly	14,795
CMBXNA BBB-.16 Index	BBB-/P	209,811	923,000	219,489	4/17/65	300 bp — Monthly	(9,217)
Credit Suisse International							
CMBXNA BB.7 Index	B-/P	36,784	268,798	98,622	1/17/47	500 bp — Monthly	(61,614)
Goldman Sachs International							
CMBXNAA.7 Index	BBB+/P	(1,645)	818,812	64,277	1/17/47	200 bp — Monthly	(65,648)
CMBXNA BB.14 Index	BB/P	92,164	592,000	234,018	12/16/72	500 bp — Monthly	(141,360)
CMBXNA BB.6 Index	B/P	334,697	586,011	186,059	5/11/63	500 bp — Monthly	149,127
CMBXNA BB.7 Index	B-/P	59,391	171,053	62,759	1/17/47	500 bp — Monthly	(3,226)
CMBXNA BB.7 Index	B-/P	77,674	225,790	82,843	1/17/47	500 bp — Monthly	(4,981)
CMBXNA BB.7 Index	B-/P	131,040	406,618	149,188	1/17/47	500 bp — Monthly	(17,809)
CMBXNA BBB-.11 Index	BBB-/P	64	1,000	201	11/18/54	300 bp — Monthly	(136)
CMBXNA BBB-.13 Index	BBB-/P	13,523	79,000	21,970	12/16/72	300 bp — Monthly	(8,407)
CMBXNA BBB-.15 Index	BBB-/P	15,898	172,000	41,056	11/18/64	300 bp — Monthly	(25,072)
CMBXNA BBB-.16 Index	BBB-/P	150,416	625,000	148,625	4/17/65	300 bp — Monthly	2,103
CMBXNA BBB-.16 Index	BBB-/P	209,040	804,000	191,191	4/17/65	300 bp — Monthly	18,251
JPMorgan Securities LLC							
CMBXNA BB.10 Index	B/P	28,886	360,000	161,208	5/11/63	500 bp — Monthly	(132,022)
CMBXNA BB.7 Index	B-/P	16,440	46,918	17,214	1/17/47	500 bp — Monthly	(735)
CMBXNA BB.7 Index	B-/P	158,648	316,693	116,195	1/17/47	500 bp — Monthly	42,718
CMBXNA BBB-.8 Index	BB-/P	103,543	664,000	126,359	10/17/57	300 bp — Monthly	(22,485)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 9/30/23 cont.

Swap counterparty/ Referenced debt [†]	Rating ^{***}	Upfront premium received (paid) ^{**}	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
Merrill Lynch International							
CMBX NAA.13 Index	A-/P	\$132,031	\$1,013,000	\$104,643	12/16/72	200 bp— Monthly	\$27,726
CMBX NAA.13 Index	A-/P	134,846	1,013,000	104,643	12/16/72	200 bp— Monthly	30,540
CMBX NABB.6 Index	B/P	186,736	997,593	316,736	5/11/63	500 bp— Monthly	(129,168)
CMBX NABB.7 Index	B-/P	20,331	164,211	60,249	1/17/47	500 bp— Monthly	(39,781)
Morgan Stanley & Co. International PLC							
CMBX NAA.6 Index	A+/P	(2,510)	97,106	15,576	5/11/63	200 bp— Monthly	(18,053)
CMBX NABB.13 Index	BB-/P	575	6,000	2,430	12/16/72	500 bp— Monthly	(1,850)
CMBX NABB.13 Index	BB-/P	13,129	143,000	57,915	12/16/72	500 bp— Monthly	(44,666)
CMBX NABB.13 Index	BB-/P	14,044	151,000	61,155	12/16/72	500 bp— Monthly	(46,985)
CMBX NABB.13 Index	BB-/P	14,439	153,000	61,965	12/16/72	500 bp— Monthly	(47,398)
CMBX NABB.13 Index	BB-/P	55,818	301,000	121,905	12/16/72	500 bp— Monthly	(65,837)
CMBX NABB.13 Index	BB-/P	33,293	363,000	147,015	12/16/72	500 bp— Monthly	(113,419)
CMBX NABB.13 Index	BB-/P	61,324	673,000	272,565	12/16/72	500 bp— Monthly	(210,681)
CMBX NABB.6 Index	B/P	8,315	27,479	8,724	5/11/63	500 bp— Monthly	(387)
CMBX NABB.6 Index	B/P	24,114	68,697	21,811	5/11/63	500 bp— Monthly	2,360
CMBX NABB.6 Index	B/P	67,200	95,578	30,346	5/11/63	500 bp— Monthly	36,934
CMBX NABB.7 Index	B-/P	146,668	427,145	156,719	1/17/47	500 bp— Monthly	(9,695)
CMBX NABBB-.13 Index	BBB-/P	223	3,000	834	12/16/72	300 bp— Monthly	(610)
CMBX NABBB-.13 Index	BBB-/P	1,016	5,000	1,391	12/16/72	300 bp— Monthly	(372)
CMBX NABBB-.13 Index	BBB-/P	206,939	709,000	197,173	12/16/72	300 bp— Monthly	10,121
CMBX NABBB-.15 Index	BBB-/P	13,590	80,000	19,096	11/18/64	300 bp— Monthly	(5,466)
CMBX NABBB-.16 Index	BBB-/P	15,685	69,000	16,408	4/17/65	300 bp— Monthly	(689)

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION SOLD at 9/30/23 cont.

Swap counterparty/ Referenced debt [†]	Rating ^{***}	Upfront premium received (paid) ^{**}	Notional amount	Value	Termination date	Payments received by fund	Unrealized appreciation/ (depreciation)
Morgan Stanley & Co. International PLC cont.							
CMBX NA BBB-7 Index	BB/P	\$9,392	\$119,403	\$22,687	1/17/47	300 bp — Monthly	\$(13,235)
CMBX NA BBB-9 Index	BB/P	47,282	487,000	105,289	9/17/58	300 bp — Monthly	(57,763)
Upfront premium received		5,736,886					Unrealized appreciation
Upfront premium (paid)		(4,155)					Unrealized (depreciation)
Total		\$5,732,731					Total
							\$(2,225,802)

[†] 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 September 30, 2023. Securities rated by Fitch are indicated by "F." Securities rated by Putnam are indicated by "P." The Putnam rating categories are comparable to the Standard & Poor's classifications.

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 9/30/23

Swap counterparty/ Referenced debt [†]	Upfront premium received (paid) ^{**}	Notional amount	Value	Termination date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
Citigroup Global Markets, Inc.						
CMBX NAA.6 Index	\$(20,929)	\$74,834	\$12,003	5/11/63	(200 bp) — Monthly	\$(8,950)
CMBX NAA.6 Index	(2,545)	9,206	1,477	5/11/63	(200 bp) — Monthly	(1,071)
CMBX NAA.6 Index	(1,459)	5,345	857	5/11/63	(200 bp) — Monthly	(603)
CMBX NAA.6 Index	(821)	2,970	476	5/11/63	(200 bp) — Monthly	(346)
CMBX NAA.6 Index	(821)	2,970	476	5/11/63	(200 bp) — Monthly	(346)
CMBX NAA.6 Index	(483)	1,782	286	5/11/63	(200 bp) — Monthly	(198)
CMBX NA BB.10 Index	(15,241)	139,000	62,244	11/17/59	(500 bp) — Monthly	46,887
CMBX NA BB.10 Index	(11,793)	113,000	50,601	11/17/59	(500 bp) — Monthly	38,714
CMBX NA BB.11 Index	(4,242)	45,000	17,132	11/18/54	(500 bp) — Monthly	12,852
CMBX NA BB.11 Index	(3,887)	30,000	11,421	11/18/54	(500 bp) — Monthly	7,509
CMBX NA BB.6 Index	(11,333)	47,192	14,983	5/11/63	(500 bp) — Monthly	3,611
CMBX NA BB.7 Index	(105,844)	2,027,227	743,790	1/17/47	(500 bp) — Monthly	636,256
CMBX NA BB.8 Index	(22,396)	62,814	27,556	10/17/57	(500 bp) — Monthly	5,108

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 9/30/23 cont.

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. cont.						
CMBX NA BBB-.10 Index	\$(486,410)	\$2,829,000	\$781,370	11/17/59	(300 bp) — Monthly	\$293,545
CMBX NA BBB-.10 Index	(234,757)	984,000	271,781	11/17/59	(300 bp) — Monthly	36,532
CMBX NA BBB-.10 Index	(62,719)	492,000	135,890	11/17/59	(300 bp) — Monthly	72,926
CMBX NA BBB-.10 Index	(115,406)	469,000	129,538	11/17/59	(300 bp) — Monthly	13,898
CMBX NA BBB-.10 Index	(97,719)	328,000	90,594	11/17/59	(300 bp) — Monthly	(7,289)
CMBX NA BBB-.10 Index	(39,230)	169,000	46,678	11/17/59	(300 bp) — Monthly	7,363
CMBX NA BBB-.10 Index	(2,569)	21,000	5,800	11/17/59	(300 bp) — Monthly	3,221
CMBX NA BBB-.11 Index	(159,306)	497,000	99,649	11/18/54	(300 bp) — Monthly	(59,906)
CMBX NA BBB-.11 Index	(48,685)	149,000	29,875	11/18/54	(300 bp) — Monthly	(18,885)
CMBX NA BBB-.11 Index	(21,489)	146,000	29,273	11/18/54	(300 bp) — Monthly	7,711
CMBX NA BBB-.12 Index	(527,412)	1,579,000	439,120	8/17/61	(300 bp) — Monthly	(89,082)
CMBX NA BBB-.12 Index	(529,327)	1,502,000	417,706	8/17/61	(300 bp) — Monthly	(112,372)
CMBX NA BBB-.12 Index	(206,461)	915,000	254,462	8/17/61	(300 bp) — Monthly	47,543
CMBX NA BBB-.12 Index	(53,286)	888,000	246,953	8/17/61	(300 bp) — Monthly	193,223
CMBX NA BBB-.12 Index	(74,917)	441,000	122,642	8/17/61	(300 bp) — Monthly	47,505
CMBX NA BBB-.8 Index	(199,245)	1,436,000	273,271	10/17/57	(300 bp) — Monthly	73,308
CMBX NA BBB-.8 Index	(99,623)	718,000	136,635	10/17/57	(300 bp) — Monthly	36,654
CMBX NA BBB-.8 Index	(108,544)	684,000	130,165	10/17/57	(300 bp) — Monthly	21,279
CMBX NA BBB-.8 Index	(105,625)	676,000	128,643	10/17/57	(300 bp) — Monthly	22,680
CMBX NA BBB-.8 Index	(51,919)	390,000	74,217	10/17/57	(300 bp) — Monthly	22,103
CMBX NA BBB-.9 Index	(251,259)	1,062,000	229,604	9/17/58	(300 bp) — Monthly	(22,186)
Credit Suisse International						
CMBX NA BB.10 Index	(46,565)	349,000	156,282	11/17/59	(500 bp) — Monthly	109,426
CMBX NA BB.10 Index	(41,383)	348,000	155,834	11/17/59	(500 bp) — Monthly	114,161

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 9/30/23 cont.

Swap counterparty/ Referenced debt [†]	Upfront premium received (paid)**	Notional amount	Value	Termination date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
Credit Suisse International cont.						
CMBX NA BB.10 Index	\$(22,747)	\$183,000	\$81,947	11/17/59	(500 bp) — Monthly	\$59,048
Goldman Sachs International						
CMBX NA BB.8 Index	(47,893)	125,627	55,113	10/17/57	(500 bp) — Monthly	7,115
CMBX NA BB.9 Index	(301,266)	1,891,000	748,647	9/17/58	(500 bp) — Monthly	445,805
CMBX NA BB.9 Index	(208,068)	1,317,000	521,400	9/17/58	(500 bp) — Monthly	312,234
CMBX NA BB.9 Index	(43,422)	271,000	107,289	9/17/58	(500 bp) — Monthly	63,641
CMBX NA BB.9 Index	(22,287)	140,000	55,426	9/17/58	(500 bp) — Monthly	33,022
CMBX NA BBB-.12 Index	(188,056)	1,053,000	292,839	8/17/61	(300 bp) — Monthly	104,257
CMBX NA BBB-.12 Index	(26,169)	146,000	40,603	8/17/61	(300 bp) — Monthly	14,361
JPMorgan Securities LLC						
CMBX NA BB.11 Index	(111,197)	129,030	40,967	5/11/63	(500 bp) — Monthly	(70,337)
Merrill Lynch International						
CMBX NA BB.10 Index	(9,047)	159,000	71,200	11/17/59	(500 bp) — Monthly	62,021
Morgan Stanley & Co. International PLC						
CMBX NA BB.10 Index	(196,526)	647,000	289,727	11/17/59	(500 bp) — Monthly	92,661
CMBX NA BB.8 Index	(397,971)	1,109,387	486,688	10/17/57	(500 bp) — Monthly	87,792
CMBX NA BB.8 Index	(234,901)	643,599	282,347	10/17/57	(500 bp) — Monthly	46,910
CMBX NA BB.8 Index	(111,807)	306,338	134,390	10/17/57	(500 bp) — Monthly	22,328
CMBX NA BB.8 Index	(12,320)	32,856	14,414	10/17/57	(500 bp) — Monthly	2,066
CMBX NA BB.9 Index	(3,804)	28,000	11,085	9/17/58	(500 bp) — Monthly	7,258
CMBX NA BBB-.10 Index	(196,183)	1,590,000	439,158	11/17/59	(300 bp) — Monthly	242,180
CMBX NA BBB-.10 Index	(93,128)	382,000	105,508	11/17/59	(300 bp) — Monthly	12,189
CMBX NA BBB-.10 Index	(23,716)	187,000	51,649	11/17/59	(300 bp) — Monthly	27,839
CMBX NA BBB-.10 Index	(36,186)	153,000	42,259	11/17/59	(300 bp) — Monthly	5,996
CMBX NA BBB-.10 Index	(13,217)	126,000	34,801	11/17/59	(300 bp) — Monthly	21,521

OTC CREDIT DEFAULT CONTRACTS OUTSTANDING — PROTECTION PURCHASED at 9/30/23 cont.

Swap counterparty/ Referenced debt [*]	Upfront premium received (paid)**	Notional amount	Value	Termi- nation date	Payments (paid) by fund	Unrealized appreciation/ (depreciation)
Morgan Stanley & Co. International PLC cont.						
CMBX NA BBB-.11 Index	\$(25,498)	\$162,000	\$32,481	11/18/54	(300 bp) — Monthly	\$6,902
CMBX NA BBB-.12 Index	(68,165)	300,000	83,430	8/17/61	(300 bp) — Monthly	15,115
CMBX NA BBB-.12 Index	(54,047)	259,000	72,028	8/17/61	(300 bp) — Monthly	17,852
CMBX NA BBB-.12 Index	(50,930)	246,000	68,413	8/17/61	(300 bp) — Monthly	17,359
CMBX NA BBB-.12 Index	(11,747)	38,000	10,568	8/17/61	(300 bp) — Monthly	(1,198)
CMBX NA BBB-.8 Index	(84,840)	606,000	115,322	10/17/57	(300 bp) — Monthly	30,179
CMBX NA BBB-.8 Index	(93,271)	602,000	114,561	10/17/57	(300 bp) — Monthly	18,270
CMBX NA BBB-.8 Index	(6,487)	51,000	9,705	10/17/57	(300 bp) — Monthly	3,193
CMBX NA BBB-.8 Index	(2,053)	15,000	2,855	10/17/57	(300 bp) — Monthly	794
Upfront premium received	—	Unrealized appreciation				3,653,923
Upfront premium (paid)	(6,462,599)	Unrealized (depreciation)				(392,769)
Total	\$(6,462,599)	Total				\$3,261,154

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

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

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

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

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

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

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

	Valuation inputs		
Investments in securities:	Level 1	Level 2	Level 3
Asset-backed securities	\$—	\$4,542,467	\$—
Mortgage-backed securities	—	345,185,957	—
U.S. government and agency mortgage obligations	—	593,175,780	—
U.S. treasury obligations	—	1,483,576	—
Short-term investments	15,096,000	48,724,546	—
Totals by level	\$15,096,000	\$993,112,326	\$—

	Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3
Futures contracts	\$469,019	\$—	\$—
Forward premium swap option contracts	—	2,705,422	—
TBA sale commitments	—	(7,138,472)	—
Interest rate swap contracts	—	11,322,967	—
Credit default contracts	—	1,765,220	—
Totals by level	\$469,019	\$8,655,137	\$—

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

Statement of assets and liabilities 9/30/23

ASSETS

Investment in securities, at value (Notes 1 and 8):	
Unaffiliated issuers (identified cost \$1,028,583,723)	\$973,487,870
Affiliated issuers (identified cost \$34,720,456) (Note 5)	34,720,456
Interest and other receivables	3,972,919
Receivable for shares of the fund sold	283,965
Receivable for investments sold	70,099
Receivable for sales of TBA securities (Note 1)	7,352,070
Receivable for variation margin on centrally cleared swap contracts (Note 1)	315,937
Unrealized appreciation on forward premium swap option contracts (Note 1)	25,321,008
Unrealized appreciation on OTC swap contracts (Note 1)	17,535,692
Premium paid on OTC swap contracts (Note 1)	6,466,754
Deposits with broker (Note 1)	12,604,345
Receivable from broker (Note 1)	7,258
Prepaid assets	36,366
Total assets	1,082,174,739

LIABILITIES

Payable for investments purchased	1,576
Payable for purchases of TBA securities (Note 1)	609,148,433
Payable for shares of the fund repurchased	551,933
Payable for compensation of Manager (Note 2)	135,301
Payable for custodian fees (Note 2)	19,999
Payable for investor servicing fees (Note 2)	222,561
Payable for Trustee compensation and expenses (Note 2)	512,094
Payable for administrative services (Note 2)	1,508
Payable for distribution fees (Note 2)	255,365
Payable for variation margin on futures contracts (Note 1)	61,143
Payable for variation margin on centrally cleared swap contracts (Note 1)	1,022,950
Unrealized depreciation on forward premium swap option contracts (Note 1)	22,615,586
Unrealized depreciation on OTC swap contracts (Note 1)	3,619,150
Premium received on OTC swap contracts (Note 1)	9,101,629
TBA sale commitments, at value (proceeds receivable \$7,345,195) (Note 1)	7,138,472
Collateral on certain derivative contracts, at value (Notes 1 and 8)	16,579,576
Other accrued expenses	185,761
Total liabilities	671,173,037
Net assets	\$411,001,702

REPRESENTED BY

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$809,719,871
Total distributable earnings (Note 1)	(398,718,169)
Total — Representing net assets applicable to capital shares outstanding	\$411,001,702

(Continued on next page)

Statement of assets and liabilities *cont.*

COMPUTATION OF NET ASSET VALUE AND OFFERING PRICE

Net asset value and redemption price per class A share (\$375,957,168 divided by 45,078,484 shares)	\$8.34
Offering price per class A share (100/96.00 of \$8.34)*	\$8.69
Net asset value and offering price per class B share (\$233,051 divided by 28,074 shares)**	\$8.30
Net asset value and offering price per class C share (\$2,268,328 divided by 275,301 shares)**	\$8.24
Net asset value, offering price and redemption price per class R share (\$4,517,550 divided by 549,896 shares)	\$8.22
Net asset value, offering price and redemption price per class R6 share (\$5,450,892 divided by 663,637 shares)	\$8.21
Net asset value, offering price and redemption price per class Y share (\$22,574,713 divided by 2,748,612 shares)	\$8.21

*On single retail sales of less than \$100,000. On sales of \$100,000 or more the offering price is reduced.

**Redemption price per share is equal to net asset value less any applicable contingent deferred sales charge.

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

Statement of operations Year ended 9/30/23

INVESTMENT INCOME	
Interest (including interest income of \$1,322,586 from investments in affiliated issuers) (Note 5)	\$33,958,170
Total investment income	33,958,170
EXPENSES	
Compensation of Manager (Note 2)	1,776,733
Investor servicing fees (Note 2)	951,871
Custodian fees (Note 2)	94,382
Trustee compensation and expenses (Note 2)	20,520
Distribution fees (Note 2)	1,096,031
Administrative services (Note 2)	14,904
Other	392,715
Fees waived and reimbursed by Manager (Note 2)	(10)
Total expenses	4,347,146
Expense reduction (Note 2)	(54,091)
Net expenses	4,293,055
Net investment income	29,665,115
REALIZED AND UNREALIZED GAIN (LOSS)	
Net realized gain (loss) on:	
Securities from unaffiliated issuers (Notes 1 and 3)	(62,746,763)
Futures contracts (Note 1)	7,387,810
Swap contracts (Note 1)	25,268,748
Written options (Note 1)	(25,434,282)
Total net realized loss	(55,524,487)
Change in net unrealized appreciation (depreciation) on:	
Securities from unaffiliated issuers and TBA sale commitments	9,061,811
Futures contracts	(2,742,131)
Swap contracts	(6,516,989)
Written options	21,697,696
Total change in net unrealized appreciation	21,500,387
Net loss on investments	(34,024,100)
Net decrease in net assets resulting from operations	\$(4,358,985)

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

Statement of changes in net assets

DECREASE IN NET ASSETS	Year ended 9/30/23	Year ended 9/30/22
Operations		
Net investment income	\$29,665,115	\$29,924,948
Net realized loss on investments	(55,524,487)	(149,335,022)
Change in net unrealized appreciation of investments	21,500,387	28,324,944
Net decrease in net assets resulting from operations	(4,358,985)	(91,085,130)
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class A	(55,401,156)	(23,649,447)
Class B	(56,944)	(32,892)
Class C	(381,762)	(181,093)
Class R	(594,142)	(233,305)
Class R6	(750,887)	(288,950)
Class Y	(3,393,543)	(2,187,672)
Decrease from capital share transactions (Note 4)	(7,970,161)	(102,258,803)
Total decrease in net assets	(72,907,580)	(219,917,292)
NET ASSETS		
Beginning of year	483,909,282	703,826,574
End of year	\$411,001,702	\$483,909,282

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

Financial highlights

(For a common share outstanding throughout the period)

Period ended	INVESTMENT OPERATIONS			LESS DISTRIBUTIONS	
	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
Class A					
September 30, 2023	\$9.65	.59	(.67)	(.08)	(1.23)
September 30, 2022	11.87	.55	(2.28)	(1.73)	(.49)
September 30, 2021	12.02	.53	(.19)	.34	(.14)
September 30, 2020	12.96	.48	(.87)	(.39)	(.55)
September 30, 2019	12.37	.44	.74	1.18	(.59)
Class B					
September 30, 2023	\$9.60	.52	(.67)	(.15)	(1.15)
September 30, 2022	11.81	.47	(2.27)	(1.80)	(.41)
September 30, 2021	11.97	.43	(.19)	.24	(.11)
September 30, 2020	12.89	.39	(.86)	(.47)	(.45)
September 30, 2019	12.31	.35	.72	1.07	(.49)
Class C					
September 30, 2023	\$9.54	.52	(.66)	(.14)	(1.16)
September 30, 2022	11.74	.46	(2.25)	(1.79)	(.41)
September 30, 2021	11.90	.42	(.18)	.24	(.11)
September 30, 2020	12.84	.39	(.88)	(.49)	(.45)
September 30, 2019	12.25	.35	.73	1.08	(.49)
Class R					
September 30, 2023	\$9.52	.56	(.66)	(.10)	(1.20)
September 30, 2022	11.71	.52	(2.24)	(1.72)	(.47)
September 30, 2021	11.88	.49	(.20)	.29	(.13)
September 30, 2020	12.81	.45	(.86)	(.41)	(.52)
September 30, 2019	12.23	.41	.72	1.13	(.55)
Class R6					
September 30, 2023	\$9.52	.62	(.67)	(.05)	(1.26)
September 30, 2022	11.71	.59	(2.25)	(1.66)	(.53)
September 30, 2021	11.88	.57	(.20)	.37	(.15)
September 30, 2020	12.82	.52	(.86)	(.34)	(.60)
September 30, 2019	12.24	.49	.72	1.21	(.63)
Class Y					
September 30, 2023	\$9.52	.60	(.66)	(.06)	(1.25)
September 30, 2022	11.71	.58	(2.25)	(1.67)	(.52)
September 30, 2021	11.88	.55	(.19)	.36	(.15)
September 30, 2020	12.81	.51	(.86)	(.35)	(.58)
September 30, 2019	12.23	.48	.72	1.20	(.62)

See notes to financial highlights at the end of this section.

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

				RATIOS AND SUPPLEMENTAL DATA			
From return of capital	Total distributions	Net asset value, end of period	Total return at net asset value (%) ^b	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) ^c	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%) ^d
—	(1.23)	\$8.34	(1.41)	\$375,957	.97 ^e	6.52 ^e	1,500
—	(.49)	9.65	(14.96)	442,394	.92 ^{e,f}	5.02 ^e	863
(.35)	(.49)	11.87	2.80	606,657	.78 ^{e,g}	4.29 ^{e,g}	974
—	(.55)	12.02	(3.05)	680,883	.75 ^{e,g}	3.88 ^{e,g}	916
—	(.59)	12.96	9.80	780,517	.75 ^{e,g}	3.55 ^{e,g}	1,089
—	(1.15)	\$8.30	(2.12)	\$233	1.72 ^e	5.72 ^e	1,500
—	(.41)	9.60	(15.61)	618	1.67 ^{e,f}	4.25 ^e	863
(.29)	(.40)	11.81	1.92	1,165	1.53 ^{e,g}	3.50 ^{e,g}	974
—	(.45)	11.97	(3.69)	2,190	1.50 ^{e,g}	3.14 ^{e,g}	916
—	(.49)	12.89	8.91	5,214	1.49 ^{e,g}	2.85 ^{e,g}	1,089
—	(1.16)	\$8.24	(2.07)	\$2,268	1.72 ^e	5.76 ^e	1,500
—	(.41)	9.54	(15.60)	3,467	1.67 ^{e,f}	4.25 ^e	863
(.29)	(.40)	11.74	1.94	5,938	1.53 ^{e,g}	3.44 ^{e,g}	974
—	(.45)	11.90	(3.82)	14,611	1.50 ^{e,g}	3.13 ^{e,g}	916
—	(.49)	12.84	9.04	23,972	1.50 ^{e,g}	2.83 ^{e,g}	1,089
—	(1.20)	\$8.22	(1.58)	\$4,518	1.22 ^e	6.27 ^e	1,500
—	(.47)	9.52	(15.11)	4,593	1.17 ^{e,f}	4.77 ^e	863
(.33)	(.46)	11.71	2.41	6,479	1.03 ^{e,g}	4.02 ^{e,g}	974
—	(.52)	11.88	(3.26)	7,813	1.00 ^{e,g}	3.63 ^{e,g}	916
—	(.55)	12.81	9.55	11,126	1.00 ^{e,g}	3.32 ^{e,g}	1,089
—	(1.26)	\$8.21	(1.04)	\$5,451	.56 ^e	6.94 ^e	1,500
—	(.53)	9.52	(14.58)	5,123	.53 ^{e,f}	5.40 ^e	863
(.39)	(.54)	11.71	3.07	6,069	.41 ^{e,g}	4.67 ^{e,g}	974
—	(.60)	11.88	(2.71)	5,928	.37 ^{e,g}	4.26 ^{e,g}	916
—	(.63)	12.82	10.25	7,454	.37 ^{e,g}	3.96 ^{e,g}	1,089
—	(1.25)	\$8.21	(1.17)	\$22,575	.72 ^e	6.77 ^e	1,500
—	(.52)	9.52	(14.71)	27,715	.67 ^{e,f}	5.23 ^e	863
(.38)	(.53)	11.71	2.93	77,518	.53 ^{e,g}	4.59 ^{e,g}	974
—	(.58)	11.88	(2.75)	61,132	.50 ^{e,g}	4.14 ^{e,g}	916
—	(.62)	12.81	10.12	89,152	.50 ^{e,g}	3.89 ^{e,g}	1,089

Financial highlights *cont.*

- ^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 Total return assumes dividend reinvestment and does not reflect the effect of sales charges.
- ^c Includes amounts paid through expense offset and/or brokerage service arrangements, if any (Note 2). Also excludes acquired fund fees and expenses, if any.
- ^d Portfolio turnover includes TBA purchase and sale commitments.
- ^e 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 less than 0.01% as a percentage of average net assets.
- ^f Includes one-time proxy cost of 0.01%.
- ^g Reflects an involuntary contractual expense limitation in effect during the period. As a result of such limitation, the expenses of each class reflect a reduction of the following amounts as a percentage of average net assets (Note 2):

	Percentage of average net assets
September 30, 2021	0.11%
September 30, 2020	0.14
September 30, 2019	0.15

Notes to financial statements 9/30/23

Unless otherwise noted, the “reporting period” represents the period from October 1, 2022 through September 30, 2023. The following table defines commonly used references within the Notes to financial statements:

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

Putnam Mortgage Securities Fund (the fund) is a Massachusetts business trust, which is registered under the Investment Company Act of 1940, as amended, as a diversified, 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 mortgages, mortgage-related fixed income securities and related derivatives that are either investment-grade or below-investment-grade in quality (sometimes referred to as “junk bonds”). Under normal circumstances, the fund invests at least 80% of its net assets (plus any borrowings for investment purposes) in mortgages, mortgage-related fixed income securities and related derivatives (i.e., derivatives used to acquire exposure to, or whose underlying securities are, mortgages or mortgage-related securities). The fund generally uses the net unrealized gain or loss, or market value, of mortgage-related derivatives for purposes of this policy, but may use the notional value of a derivative if that is determined to be a more appropriate measure of the fund’s investment exposure. This policy may be changed only after 60 days’ notice to shareholders.

The fund expects to invest in mortgage-backed investments that are obligations of U.S. government agencies and instrumentalities and accordingly are backed by the full faith and credit of the United States (e.g., Ginnie Mae mortgage-backed bonds) as well as in mortgage-backed investments that are backed by only the credit of a federal agency or government-sponsored entity (e.g., Fannie Mae and Freddie Mac mortgage-backed bonds), and that have short- to long-term maturities.

The fund also expects to invest in lower-rated, higher-yielding mortgage-backed securities, including non-agency residential mortgage-backed securities (which may be backed by non-qualified or “sub-prime” mortgages), commercial mortgage-backed securities, and collateralized mortgage obligations (including interest only, principal only, and other prepayment derivatives). Non-agency (i.e., privately issued) securities typically are lower-rated and higher yielding than securities issued or backed by agencies such as Ginnie Mae, Fannie Mae or Freddie Mac. The fund currently has significant investment exposure to commercial mortgage-backed securities. While the fund’s emphasis will be on mortgage-backed securities, it may also invest to a lesser extent in other types of asset-backed securities.

Putnam Management may consider, among other factors, credit, interest rate, prepayment and liquidity 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, including on mortgage-backed securities and indices, for both hedging and non-hedging purposes, including to obtain or adjust exposure to mortgage-backed investments.

The fund offers the following share classes. The expenses for each class of shares may differ based on the distribution and investor servicing fees of each class, which are identified in Note 2.

Share class	Sales charge	Contingent deferred sales charge	Conversion feature
Class A	Up to 4.00%	1.00% on certain redemptions of shares bought with no initial sales charge	None
Class B*	None	5.00% phased out over six years	Converts to class A shares after 8 years
Class C	None	1.00% eliminated after one year	Converts to class A shares after 8 years
Class R†	None	None	None
Class R6†	None	None	None
Class Y†	None	None	None

* Purchases of class B shares are closed to new and existing investors except by exchange from class B shares of another Putnam fund or through dividend and/or capital gains reinvestment.

† Not available to all investors.

In the normal course of business, the fund enters into contracts that may include agreements to indemnify another party under given circumstances. The fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be, but have not yet been, made against the fund. However, the fund's management team expects the risk of material loss to be remote.

The fund has entered into contractual arrangements with an investment adviser, administrator, distributor, shareholder servicing agent and custodian, who each provide services to the fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the fund.

Under the fund's Amended and Restated Agreement and Declaration of Trust, any claims asserted by a shareholder against or on behalf of the fund, including claims against Trustees and Officers, must be brought in state and federal courts located within the Commonwealth of Massachusetts.

Note 1: Significant accounting policies

The following is a summary of significant accounting policies consistently followed by the fund in the preparation of its financial statements. The preparation of financial statements is in conformity with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases in net assets from operations. Actual results could differ from those estimates. Subsequent events after the Statement of assets and liabilities date through the date that the financial statements were issued have been evaluated in the preparation of the financial statements.

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

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

Investments, including mortgage backed securities and short-term investments with remaining maturities of 60 days or less, are valued on the basis of valuations provided by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such service providers use information with respect to

transactions in bonds, quotations from bond dealers, market transactions in comparable securities and various relationships between securities in determining value. These securities will generally be categorized as Level 2.

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.

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.

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.

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

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

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.

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 and for yield curve positioning.

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 close of the reporting period, the fund has deposited cash valued at \$12,604,345 in a segregated account to cover margin requirements on open centrally cleared interest rate swap contracts.

Credit default contracts The fund entered into OTC and/or centrally cleared credit default contracts to hedge credit risk and 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.

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 \$2,888,907 on open derivative contracts subject to the Master Agreements. Collateral pledged by the fund at period end for these agreements totaled \$3,023,177 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. It is also the intention of the fund to distribute an amount sufficient to avoid imposition of any excise tax under Section 4982 of the Code.

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

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 September 30, 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
\$199,516,859	\$116,286,643	\$315,803,502

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 unrealized gains and losses on certain futures contracts, income on swap contracts and 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 \$10,531,709 to increase undistributed net investment income and \$10,531,709 to increase 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	\$69,334,120
Unrealized depreciation	(192,637,040)
Net unrealized depreciation	(123,302,920)
Undistributed ordinary income	40,388,253
Capital loss carryforward	(315,803,502)
Cost for federal income tax purposes	\$1,140,635,402

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:

0.550%	of the first \$5 billion,	0.350%	of the next \$50 billion,
0.500%	of the next \$5 billion,	0.330%	of the next \$50 billion,
0.450%	of the next \$10 billion,	0.320%	of the next \$100 billion and
0.400%	of the next \$10 billion,	0.315%	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 0.391% of the fund's average net assets.

Putnam Management has contractually agreed, through January 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 plans, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were not reduced as a result of this limit.

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 \$10 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.

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. received fees for investor servicing for class A, class B, class C, class R and class Y shares that included (1) a per account fee for each direct and underlying non-defined contribution account (retail account) of the fund; (2) a specified rate of the fund's assets attributable to defined contribution plan accounts; and (3) a specified rate based on the average net assets in retail accounts. Putnam Investor Services, Inc. has agreed that the aggregate investor servicing fees for each fund's retail and defined contribution accounts for these share classes will not exceed an annual rate of 0.25% of the fund's average assets attributable to such accounts.

Class R6 shares paid a monthly fee based on the average net assets of class R6 shares at an annual rate of 0.05%.

During the reporting period, the expenses for each class of shares related to investor servicing fees were as follows:

Class A	\$879,858	Class R	9,831
Class B	838	Class R6	2,824
Class C	6,067	Class Y	52,453
		Total	\$951,871

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 \$54,091 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$375, as a quarterly retainer, has been allocated to the fund, and an additional fee for each Trustee's meeting attended. Trustees also are reimbursed for expenses they incur relating to their services as Trustees.

The fund has adopted a Trustee Fee Deferral Plan (the Deferral Plan) which allows the Trustees to defer the receipt of all or a portion of Trustees fees payable on or after July 1, 1995. The deferred fees remain invested in certain Putnam funds until distribution in accordance with the Deferral Plan.

The fund has adopted an unfunded noncontributory defined benefit pension plan (the Pension Plan) covering all Trustees of the fund who have served as a Trustee for at least five years and were first elected prior to 2004. Benefits under the Pension Plan are equal to 50% of the Trustee's average annual attendance and retainer fees for the three years ended December 31, 2005. The retirement benefit is payable during a Trustee's lifetime, beginning the year following retirement, for the number of years of service through December 31, 2006. Pension expense for the fund is included in Trustee compensation and expenses in the Statement of operations. Accrued pension liability is included in Payable for Trustee compensation and expenses in the Statement of assets and liabilities. The Trustees have terminated the Pension Plan with respect to any Trustee first elected after 2003.

The fund has adopted distribution plans (the Plans) with respect to the following share classes pursuant to Rule 12b-1 under the Investment Company Act of 1940. The purpose of the Plans is to compensate Putnam Retail Management Limited Partnership, an indirect wholly-owned subsidiary of Putnam Investments, LLC, for services provided and expenses incurred in distributing shares of the fund. The Plans provide payments by the fund to Putnam Retail Management Limited Partnership at an annual rate of up to the following amounts (Maximum %) of the average net assets attributable to each class. The Trustees have approved payment by the fund at the

following annual rate (Approved %) of the average net assets attributable to each class. During the reporting period, the class-specific expenses related to distribution fees were as follows:

	Maximum %	Approved %	Amount
Class A	0.35%	0.25%	\$1,040,095
Class B	1.00%	1.00%	3,975
Class C	1.00%	1.00%	28,723
Class R	1.00%	0.50%	23,238
Total			\$1,096,031

For the reporting period, Putnam Retail Management Limited Partnership, acting as underwriter, received net commissions of \$9,331 from the sale of class A shares and received \$8 and \$63 in contingent deferred sales charges from redemptions of class B and class C shares, respectively.

A deferred sales charge of up to 1.00% is assessed on certain redemptions of class A shares. For the reporting period, Putnam Retail Management Limited Partnership, acting as underwriter, received \$238 on class A redemptions.

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)	\$17,887,058,757	\$17,059,255,447
U.S. government securities (Long-term)	\$—	\$—
Total	\$17,887,058,757	\$17,059,255,447

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. Transactions, including, if applicable, direct exchanges pursuant to share conversions, in capital shares were as follows:

Class A	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	1,010,092	\$9,117,721	947,739	\$10,520,300
Shares issued in connection with reinvestment of distributions	5,482,617	49,885,573	1,940,273	21,196,088
	6,492,709	59,003,294	2,888,012	31,716,388
Shares repurchased	(7,280,389)	(66,039,522)	(8,149,082)	(90,180,792)
Net decrease	(787,680)	\$(7,036,228)	(5,261,070)	\$(58,464,404)

Class B	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	276	\$2,541	138	\$1,502
Shares issued in connection with reinvestment of distributions	5,838	53,216	2,822	30,809
	6,114	55,757	2,960	32,311
Shares repurchased	(42,401)	(385,130)	(37,277)	(408,936)
Net decrease	(36,287)	\$(329,373)	(34,317)	\$(376,625)

Class C	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	22,498	\$201,042	44,039	\$487,703
Shares issued in connection with reinvestment of distributions	39,817	359,272	15,713	170,270
	62,315	560,314	59,752	657,973
Shares repurchased	(150,401)	(1,349,068)	(201,969)	(2,190,938)
Net decrease	(88,086)	\$(788,754)	(142,217)	\$(1,532,965)

Class R	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	69,253	\$614,601	76,433	\$844,833
Shares issued in connection with reinvestment of distributions	66,310	594,142	21,652	233,292
	135,563	1,208,743	98,085	1,078,125
Shares repurchased	(68,236)	(614,344)	(168,625)	(1,869,459)
Net increase (decrease)	67,327	\$594,399	(70,540)	\$(791,334)

Class R6	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	108,741	\$983,244	59,263	\$676,344
Shares issued in connection with reinvestment of distributions	82,714	739,992	26,443	284,888
	191,455	1,723,236	85,706	961,232
Shares repurchased	(66,182)	(571,301)	(65,483)	(712,905)
Net increase	125,273	\$1,151,935	20,223	\$248,327

Class Y	YEAR ENDED 9/30/23		YEAR ENDED 9/30/22	
	Shares	Amount	Shares	Amount
Shares sold	604,275	\$5,339,585	1,147,656	\$12,805,314
Shares issued in connection with reinvestment of distributions	273,531	2,451,883	109,908	1,187,759
	877,806	7,791,468	1,257,564	13,993,073
Shares repurchased	(1,041,049)	(9,353,608)	(4,963,533)	(55,334,875)
Net decrease	(163,243)	\$(1,562,140)	(3,705,969)	\$(41,341,802)

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 9/30/22	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 9/30/23
Short-term investments					
Putnam Government Money Market Fund*	\$10,000	\$—	\$10,000	\$123	\$—
Putnam Short Term Investment Fund**	8,479,918	346,482,575	320,242,037	1,322,463	34,720,456
Total Short-term investments	\$8,489,918	\$346,482,575	\$320,252,037	\$1,322,586	\$34,720,456

* Management fees incurred through investment in Putnam Government Money Market Fund have been waived by the 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. The fund may invest in higher-yielding, lower-rated bonds that may have a higher rate of default. The fund may invest a significant portion of its assets in securitized debt instruments, including mortgage-backed and asset-backed investments. The yields and values of these investments are sensitive to changes in interest rates, the rate of principal payments on the underlying assets and the market's perception of the issuers. The market for these investments may be volatile and limited, which may make them difficult to buy or sell.

On July 27, 2017, the United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, announced its intention to cease compelling banks to provide the quotations needed to sustain LIBOR after 2021. ICE Benchmark Administration, the administrator of LIBOR, ceased publication of most LIBOR settings on a representative basis at the end of 2021 and ceased publication of a majority of U.S. dollar LIBOR settings on a representative basis after June 30, 2023. In addition, global regulators have announced that, with limited exceptions, no new LIBOR-based contracts should be entered into after 2021. LIBOR has historically been a common benchmark interest rate index used to make adjustments to variable-rate loans. It is used throughout global banking and financial industries to determine interest rates for a variety of financial instruments and borrowing arrangements. Actions by regulators have resulted in the establishment of alternative reference rates to LIBOR in most major currencies. Various financial industry groups have been planning for the transition away from LIBOR, but there are obstacles to converting certain longer-term securities and transactions to new reference rates. Markets are developing slowly and questions around liquidity in these rates and how to appropriately adjust these rates to mitigate any economic value transfer at the time of transition remain a significant concern. Neither the effect of the transition process nor its ultimate success can yet be known. The transition process might lead to increased volatility and illiquidity in markets that rely on LIBOR to determine interest rates. It could also lead to a reduction in the value of some LIBOR-based investments and reduce the effectiveness of related transactions, such as hedges. While some LIBOR-based instruments may contemplate a scenario where LIBOR is no longer available by providing for an alternative rate-setting methodology, not all may have such provisions and there may be significant uncertainty regarding the effectiveness of any such alternative methodologies. Since the usefulness of LIBOR as a benchmark could deteriorate during the transition period, these effects could occur at any time.

Note 7: Summary of derivative activity

The volume of activity for the reporting period for any derivative type that was held during the period is listed below and was based on an average of the holdings at the end of each fiscal quarter:

Purchased TBA commitment option contracts (contract amount)	\$22,700,000
Purchased swap option contracts (contract amount)	\$1,200,100,000
Written TBA commitment option contracts (contract amount)	\$22,700,000
Written swap option contracts (contract amount)	\$805,400,000
Futures contracts (number of contracts)	800
OTC interest rate swap contracts (notional)	\$420,000,000
Centrally cleared interest rate swap contracts (notional)	\$2,108,000,000
OTC credit default contracts (notional)	\$77,800,000

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	\$9,723,753	Payables	\$7,958,533
Interest rate contracts	Receivables, Net assets — Unrealized appreciation	48,756,839*	Payables, Net assets — Unrealized depreciation	34,259,431*
Total		\$58,480,592		\$42,217,964

* 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	Swaps	Total
Credit contracts	\$—	\$—	\$(3,051,473)	\$(3,051,473)
Interest rate contracts	(19,778,421)	7,387,810	28,320,221	\$15,929,610
Total	\$(19,778,421)	\$7,387,810	\$25,268,748	\$12,878,137

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	Swaps	Total
Credit contracts	\$—	\$—	\$3,419,659	\$3,419,659
Interest rate contracts	16,689,995	(2,742,131)	(9,936,648)	\$4,011,216
Total	\$16,689,995	\$(2,742,131)	\$(6,516,989)	\$7,430,875

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Note 8: Offsetting of financial and derivative assets and liabilities

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

	Bank of America N.A.	Barclays Bank PLC	Barclays Capital, Inc. (clearing broker)	Citibank, N.A.	Citigroup Global Markets, Inc.	Credit Suisse International
Assets:						
OTC Interest rate swap contracts*#	\$—	\$—	\$—	\$—	\$—	\$—
Centrally cleared interest rate swap contracts [§]	—	—	315,937	—	—	—
OTC Credit default contracts — protection sold*#	—	—	—	—	—	—
OTC Credit default contracts — protection purchased*#	—	—	—	—	5,006,896	393,330
Futures contracts [§]	—	—	—	—	—	—
Forward premium swap option contracts#	14,022,548	916,531	—	5,041,245	—	—
Total Assets	\$14,022,548	\$916,531	\$315,937	\$5,041,245	\$5,006,896	\$393,330
Liabilities:						
OTC Interest rate swap contracts*#	—	—	—	—	—	—
Centrally cleared interest rate swap contracts [§]	—	—	1,022,950	—	—	—
OTC Credit default contracts — protection sold*#	—	—	—	—	4,357,820	98,398
OTC Credit default contracts — protection purchased*#	—	—	—	—	—	—
Futures contracts [§]	—	—	—	—	—	—
Forward premium swap option contracts#	12,597,166	360,698	—	2,617,712	—	—
Total Liabilities	\$12,597,166	\$360,698	\$1,022,950	\$2,617,712	\$4,357,820	\$98,398
Total Financial and Derivative Net Assets	\$1,425,382	\$555,833	\$(707,013)	\$2,423,533	\$649,076	\$294,932
Total collateral received (pledged)†##	\$1,425,382	\$540,000	\$—	\$2,208,000	\$570,000	\$294,932
Net amount	\$—	\$15,833	\$(707,013)	\$215,533	\$79,076	\$—
<i>Controlled collateral received (including TBA commitments)**</i>	\$1,483,576	\$540,000	\$—	\$2,208,000	\$570,000	\$300,000
<i>Uncontrolled collateral received</i>	\$—	\$—	\$—	\$—	\$—	\$—
<i>Collateral (pledged) (including TBA commitments)**</i>	\$—	\$—	\$—	\$—	\$(4,017,861)	\$—

* 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.

Deutsche Bank AG	Goldman Sachs International	JP Morgan Chase Bank N.A.	JP Morgan Securities LLC	Merrill Lynch International	Morgan Stanley & Co. International PLC	Toronto-Dominion Bank	Wells Fargo Bank, N.A.	Total
\$—	\$—	\$—	\$—	\$—	\$9,516,447	\$—	\$—	\$9,516,447
—	—	—	—	—	—	—	—	315,937
—	—	—	—	—	—	—	—	—
—	1,817,596	—	40,860	71,068	2,394,003	—	—	9,723,753
—	—	—	—	—	—	—	—	—
1,437,059	342,979	3,444,139	—	—	—	116,507	—	25,321,008
\$1,437,059	\$2,160,575	\$3,444,139	\$40,860	\$71,068	\$11,910,450	\$116,507	\$—	\$44,877,145
—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	1,022,950
—	1,179,420	—	420,041	584,627	1,318,227	—	—	7,958,533
—	—	—	—	—	—	—	—	—
—	—	—	61,143	—	—	—	—	61,143
1,791,675	132,946	5,085,690	—	—	—	29,699	—	22,615,586
\$1,791,675	\$1,312,366	\$5,085,690	\$481,184	\$584,627	\$1,318,227	\$29,699	\$—	\$31,658,212
\$(354,616)	\$848,209	\$(1,641,551)	\$(440,324)	\$(513,559)	\$10,592,223	\$86,808	\$—	\$13,218,933
\$(354,616)	\$840,000	\$(1,641,551)	\$(410,352)	\$(513,559)	\$10,592,223	\$—	\$—	
\$—	\$8,209	\$—	\$(29,972)	\$—	\$—	\$86,808	\$—	
\$—	\$840,000	\$—	\$—	\$—	\$10,638,000	\$—	\$—	\$16,579,576
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$(372,592)	\$—	\$(1,703,418)	\$(2,036,960)	\$(536,815)	\$—	\$—	\$(1,743,386)	\$(10,411,032)

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 \$985,050 and \$12,604,345, respectively.

Note 9: Of special note

On May 31, 2023, Franklin Resources, Inc. ("Franklin Resources") and Great-West Lifeco Inc., the parent company of Putnam U.S. Holdings I, LLC ("Putnam Holdings"), announced that they have entered into a definitive agreement for a subsidiary of Franklin Resources to acquire Putnam Holdings in a stock and cash transaction.

As part of this transaction, Putnam Management, a wholly-owned subsidiary of Putnam Holdings and investment manager to the Putnam family of funds (the "Putnam Funds"), would become an indirect wholly-owned subsidiary of Franklin Resources.

The transaction is subject to customary closing conditions, including receipt of applicable regulatory approvals. Subject to such approvals and the satisfaction of these conditions, the transaction is currently expected to be consummated in the fourth quarter of 2023.

Under the Investment Company Act of 1940, as amended, consummation of the transaction will result in the automatic termination of the investment management contract between each Putnam Fund and Putnam Management and any related sub-management and sub-advisory contracts, where applicable. In anticipation of this automatic termination, on June 23, 2023, the Board of Trustees of the Putnam Funds approved a new investment management contract between each Putnam Fund and Putnam Management (and new sub-management and sub-advisory contracts, if applicable), which will be presented to the shareholders of each Putnam Fund for their approval at shareholder meetings in October 2023 or at any adjourned sessions of such meetings. Proxy solicitation materials related to these meetings have been made available to shareholders that held shares of the fund at the close of business on July 24, 2023.

Federal tax information (Unaudited)

For the reporting period, pursuant to §871(k) of the Internal Revenue Code, the fund hereby designates \$28,481,451 of distributions paid as qualifying to be taxed as interest-related dividends, and no amount to be taxed as short-term capital gain dividends for nonresident alien shareholders.

The Form 1099 that will be mailed to you in January 2024 will show the tax status of all distributions paid to your account in calendar 2023.

About the Trustees

INDEPENDENT TRUSTEES



Liaquat Ahamed

Born 1952, Trustee since 2012

Principal occupations during past

five years: Author; won Pulitzer Prize for *Lords of Finance: The Bankers Who Broke the World*.

Other directorships: 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

Principal occupations during past

five years: President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.

Other directorships: 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

Principal occupations during past

five years: Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies.

Other directorships: Director of the Great Lakes Science Center and of College Now Greater Cleveland.



Catharine Bond Hill

Born 1954, Trustee since 2017

Principal occupations during past

five years: Managing Director of Ithaka 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.

Other directorships: 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

Principal occupations during past

five years: 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.

Other directorships: 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

Principal occupations during past

five years: 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.

Other directorships: Previously, a Director of Western Asset Mortgage Capital Corporation.



Marie Pillai

Born 1954, Trustee since 2022

Principal occupations during past

five years: 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.

Other directorships: 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***Principal occupations during past****five years:** Chair 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.

Other directorships: 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.

**Manoj P. Singh***Born 1952, Trustee since 2017***Principal occupations during past****five years:** 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.

Other directorships: 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***Principal occupations during past five****years:** 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.

Other directorships: 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 UBS AG.

INTERESTED TRUSTEE**Robert L. Reynolds****Born 1952, Trustee since 2008, President**and Chief Executive Officer of Putnam**Investments since 2008***Principal occupations during past five**

years: President and Chief Executive Officer of Putnam Investments; member of Putnam Investments' Board of Directors; and 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.

Other directorships: 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.

* Mr. Reynolds is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Investments. He is President and Chief Executive Officer of Putnam Investments, as well as the President of your fund and each of the other Putnam funds.

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

As of September 30, 2023, there were 89 mutual funds, 4 closed-end funds, and 12 exchange-traded funds in the Putnam funds complex. Each Trustee serves as Trustee of all funds in the Putnam funds complex.

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:

James F. Clark *(Born 1974)*

Vice President and Chief Compliance Officer

Since 2016

Chief Compliance Officer and Chief Risk Officer, Putnam Investments, and Chief Compliance Officer, Putnam Management

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

Richard T. Kircher *(Born 1962)*

Vice President and BSA Compliance Officer

Since 2019

Assistant Director, Operational Compliance, Putnam Investments and Putnam Retail Management

Martin Lemaire *(Born 1984)*

Vice President and Derivatives Risk Manager

Since 2022

Risk Manager and Risk Analyst, Putnam Investments

Susan G. Malloy *(Born 1957)*

Vice President and Assistant Treasurer

Since 2007

Head of Accounting and Middle Office Services, Putnam Investments and Putnam Management

Alan G. McCormack *(Born 1964)*

Vice President and Derivatives Risk Manager

Since 2022

Head of Quantitative Equities and Risk, Putnam Investments

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 Investments and Putnam Management

Stephen J. Tate *(Born 1974)*

Vice President and Chief Legal Officer

Since 2021

General Counsel, Putnam Investments, Putnam Management, and Putnam Retail Management

Mark C. Trenchard *(Born 1962)*

Vice President

Since 2002

Director of Operational Compliance, Putnam Investments 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 is 100 Federal Street, Boston, MA 02110.

Fund information

Founded over 85 years ago, Putnam Investments was built around the concept that a balance between risk and reward is the hallmark of a well-rounded financial program. We manage funds across income, value, blend, growth, sustainable, and asset allocation categories.

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

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

Officers

Robert L. Reynolds
President

James F. Clark
Vice President and Chief Compliance Officer

Michael J. Higgins
Vice President, Treasurer, and Clerk

Jonathan S. Horwitz
Executive Vice President, Principal Executive Officer, and Compliance Liaison

Richard T. Kircher
Vice President and BSA Compliance Officer

Martin Lemaire
Vice President and Derivatives Risk Manager

Susan G. Malloy
Vice President and Assistant Treasurer

Alan G. McCormack
Vice President and Derivatives Risk Manager

Denere P. Poulack
Assistant Vice President, Assistant Clerk, and Assistant Treasurer

Janet C. Smith
Vice President, Principal Financial Officer, Principal Accounting Officer, and Assistant Treasurer

Stephen J. Tate
Vice President and Chief Legal Officer

Mark C. Trenchard
Vice President

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