A world of investing®



Putnam Research Fund

Semiannual report 1 | 31 | 23



Blend funds invest opportunistically in a variety of stocks, such as growth stocks and value stocks.

FUND SYMBOL CLASS A PNRAX

Putnam Research Fund

Semiannual report 1|31|23

| Message from the trustees | 1 |
|--|----|
| Interview with your fund's portfolio manager | 3 |
| Your fund's performance | 7 |
| Your fund's expenses | 9 |
| Consider these risks before investing | 11 |
| Terms and definitions | 12 |
| Other information for shareholders | 14 |
| Financial statements | 15 |

Message from the Trustees

March 9, 2023

Dear Fellow Shareholder:

Stock and bond markets rose in early 2023 as inflation continued to ease and the U.S. Federal Reserve moderated its interest-rate increases. Investors showed optimism that the Fed might slow the economy and reduce inflation without causing a recession. Still, caution may be warranted. While the Fed has reduced the size of its interest-rate increases, it also signaled that more rate hikes are likely if concerns persist about a resurgence in inflation.

Putnam's investment teams believe a recession is possible this year or next. However, they also are finding what they believe to be attractive investment opportunities in a range of asset classes, including stocks and taxable and tax-exempt bonds. As active researchers, our teams analyze interest-rate and credit risks as they seek out investments for your fund. They also consider how stocks and bonds are likely to perform in uncertain economic conditions

Thank you for investing with Putnam.

Respectfully yours,

Robert L. Reynolds

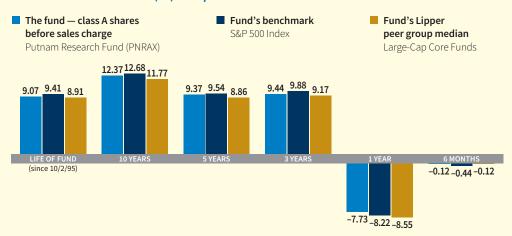
President and Chief Executive Officer

Putnam Investments

Kenneth R. Leibler Chair, Board of Trustees

Performance history as of 1/31/23

Annualized total return (%) comparison

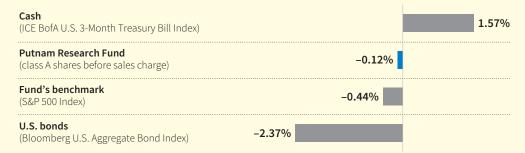


Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. Share price, principal value, and return will fluctuate, and you may have a gain or a loss when you sell your shares. Performance of class A shares assumes reinvestment of distributions and does not account for taxes. Fund returns in the bar chart do not reflect a sales charge of 5.75%; had they, returns would have been lower. See below and pages 7–9 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.

Returns for periods of less than one year are not annualized.

Lipper peer group median is provided by Lipper, a Refinitiv company.

Recent broad market index and fund performance



This comparison shows your fund's performance in the context of broad market indexes for the six months ended 1/31/23. See above and pages 7–9 for additional fund performance information. Index descriptions can be found on pages 12-13.

All Bloomberg indices are provided by Bloomberg Index Services Limited.

Interview with your fund's portfolio manager

Will Rives discusses the investment environment and fund performance for the six months ended January 31, 2023, as well as his outlook for the fund



William C. Rives, CFA Portfolio Manager

Will has a B.A. from Amherst College. Will has been in the investment industry since he joined Putnam in 2013.

Jacquelyne J. Cavanaugh; Kathryn B. Lakin; Matthew J. LaPlant, CFA; Andrew N. O'Brien, CFA; and Walter D. Scully, CPA, are also Portfolio Managers of the fund.

Please describe investing conditions for the six-month reporting period ended January 31, 2023.

Multiple macroeconomic headwinds challenged stock markets during the period. Rising interest rates, supply chain disruptions, the Russia-Ukraine War, and a slowdown in global growth weighed on investor sentiment.

To help tame multidecade-high inflation, the U.S. Federal Reserve raised interest rates more aggressively early in the period. Business spending declined as borrowing rates increased. U.S. home sales, which had peaked during the pandemic, began to moderate. Investors feared that the Fed's actions would push the U.S. economy into a recession.

By November 2022, the pace of inflation, as measured by the Consumer Price Index [CPI], showed signs of easing. The Fed started to pare back its interest-rate hikes in December 2022. Positive corporate earnings results and the prospect of lower interest rates helped stocks to rally later in the period.

Sector allocations

| Information technology | 24.1% |
|---|-------|
| Health care | 15.1 |
| Consumer discretionary | 11.7 |
| Financials | 10.4 |
| Industrials | 8.5 |
| Communication services | 7.6 |
| Consumer staples | 6.6 |
| Energy | 5.8 |
| Materials | 3.8 |
| Utilities | 3.1 |
| • Real estate | 1.1 |
| Cash and net other assets | 2.2 |



Allocations are shown as a percentage of the fund's net assets as of 1/31/23. 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 exclusion of as-of trades, if any, the use of different classifications of securities for presentation purposes, and rounding. Holdings and allocations may vary over time.

Top 10 holdings

| HOLDING (PERCENTAGE OF FUND'S NET ASSETS) | INDUSTRY | OVER/UNDERWEIG VS. BENCHMARK | БНТ |
|---|---|---------------------------------|------------|
| Microsoft Corp. (5.2%) | Software | -0.2% | |
| Apple, Inc. (4.3%) | Technology hardware, storage and peripherals | -2.0% | |
| Alphabet, Inc. Class A (3.7%) | Interactive media and services | | 0.4% |
| Amazon.com, Inc. (2.8%) | Internet and direct marketing retail | | 0.1% |
| Exxon Mobil Corp. (2.5%) | Oil, gas, and consumable fuels | | 1.1% |
| Mastercard, Inc. Class A (2.3%) | IT services | | 1.4% |
| Oracle Corp. (2.2%) | Software | | 1.8% |
| Home Depot, Inc. (The) (2.1%) | Specialty retail | | 1.1% |
| NVIDIA Corp. (2.1%) | Semiconductors and semiconductor equipment | | 0.7% |
| UnitedHealth Group, Inc. (1.9%) | Health care providers and services | | 0.5% |

This table shows the fund's top 10 holdings by percentage of the fund's net assets as of 1/31/23. Short-term investments and derivatives, if any, are excluded. Holdings may vary over time.

How did the fund perform for the reporting period?

The fund returned -0.12%, outperforming its benchmark, the S&P 500 Index, which returned -0.44% for the six-month period.

Can you discuss some of the top contributors to fund performance during the reporting period?

NVIDIA, a U.S.-based software firm, was the top contributor to fund performance. NVIDIA designs and sells graphics processing units [GPUs] to industries such as gaming and entertainment, automotive, artificial intelligence [AI], computing, and robotics. GPUs are enabling technologies that power everything from data centers and gaming consoles to autonomous cars and cryptocurrencies.

During the period, the global semiconductor industry started to emerge from a cyclical downturn, which drove up demand for NVIDIA's chips. NVIDIA also is a key beneficiary of new generative AI workloads, such as ChatGPT. NVIDIA's GPUs provide the enabling technology to run ChatGPT, which we believe offers significant future upside potential for the company.

Oracle, the world's largest database management company, was another contributor to fund performance. Oracle's cloud-based revenues, which include infrastructure and platform service offerings, have reached critical mass. Launched in 2016, Oracle's cloud services now generate one-third of the company's total revenues. Growth in Oracle's cloud-based revenues helped to offset a decline in the company's legacy business, including sales of its server hardware. Oracle's stock price rose on strengthening company fundamentals.

Could you discuss some of the top detractors from fund performance for the reporting period?

Amazon.com, the global e-commerce retailer, was the top detractor from fund performance. After soaring during the pandemic, revenues

66 We expect many stocks will rebound once the Fed slows interest-rate hikes further. ""

from its cloud computing platform, Amazon Web Services, began to slow. Inflation and supply chain disruptions further squeezed Amazon's profit margins. The company reported negative free cash flows in calendar 2022, which also dampened investor interest in the stock

Our decision not to own JPMorgan Chase & Co., a leading global financial services firm, modestly detracted from results. The stock performed well as investors became more riskaverse. A strong financial franchise with a solid management team, JPMorgan's valuation was appropriately priced, in our view. The stock traded at a higher valuation than its peers and the sector. Our approach focuses on identifying differentiated insights at attractive valuations. As such, we have preferred exposure to names such as Apollo Global Management and Prudential, both of which were positive contributors during the period.

How were derivatives used during the period?

We used forward currency contracts to help hedge foreign exchange risk. We also used futures to equitize cash.

What is your outlook for the economy and the fund?

Last year was very challenging for financial markets and all asset classes. While 2022 is behind us, we believe market volatility will continue until inflation is better understood and central banks become less hawkish.

On the positive side, as of period-end, commodity prices were declining, supply chain pressures were easing, inventories of goods were increasing, and U.S. home prices were declining. These conditions may help to de-escalate inflation. Still, we believe it

will take some time before this is reflected in macroeconomic data

Some data, including CPI, has shown a decline in the pace of inflation. Yet, inflation remains very high, and it has persisted longer than expected. In our view, the Fed seems intent on raising interest rates and keeping them higher for longer than most investors anticipate. Whether or not the Fed will reduce rates depends on future reductions in inflation and an increase in unemployment, in our view.

For calendar 2023, we have reasons for optimism. Many sectors and industries that were devastated two years ago, at the start of the pandemic, are now thriving. We expect many stocks will rebound once the Fed slows interest-rate hikes further.

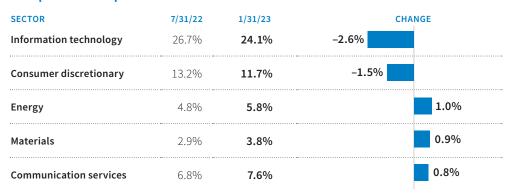
For the fund, we use deep fundamental research to evaluate businesses in the context of macroeconomic challenges. We invest in companies that we believe can weather macro-driven risks and rebound if conditions shift in 2023. The portfolio represents our best ideas that we believe will outperform the fund's benchmark over the long run.

Thank you, Will, 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.

Comparison of top sector shifts



This table shows the fund's largest allocation shifts, by percentage, over the past six months. Allocations are shown as a percentage of the fund's net assets. Current period summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities, any interest accruals, the exclusion of as-of trades, if any, the use of different classifications of securities for presentation purposes, and rounding. Holdings and allocations may vary over time.

Your fund's performance

This section shows your fund's performance, price, and distribution information for periods ended January 31, 2023, the end of the first half of its current fiscal year. In accordance with regulatory requirements for mutual funds, we also include performance information as of the most recent calendar quarter-end and 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. See the Terms and definitions section in this report for definitions of the share classes offered by your fund.

Annualized fund performance Total return for periods ended 1/31/23

| | Life of fund | 10 years | 5 years | 3 years | 1 year | 6 months |
|---------------------|--------------|----------|---------|---------|--------|----------|
| Class A (10/2/95) | | | | | | |
| Before sales charge | 9.07% | 12.37% | 9.37% | 9.44% | -7.73% | -0.12% |
| After sales charge | 8.83 | 11.71 | 8.08 | 7.30 | -13.03 | -5.87 |
| Class B (6/15/98) | | | | | | |
| Before CDSC | 8.81 | 11.70 | 8.55 | 8.62 | -8.42 | -0.48 |
| After CDSC | 8.81 | 11.70 | 8.26 | 7.76 | -12.61 | -5.04 |
| Class C (2/1/99) | | | | | | |
| Before CDSC | 8.83 | 11.70 | 8.55 | 8.62 | -8.42 | -0.49 |
| After CDSC | 8.83 | 11.70 | 8.55 | 8.62 | -9.25 | -1.40 |
| Class R (1/21/03) | | | | | | |
| Netassetvalue | 8.80 | 12.10 | 9.10 | 9.16 | -7.95 | -0.25 |
| Class R6 (6/29/15) | | | | | | |
| Netassetvalue | 9.34 | 12.77 | 9.78 | 9.84 | -7.39 | 0.07 |
| Class Y (4/4/00) | | | | | | |
| Net asset value | 9.30 | 12.66 | 9.64 | 9.71 | -7.48 | 0.02 |

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 5.75% 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.

Returns for periods of less than one year are not annualized.

For a portion of the periods, the fund had expense limitations, without which returns would have been lower. Recent performance may have benefited from one or more legal settlements.

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

Comparative annualized index returns For periods ended 1/31/23

| | Life of fund | 10 years | 5 years | 3 years | 1 year | 6 months |
|---|--------------|----------|---------|---------|--------|----------|
| S&P 500 Index | 9.41% | 12.68% | 9.54% | 9.88% | -8.22% | -0.44% |
| Lipper Large-Cap Core Funds category median* | 8.91 | 11.77 | 8.86 | 9.17 | -8.55 | -0.12 |

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

Returns for periods of less than one year are not annualized.

Lipper peer group median is provided by Lipper, a Refinitiv company.

Fund price and distribution information For the six-month period ended 1/31/23

| Distributions | Cla | ss A | Class B | Class C | Class R | Class R6 | Class Y |
|------------------|---------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Number | | L | 1 | 1 | 1 | 1 | 1 |
| Income | \$0. | 399 | \$0.021 | \$0.116 | \$0.306 | \$0.552 | \$0.502 |
| Capital gains | | | | | | | |
| Long-term gains | 2. | 831 | 2.831 | 2.831 | 2.831 | 2.831 | 2.831 |
| Short-term gains | 0. | 073 | 0.073 | 0.073 | 0.073 | 0.073 | 0.073 |
| Total | \$3. | 303 | \$2.925 | \$3.020 | \$3.210 | \$3.456 | \$3.406 |
| Share value | Before sales charge | After sales charge | Net asset value | Net asset value | Net asset value | Net asset value | Net asset value |
| 7/31/22 | \$40.54 | \$43.01 | \$36.14 | \$36.06 | \$39.77 | \$41.32 | \$41.07 |
| 1/31/23 | 37.07 | 39.33 | 32.94 | 32.76 | 36.35 | 37.77 | 37.55 |

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 (5.75% for class A shares) was levied at the time of purchase. Final distribution information will appear on your year-end tax forms.

^{*}Over the 6-month, 1-year, 3-year, 5-year, 10-year, and life-of-fund periods ended 1/31/23, there were 643, 627, 564, 510, 408, and 78 funds, respectively, in this Lipper category.

Annualized fund performance as of most recent calendar quarter

Total return for periods ended 12/31/22

| | Life of fund | 10 years | 5 years | 3 years | 1 year | 6 months |
|---------------------|--------------|----------|---------|---------|---------|----------|
| Class A (10/2/95) | | | | | | |
| Before sales charge | 8.86% | 12.22% | 9.28% | 7.21% | -17.33% | 2.92% |
| After sales charge | 8.62 | 11.56 | 7.99 | 5.11 | -22.08 | -3.00 |
| Class B (6/15/98) | | | | | | |
| Before CDSC | 8.60 | 11.56 | 8.46 | 6.41 | -17.93 | 2.55 |
| After CDSC | 8.60 | 11.56 | 8.17 | 5.52 | -21.69 | -2.15 |
| Class C (2/1/99) | | | | | | |
| Before CDSC | 8.62 | 11.55 | 8.46 | 6.41 | -17.94 | 2.56 |
| After CDSC | 8.62 | 11.55 | 8.46 | 6.41 | -18.69 | 1.62 |
| Class R (1/21/03) | | | | | | |
| Net asset value | 8.59 | 11.94 | 9.01 | 6.95 | -17.51 | 2.81 |
| Class R6 (6/29/15) | | | | | | |
| Net asset value | 9.13 | 12.62 | 9.69 | 7.61 | -17.02 | 3.13 |
| Class Y (4/4/00) | | | | | | |
| Net asset value | 9.09 | 12.51 | 9.56 | 7.48 | -17.10 | 3.07 |

See the discussion following the fund performance table on page 7 for information about the calculation of fund performance.

Returns for periods of less than one year are not annualized.

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 7/31/22 | 1.02% | 1.77% | 1.77% | 1.27% | 0.67% | 0.77% |
| Annualized expense ratio for the six-month period ended 1/31/23 | 1.04% | 1.79% | 1.79% | 1.29% | 0.68% | 0.79% |

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

Expenses are shown as a percentage of average net assets.

Expenses per \$1,000

The following table shows the expenses you would have paid on a \$1,000 investment in each class of the fund from 8/1/22 to 1/31/23. 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*† | \$5.24 | \$9.00 | \$9.00 | \$6.49 | \$3.43 | \$3.98 |
| Ending value (after expenses) | \$998.80 | \$995.20 | \$995.10 | \$997.50 | \$1,000.70 | \$1,000.20 |

^{*}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 1/31/23. The expense ratio may differ for each share class.

Estimate the expenses you paid

To estimate the ongoing expenses you paid for the six months ended 1/31/23, use the following calculation method. To find the value of your investment on 8/1/22, call Putnam at 1-800-225-1581.

| How to calculate the expenses you paid | | | | | | | | |
|---|---|---------|---|------------------------------|---|---------------------|--|--|
| Value of your investment on 8/1/22 | • | \$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 | \$5.24 (see preceding table) | = | \$52.40 | | |

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*† | \$5.30 | \$9.10 | \$9.10 | \$6.56 | \$3.47 | \$4.02 |
| Ending value (after expenses) | \$1,019.96 | \$1,016.18 | \$1,016.18 | \$1,018.70 | \$1,021.78 | \$1,021.22 |

^{*}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 1/31/23. 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 (184); and then dividing that result by the number of days in the year (365).

[†] 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 (184); and then dividing that result by the number of days in the year (365).

Consider these risks before investing

Growth stocks may be more susceptible to earnings disappointments, and value stocks may fail to rebound. The value of investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political, or financial market conditions; investor sentiment and market perceptions; government actions; geopolitical events or changes; and factors related to a specific issuer, geography, industry, or sector. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings.

From time to time, the fund may invest a significant portion of its assets in companies in one or more related industries or sectors, which would make the fund more vulnerable to adverse developments affecting those industries or sectors. For example, the fund may invest a significant portion of its assets in companies in the information technology sector. The information technology sector may be significantly affected by technological obsolescence or innovation, short product cycles, falling prices and profits, competitive pressures, and general market conditions.

Our investment techniques, analyses, and judgments may not produce the outcome we intend. The investments we select for the fund may not perform as well as other securities that we do not select for the fund. We, or the fund's other service providers, may experience disruptions or operating errors that could have a negative effect on the fund. You can lose money by investing in the fund.

Terms and definitions

Important terms

Total return shows how the value of the fund's shares changed over time, assuming you held the shares through the entire period and reinvested all distributions in the fund.

Before sales charge, or net asset value, is the price, or value, of one share of a mutual fund, without a sales charge. Before-sales-charge figures fluctuate with market conditions. They are calculated by dividing the net assets of each class of shares by the number of outstanding shares in the class.

After sales charge is the price of a mutual fund share plus the maximum sales charge levied at the time of purchase. After-sales-charge performance figures shown here assume the 5.75% maximum sales charge for class A shares.

Contingent deferred sales charge (CDSC) is generally a charge applied at the time of the redemption of class B or C shares and assumes redemption at the end of the period. Your fund's class B CDSC declines over time from a 5% maximum during the first year to 1% during the sixth year. After the sixth year, the CDSC no longer applies. The CDSC for class C shares is 1% for one year after purchase.

Share classes

Class A shares are generally subject to an initial sales charge and no CDSC (except on certain redemptions of shares bought without an initial sales charge).

Class B shares are closed to new investments and are only available by exchange from class B shares of another Putnam fund or through dividend and/or capital gains reinvestment. They are not subject to an initial sales charge and may be subject to a CDSC.

Class C shares are not subject to an initial sales charge and are subject to a CDSC only if the shares are redeemed during the first year.

Class R shares are not subject to an initial sales charge or CDSC and are only available to employer-sponsored retirement plans.

Class R6 shares are not subject to an initial sales charge or CDSC and carry no 12b-1 fee. They are generally only available to employer-sponsored retirement plans, corporate and institutional clients, and clients in other approved programs.

Class Y shares are not subject to an initial sales charge or CDSC and carry no 12b-1 fee. They are generally only available to corporate and institutional clients and clients in other approved programs.

Comparative indexes

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

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.

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.

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

ICE Data Indices, LLC ("ICE BofA"), used with permission. ICE BofA permits use of the ICE BofA indices and related data on an "as is" basis; makes no warranties regarding same; does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the ICE BofA indices or any data included in, related to, or derived

therefrom; assumes no liability in connection with the use of the foregoing; and does not sponsor, endorse, or recommend Putnam Investments, or any of its products or services.

Lipper, a Refinitiv company, is a third-party industry-ranking entity that ranks mutual 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, and Putnam will begin sending individual copies within 30 days.

Proxy voting

Putnam is committed to managing our mutual funds in the best interests of our shareholders. The Putnam funds' proxy voting guidelines and procedures, as well as information regarding how your fund voted proxies relating to portfolio securities during the 12-month period ended June 30, 2022, 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

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.

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

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 mutual funds. As of January 31, 2023, Putnam employees had approximately \$478,000,000 and the Trustees had approximately \$64,000,000 invested in Putnam mutual funds. These amounts include investments by the Trustees' and employees' immediate family members as well as investments through retirement and deferred compensation plans.

Financial statements

These sections of the report, as well as the accompanying Notes, constitute the fund's 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. Dividend sources are estimated at the time of declaration. Actual results may vary. Any non-taxable return of capital cannot be determined until final tax calculations are completed after the end of the fund's fiscal period.

Financial highlights provide an overview of the fund's investment results, per-share distributions, expense ratios, net investment income ratios, and portfolio turnover in one summary table, reflecting the five most recent reporting periods. In a semiannual report, the highlights table also includes the current reporting period.

The fund's portfolio 1/31/23 (Unaudited)

| COMMON STOCKS (97.9%)* | Shares | Value |
|---|---------|--------------------------------|
| Aerospace and defense (1.8%) | | |
| Boeing Co. (The) † | 2,859 | \$608,967 |
| Northrop Grumman Corp. | 6,736 | 3,017,998 |
| Raytheon Technologies Corp. | 38,957 | 3,889,857 |
| , | | 7,516,822 |
| Air freight and logistics (0.4%) | | |
| FedEx Corp. | 7,996 | 1,550,105 |
| | | 1,550,105 |
| Airlines (0.3%) | | |
| Southwest Airlines Co. | 38,022 | 1,360,047 |
| | | 1,360,047 |
| Automobiles (1.2%) | | |
| General Motors Co. | 18,183 | 714,956 |
| Tesla, Inc. † | 24,591 | 4,259,653 |
| | | 4,974,609 |
| Banks (2.5%) | | |
| Bank of America Corp. | 112,146 | 3,978,940 |
| Citigroup, Inc. | 121,115 | 6,324,625 |
| Silvergate Capital Corp. Class A†S | 18,627 | 265,248 |
| | | 10,568,813 |
| Beverages (2.7%) | | |
| Coca-Cola Co. (The) | 75,722 | 4,643,273 |
| Constellation Brands, Inc. Class A | 1,978 | 457,947 |
| PepsiCo, Inc. | 36,113 | 6,176,046 |
| | | 11,277,266 |
| Biotechnology (1.7%) | | |
| AbbVie, Inc. | 15,879 | 2,346,122 |
| Alkermes PLC † | 51,658 | 1,479,485 |
| Ascendis Pharma A/S ADR (Denmark) † \$ | 12,501 | 1,551,124 |
| Biogen, Inc. † | 4,700 | 1,367,230 |
| Regeneron Pharmaceuticals, Inc. † | 797 | 604,501 |
| D 1111 1 (0.00) | | 7,348,462 |
| Building products (0.9%) | 50.104 | 2 620 441 |
| Johnson Controls International PLC | 52,184 | 3,630,441 |
| Capital markets (4.0%) | | 3,630,441 |
| | E2 262 | 4 122 544 |
| Charles Schwab Corp. (The) | 53,262 | 4,123,544 6,671,277 |
| Goldman Sachs Group, Inc. (The) KKR & Co., Inc. | 18,237 | |
| | 57,583 | 3,213,707 |
| Quilter PLC (United Kingdom) | 769,996 | 919,581 |
| S&P Global, Inc. | 4,901 | 1,837,581 16,765,690 |
| Chemicals (2.4%) | | 10,765,650 |
| Corteva, Inc. | 33,650 | 2,168,742 |
| DuPont de Nemours, Inc. | 39,937 | 2,953,342 |
| Eastman Chemical Co. | 13,774 | 1,214,454 |
| Linde PLC | 1,533 | 507,331 |
| PPG Industries, Inc. | 10,223 | 1,332,466 |
| Sherwin-Williams Co. (The) | 8,771 | 2,075,131 |
| Sherwin-Williams Co. (The) | 0,111 | |
| | | 10,251,466 |

| COMMON STOCKS (97.9%)* cont. | Shares | Value |
|--|---------|-------------|
| Construction materials (0.3%) | | |
| CRH PLC ADR (Ireland) ^s | 25,285 | \$1,190,418 |
| | | 1,190,418 |
| Containers and packaging (0.5%) | 5 750 | |
| Avery Dennison Corp. | 5,750 | 1,089,280 |
| Berry Global Group, Inc. | 13,378 | 825,824 |
| Diversified financial convince (1.00/) | | 1,915,104 |
| Diversified financial services (1.0%) | CO 007 | 4 217 200 |
| Apollo Global Management, Inc. | 60,997 | 4,317,368 |
| Electric utilities (2.7%) | | 4,317,368 |
| Constellation Energy Corp. | 5,249 | 448,055 |
| Exelon Corp. | 62,825 | 2,650,587 |
| NextEra Energy, Inc. | 25,511 | 1,903,886 |
| NRG Energy, Inc. | 158,980 | 5,440,295 |
| PG&E Corp. † | 75,279 | 1,196,936 |
| r αας corp. · | 13,213 | 11,639,759 |
| Electrical equipment (0.3%) | | 11,000,100 |
| Emerson Electric Co. | 14,419 | 1,300,882 |
| | , | 1,300,882 |
| Electronic equipment, instruments, and components (1.3%) | | ,,. |
| CDW Corp./DE | 20,818 | 4,080,953 |
| Vontier Corp. | 63,585 | 1,464,363 |
| | | 5,545,316 |
| Energy equipment and services (0.6%) | | |
| Diamond Offshore Drilling, Inc. † | 235,699 | 2,701,111 |
| | | 2,701,111 |
| Entertainment (1.3%) | | |
| Netflix, Inc. † | 7,719 | 2,731,445 |
| Sea, Ltd. ADR (Singapore) † \$ | 10,844 | 698,896 |
| Walt Disney Co. (The) † | 18,343 | 1,990,032 |
| | | 5,420,373 |
| Equity real estate investment trusts (REITs) (1.1%) | | |
| American Tower Corp. R | 3,894 | 869,881 |
| Gaming and Leisure Properties, Inc. R | 56,604 | 3,031,710 |
| Vornado Realty Trust RS | 33,781 | 823,919 |
| | | 4,725,510 |
| Food and staples retailing (1.8%) | | |
| BJ's Wholesale Club Holdings, Inc. † | 5,676 | 411,340 |
| Costco Wholesale Corp. | 5,282 | 2,699,841 |
| Walmart, Inc. | 31,842 | 4,581,109 |
| | | 7,692,290 |
| Food products (0.2%) | | |
| McCormick & Co., Inc. (non-voting shares) | 11,942 | 897,083 |
| | | 897,083 |
| Health-care equipment and supplies (2.2%) | | |
| Abbott Laboratories | 19,694 | 2,177,172 |
| Becton Dickinson and Co. | 5,834 | 1,471,451 |
| Boston Scientific Corp. † | 52,921 | 2,447,596 |
| Dexcom, Inc. † | 10,796 | 1,156,144 |

| COMMON STOCKS (97.9%)* cont. | Shares | Value |
|--|---------|-------------|
| Health-care equipment and supplies cont. | | |
| Intuitive Surgical, Inc. † | 7,355 | \$1,807,050 |
| Medtronic PLC | 3,221 | 269,565 |
| | | 9,328,978 |
| Health-care providers and services (4.8%) | 00.040 | |
| Cigna Corp. | 20,948 | 6,633,603 |
| Elevance Health, Inc. | 1,432 | 715,986 |
| Humana, Inc. | 2,667 | 1,364,704 |
| McKesson Corp. | 9,543 | 3,613,743 |
| UnitedHealth Group, Inc. | 16,074 | 8,023,980 |
| | | 20,352,016 |
| Hotels, restaurants, and leisure (2.4%) | 24.100 | 1 077 507 |
| Aramark | 24,198 | 1,077,537 |
| Booking Holdings, Inc. † | 1,584 | 3,855,614 |
| Chipotle Mexican Grill, Inc. † | 1,186 | 1,952,607 |
| Hilton Worldwide Holdings, Inc. | 15,307 | 2,220,893 |
| Penn Entertainment, Inc. † S | 26,171 | 927,762 |
| | | 10,034,413 |
| Household durables (0.9%) | | |
| PulteGroup, Inc. | 69,020 | 3,926,548 |
| | | 3,926,548 |
| Household products (1.8%) | 50.000 | = |
| Procter & Gamble Co. (The) | 52,299 | 7,446,331 |
| Industrial conclusion (1.00/) | | 7,446,331 |
| Industrial conglomerates (1.0%) General Electric Co. | 8,046 | 647.540 |
| | | 647,542 |
| Honeywell International, Inc. | 16,290 | 3,396,139 |
| Insurance (3.0%) | | 4,043,681 |
| AlA Group, Ltd. (Hong Kong) | 190,200 | 2,147,836 |
| Assured Guaranty, Ltd. | 72,212 | 4,520,471 |
| AXA SA (France) | 76,392 | 2,381,402 |
| Prudential PLC (United Kingdom) | 213,496 | 3,537,897 |
| Fiddelitiat FEC (offited Killgdoff) | 213,490 | 12,587,606 |
| Interactive media and services (4.6%) | | 12,361,000 |
| Alphabet, Inc. Class A † | 156,684 | 15,486,647 |
| Meta Platforms, Inc. Class A † | 27,669 | 4,121,851 |
| Metal lationis, inc. class A | 21,003 | 19,608,498 |
| Internet and direct marketing retail (2.8%) | | 13,000,130 |
| Amazon.com, Inc. † | 115,796 | 11,942,041 |
| | | 11,942,041 |
| IT Services (3.7%) | | |
| Adyen NV (Netherlands) † | 618 | 934,261 |
| Mastercard, Inc. Class A | 25,951 | 9,617,441 |
| PayPal Holdings, Inc. † | 9,207 | 750,278 |
| Visa, Inc. Class A | 18,401 | 4,236,094 |
| , | 20,102 | 15,538,074 |
| Life sciences tools and services (2.2%) | | , |
| Avantor, Inc. † | 41,890 | 1,001,171 |
| Bio-Rad Laboratories, Inc. Class A † | 3,099 | 1,448,659 |
| | | 2, 0,000 |

| COMMON STOCKS (97.9%)* cont. | Shares | Value |
|---|-----------|-------------|
| Life sciences tools and services cont. | | |
| Danaher Corp. | 10,682 | \$2,824,107 |
| Illumina, Inc. † | 913 | 195,565 |
| Thermo Fisher Scientific, Inc. | 6,604 | 3,766,459 |
| | | 9,235,961 |
| Machinery (1.6%) | | |
| Deere & Co. | 2,786 | 1,178,032 |
| Ingersoll Rand, Inc. | 31,072 | 1,740,032 |
| Otis Worldwide Corp. | 45,069 | 3,706,024 |
| | | 6,624,088 |
| Media (0.4%) | | |
| Charter Communications, Inc. Class A † | 4,175 | 1,604,494 |
| | | 1,604,494 |
| Metals and mining (0.6%) | | |
| Agnico-Eagle Mines, Ltd. (Canada) | 26,202 | 1,479,703 |
| Alamos Gold, Inc. Class A (Canada) | 102,114 | 1,127,339 |
| | | 2,607,042 |
| Multi-utilities (0.3%) | | |
| Ameren Corp. | 16,268 | 1,413,201 |
| | | 1,413,201 |
| Multiline retail (0.6%) | | |
| Target Corp. | 15,253 | 2,625,652 |
| | | 2,625,652 |
| Oil, gas, and consumable fuels (5.1%) | | |
| Cenovus Energy, Inc. (Canada) | 287,159 | 5,736,490 |
| ConocoPhillips | 24,441 | 2,978,625 |
| Exxon Mobil Corp. | 91,949 | 10,667,003 |
| Shell PLC (London Exchange) (United Kingdom) | 90,477 | 2,657,513 |
| | | 22,039,631 |
| Pharmaceuticals (4.2%) | | |
| 4Front Ventures Corp. † | 1,724,209 | 427,776 |
| Eli Lilly and Co. | 11,385 | 3,918,148 |
| Innoviva, Inc. † | 123,912 | 1,567,487 |
| Johnson & Johnson | 25,948 | 4,240,422 |
| Merck&Co., Inc. | 41,242 | 4,429,803 |
| Pfizer, Inc. | 47,022 | 2,076,492 |
| Zoetis, Inc. | 5,582 | 923,765 |
| D 1 1/4 00/ \ | | 17,583,893 |
| Road and rail (1.9%) | 00440 | 4.470.000 |
| CSX Corp. | 38,140 | 1,179,289 |
| Hertz Global Holdings, Inc. † \$ | 31,780 | 572,676 |
| Union Pacific Corp. | 29,951 | 6,115,695 |
| | | 7,867,660 |
| Semiconductors and semiconductor equipment (5.2%) | 50.400 | 4 205 222 |
| Advanced Micro Devices, Inc. † | 58,486 | 4,395,223 |
| Applied Materials, Inc. | 35,724 | 3,982,869 |
| Enphase Energy, Inc. † | 626 | 138,584 |
| NVIDIA Corp. | 44,929 | 8,777,779 |
| Qualcomm, Inc. | 34,198 | 4,555,516 |
| | | 21,849,971 |

| COMMON STOCKS (97.9%)* cont. | Shares | Value |
|--|---------|---------------|
| Software (9.5%) | | |
| Intuit, Inc. | 9,820 | \$4,150,619 |
| Microsoft Corp. | 89,644 | 22,214,672 |
| Oracle Corp. | 105,539 | 9,335,980 |
| salesforce.com,Inc.† | 29,776 | 5,001,475 |
| | | 40,702,746 |
| Specialty retail (3.2%) | | |
| Bath & Body Works, Inc. | 10,051 | 462,447 |
| CarMax, Inc. † s | 15,718 | 1,107,333 |
| Home Depot, Inc. (The) | 27,117 | 8,790,518 |
| O'Reilly Automotive, Inc. † | 2,415 | 1,913,525 |
| TJX Cos., Inc. (The) | 10,962 | 897,349 |
| Warby Parker, Inc. Class A † \$ | 12,463 | 201,277 |
| | | 13,372,449 |
| Technology hardware, storage, and peripherals (4.3%) | | |
| Apple, Inc. | 126,446 | 18,244,893 |
| | | 18,244,893 |
| Textiles, apparel, and luxury goods (0.6%) | | |
| Levi Strauss & Co. Class A | 27,782 | 511,189 |
| Lululemon Athletica, Inc. (Canada) † | 1,598 | 490,394 |
| Nike, Inc. Class B | 11,616 | 1,479,065 |
| | | 2,480,648 |
| Tobacco (0.2%) | | |
| Altria Group, Inc. | 18,460 | 831,438 |
| | | 831,438 |
| Trading companies and distributors (0.5%) | | |
| United Rentals, Inc. † | 5,087 | 2,243,113 |
| | | 2,243,113 |
| Wireless telecommunication services (1.3%) | | |
| T-Mobile US, Inc. † | 37,421 | 5,587,330 |
| | | 5,587,330 |
| Total common stocks (cost \$295,963,392) | | \$414,311,331 |

| SHORT-TERM INVESTMENTS (3.2%)* | Prin | cipal amount/ shares | Value |
|---|--------|-------------------------|--------------|
| Putnam Cash Collateral Pool, LLC 4.60% d | Shares | 4,495,680 | \$4,495,680 |
| Putnam Short Term Investment Fund Class P 4.58% L | Shares | 8,600,331 | 8,600,331 |
| U.S. Treasury Bills 4.469%, 3/2/23 △ | | \$200,000 | 199,288 |
| U.S. Treasury Bills 4.480%, 3/9/23# | | 193,000 | 192,138 |
| U.S. Treasury Bills 3.814%, 2/2/23 △ | | 100,000 | 99,990 |
| U.S. Treasury Bills 4.404%, 2/23/23# | | 100,000 | 99,728 |
| Total short-term investments (cost \$13,687,184) | | | \$13,687,155 |

| TOTALINVESTMENTS | |
|--|---------------|
| Total investments (cost \$309.650.576) | \$427,998,486 |

Key to holding's abbreviations

ADR American Depository Receipts: Represents ownership of foreign securities on deposit with a custodian bank.

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 August 1, 2022 through January 31, 2023 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of 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 \$423,408,898.
- † This security is non-income-producing.
- # This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$217,040 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).
- A 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 \$120,587 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).
- d Affiliated company. See Notes 1 and 5 to the financial statements regarding securities lending. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- L Affiliated company (Note 5). The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- R Real Estate Investment Trust.
- s Security on loan, in part or in entirety, at the close of the reporting period (Note 1).

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

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

| | | | | | | Unrealized |
|----------------------|--------------------|-------------------|------------------|-------------|----------------------|--------------------------------|
| Counterparty | Currency | Contract type* | Delivery date | Value | Aggregate face value | appreciation/ (depreciation |
| Bank of America N.A. | • | | | | | |
| | British Pound | Sell | 3/15/23 | \$3,862,448 | \$3,826,592 | \$(35,856 |
| | Canadian Dollar | Sell | 4/19/23 | 2,398,556 | 2,357,704 | (40,852 |
| | Danish Krone | Sell | 3/15/23 | 1,175,356 | 1,127,161 | (48,195 |
| Barclays Bank PLC | | | | | | |
| | Euro | Sell | 3/15/23 | 1,011,529 | 981,283 | (30,246 |
| Citibank, N.A. | | | | | | |
| | Canadian Dollar | Sell | 4/19/23 | 2,210,394 | 2,172,923 | (37,471 |
| | Euro | Sell | 3/15/23 | 1,474,129 | 1,429,660 | (44,469 |
| HSBC Bank USA, Nati | ional Association | | | | | |
| | Hong Kong Dollar | Buy | 2/15/23 | 1,130,866 | 1,131,571 | (705 |
| | Hong Kong Dollar | Sell | 2/15/23 | 1,130,866 | 1,138,507 | 7,641 |
| | Hong Kong Dollar | Sell | 5/17/23 | 1,134,366 | 1,135,147 | 781 |
| JPMorgan Chase Bar | nk N.A. | | | | | |
| | Singapore Dollar | Buy | 2/15/23 | 973,233 | 972,190 | 1,043 |
| | Singapore Dollar | Sell | 2/15/23 | 973,233 | 906,465 | (66,768 |
| | Singapore Dollar | Sell | 5/17/23 | 975,351 | 974,261 | (1,090 |
| Morgan Stanley & Co | . International PL | .C | | | | |
| | Canadian Dollar | Sell | 4/19/23 | 1,886,040 | 1,866,289 | (19,751 |
| | Euro | Sell | 3/15/23 | 561,355 | 544,275 | (17,080 |

FORWARD CURRENCY CONTRACTS at 1/31/23 (aggregate face value \$28,952,269) (Unaudited) cont.

| | | Contract | Delivery | | Aggregate | Unrealized appreciation/ |
|---------------------------------|--------|----------|----------|-----------|------------|--------------------------|
| Counterparty Cur | rency | type* | date | Value | face value | (depreciation) |
| State Street Bank and Trust Co. | | | | | | |
| British F | Pound | Sell | 3/15/23 | \$997,047 | \$988,346 | \$(8,701) |
| Hong Kong | Dollar | Buy | 2/15/23 | 944,886 | 945,521 | (635) |
| Hong Kong | Dollar | Sell | 2/15/23 | 944,886 | 944,128 | (758) |
| Hong Kong | Dollar | Sell | 5/17/23 | 947,810 | 948,320 | 510 |
| UBSAG | | | | | | |
| Canadian | Dollar | Sell | 4/19/23 | 2,511,285 | 2,468,564 | (42,721) |
| | Euro | Sell | 3/15/23 | 893,699 | 866,979 | (26,720) |
| WestPac Banking Corp. | | | | | | |
| British F | Pound | Sell | 3/15/23 | 1,237,178 | 1,226,383 | (10,795) |
| Unrealized appreciation | | | | | | 9,975 |
| Unrealized (depreciation) | | | | | | (432,813) |
| Total | | | | | | \$(422,838) |

 $^{^{\}star}\, \text{The exchange currency for all contracts listed is the United States Dollar}.$

| FUTURES CONTRACTS OUTST | ANDING at 1/31/2 | 23 (Unaudited) | | | |
|-----------------------------|---------------------|--------------------|-------------|-----------------|---|
| | Number of contracts | Notional amount | Value | Expiration date | Unrealized appreciation/ (depreciation) |
| S&P 500 Index E-Mini (Long) | 22 | \$4,484,260 | \$4,499,000 | Mar-23 | \$164,258 |
| Unrealized appreciation | | | | | 164,258 |
| Unrealized (depreciation) | | | | | _ |
| Total | | | | | \$164,258 |

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

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

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

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

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

Valuation inputs

| Investments in securities: | Level 1 | Level 2 | Level 3 |
|----------------------------|---------------|--------------|---------|
| Common stocks*: | | | |
| Communication services | \$32,220,695 | \$— | \$— |
| Consumer discretionary | 49,356,360 | _ | _ |
| Consumer staples | 28,144,408 | _ | _ |
| Energy | 22,083,229 | 2,657,513 | _ |
| Financials | 35,252,761 | 8,986,716 | _ |
| Health care | 63,849,310 | _ | _ |
| Industrials | 36,136,839 | _ | _ |
| Information technology | 100,946,739 | 934,261 | _ |
| Materials | 15,964,030 | _ | _ |
| Real estate | 4,725,510 | _ | _ |
| Utilities | 13,052,960 | _ | _ |
| Total common stocks | 401,732,841 | 12,578,490 | _ |
| Short-term investments | _ | 13,687,155 | _ |
| Totals by level | \$401,732,841 | \$26,265,645 | \$- |

Valuation inputs

| Other financial instruments: | Level 1 | Level 2 | Level 3 |
|------------------------------|-----------|-------------|---------|
| Forward currency contracts | \$— | \$(422,838) | \$— |
| Futures contracts | 164,258 | _ | _ |
| Totals by level | \$164,258 | \$(422,838) | \$— |

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

Statement of assets and liabilities 1/31/23 (Unaudited)

| ASSETS | |
|---|---|
| Investment in securities, at value, including \$4,522,185 of securities on loan (Notes 1 and 8): Unaffiliated issuers (identified cost \$296,554,565) Affiliated issuers (identified cost \$13,096,011) (Note 5) | \$414,902,475 13,096,011 |
| Foreign currency (cost \$177) (Note 1) | 195 |
| Dividends, interest and other receivables | 273,778 |
| Foreign tax reclaim | 26,868 |
| Receivable for shares of the fund sold | 262,000 |
| Receivable for investments sold | 1,953,112 |
| Receivable for variation margin on futures contracts (Note 1) | 52,14 |
| Unrealized appreciation on forward currency contracts (Note 1) | 9,975 |
| | |
| Prepaid assets | 51,136 |
| Prepaid assets Total assets | 51,136 430,627,69 4 |
| Total assets | |
| Total assets LIABILITIES | 430,627,694 |
| Total assets LIABILITIES Payable for investments purchased | |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased | 1,332,530 390,533 |
| Total assets LIABILITIES Payable for investments purchased | 430,627,69 4 1,332,530 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) | 1,332,536 390,533 192,803 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) Payable for custodian fees (Note 2) Payable for investor servicing fees (Note 2) | 1,332,530 390,53 192,80 17,55 106,74 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) Payable for custodian fees (Note 2) | 1,332,530 390,533 192,800 17,555 106,749 96,28 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) Payable for custodian fees (Note 2) Payable for investor servicing fees (Note 2) Payable for Trustee compensation and expenses (Note 2) | 1,332,530 390,533 192,803 17,55 106,744 96,287 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) Payable for custodian fees (Note 2) Payable for investor servicing fees (Note 2) Payable for Trustee compensation and expenses (Note 2) Payable for administrative services (Note 2) | 1,332,538 390,538 192,808 |
| Total assets LIABILITIES Payable for investments purchased Payable for shares of the fund repurchased Payable for compensation of Manager (Note 2) Payable for custodian fees (Note 2) Payable for investor servicing fees (Note 2) Payable for Trustee compensation and expenses (Note 2) Payable for administrative services (Note 2) Payable for distribution fees (Note 2) | 1,332,538 390,538 192,808 17,55 106,748 96,28 798 |

| REPRESENTED BY | |
|--|---------------|
| Paid-in capital (Unlimited shares authorized) (Notes 1 and 4) | \$317,803,385 |
| Total distributable earnings (Note 1) | 105,605,513 |
| Total — Representing net assets applicable to capital shares outstanding | \$423,408,898 |

7,218,796

\$423,408,898

(Continued on next page)

Total liabilities

Net assets

Statement of assets and liabilities cont.

| COMPUTATION OF NET ASSET VALUE AND OFFERING PRICE | |
|---|---------|
| Net asset value and redemption price per class A share (\$333,531,027 divided by 8,996,844 shares) | \$37.07 |
| Offering price per class A share (100/94.25 of \$37.07)* | \$39.33 |
| Net asset value and offering price per class B share (\$1,768,725 divided by 53,694 shares)** | \$32.94 |
| Net asset value and offering price per class C share (\$10,499,567 divided by 320,502 shares)** | \$32.76 |
| Net asset value, offering price and redemption price per class R share (\$929,345 divided by 25,566 shares) | \$36.35 |
| Net asset value, offering price and redemption price per class R6 share (\$22,243,179 divided by 588,878 shares) | \$37.77 |
| Net asset value, offering price and redemption price per class Y share (\$54,437,055 divided by 1,449,685 shares) | \$37.55 |

^{*}On single retail sales of less than \$50,000. On sales of \$50,000 or more the offering price is reduced.

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

Statement of operations Six months ended 1/31/23 (Unaudited)

| INVESTMENT INCOME | |
|---|-------------|
| Dividends (net of foreign tax of \$15,016) | \$2,908,689 |
| Interest (including interest income of \$159,547 from investments in affiliated issuers) (Note 5) | 168,205 |
| Securities lending (net of expenses) (Notes 1 and 5) | 9,738 |
| Total investment income | 3,086,632 |
| | |
| EXPENSES | |
| Compensation of Manager (Note 2) | 1,150,304 |
| Investor servicing fees (Note 2) | 327,654 |
| Custodian fees (Note 2) | 29,325 |
| Trustee compensation and expenses (Note 2) | 9,002 |
| Distribution fees (Note 2) | 472,047 |
| Administrative services (Note 2) | 9,054 |
| Other | 125,728 |
| Total expenses | 2,123,114 |
| Expense reduction (Note 2) | (1,980) |
| Net expenses | 2,121,134 |
| Net investment income | 965,498 |
| | |

| REALIZED AND UNREALIZED GAIN (LOSS) | |
|--|---------------|
| Net realized gain (loss) on: | |
| Securities from unaffiliated issuers (Notes 1 and 3) | (8,699,470) |
| Foreign currency transactions (Note 1) | 2,256 |
| Forward currency contracts (Note 1) | 947,917 |
| Futures contracts (Note 1) | (734,134) |
| Total net realized loss | (8,483,431) |
| Change in net unrealized appreciation (depreciation) on: | |
| Securities from unaffiliated issuers | 6,956,019 |
| Assets and liabilities in foreign currencies | 1,261 |
| Forward currency contracts | (804,851) |
| Futures contracts | 150,491 |
| Total change in net unrealized appreciation | 6,302,920 |
| Net loss on investments | (2,180,511) |
| Net decrease in net assets resulting from operations | \$(1,215,013) |

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

Statement of changes in net assets

| DECREASE IN NET ASSETS | Six months ended 1/31/23* | Year ended 7/31/22 |
|--|---------------------------|--------------------|
| Operations | | |
| Net investment income | \$965,498 | \$1,705,414 |
| Net realized gain (loss) on investments | | |
| and foreign currency transactions | (8,483,431) | 32,629,297 |
| Change in net unrealized appreciation (depreciation) | | |
| of investments and assets and liabilities | 0.000.000 | (05.000.474) |
| in foreign currencies | 6,302,920 | (65,399,174) |
| Net decrease in net assets resulting from operations | (1,215,013) | (31,064,463) |
| Distributions to shareholders (Note 1): | | |
| From ordinary income Net investment income | | |
| Class A | (3,283,433) | (8,993) |
| Class B | (1,104) | (0,555) |
| Class C | (34,814) | _ |
| Class R | (8,826) | _ |
| Class R6 | (288,775) | (82,775) |
| Class Y | (679,270) | (167,222) |
| Net realized short-term gain on investments | , , , | , , , |
| Class A | (600,728) | (12,481,904) |
| Class B | (3,838) | (126,065) |
| Class C | (21,909) | (495,081) |
| Class R | (2,054) | (40,793) |
| Class R6 | (38,189) | (762,926) |
| Class Y | (98,778) | (2,114,460) |
| From net realized long-term gain on investments | | |
| Class A | (23,296,740) | (16,397,795) |
| Class B | (148,826) | (165,615) |
| Class C | (849,650) | (650,400) |
| Class R | (79,642) | (53,591) |
| Class R6 | (1,481,017) | (1,002,276) |
| Class Y | (3,830,704) | (2,777,819) |
| Increase from capital share transactions (Note 4) | 17,370,787 | 20,735,669 |
| Total decrease in net assets | (18,592,523) | (47,656,509) |

| NET ASSETS | | |
|---------------------|---------------|---------------|
| Beginning of period | 442,001,421 | 489,657,930 |
| End of period | \$423,408,898 | \$442,001,421 |

^{*}Unaudited.

Financial highlights

(For a common share outstanding throughout the period)

| | INVESTMENT O | PERATIONS | LESS DISTRIBU | LESS DISTRIBUTIONS | | |
|--------------------|---|--------------------------------|---|--|----------------------------------|--|
| Period ended | Net asset value, beginning of period | Net investment income (loss) a | Net realized and unrealized gain (loss) on investments | Total from investment operations | From net investment income | From net realized gain on investments |
| Class A | | | | | | |
| January 31, 2023** | \$40.54 | .08 | (.25) | (.17) | (.40) | (2.90) |
| July 31, 2022 | 46.80 | .15 | (2.87) | (2.72) | d | (3.54) |
| July 31, 2021 | 35.33 | .12 | 12.16 | 12.28 | (.25) | (.56) |
| July 31, 2020 | 33.64 | .22 | 3.94 | 4.16 | (.34) | (2.13) |
| July 31, 2019 | 35.35 | .23 | 2.23 | 2.46 | (.12) | (4.05) |
| July 31, 2018 | 31.03 | .16 | 4.68 | 4.84 | _ | (.52) |
| Class B | | | | | | |
| January 31, 2023** | \$36.14 | (.05) | (.23) | (.28) | (.02) | (2.90) |
| July 31, 2022 | 42.39 | (.17) | (2.54) | (2.71) | _ | (3.54) |
| July 31, 2021 | 32.10 | (.17) | 11.03 | 10.86 | (.01) | (.56) |
| July 31, 2020 | 30.75 | (.02) | 3.57 | 3.55 | (.07) | (2.13) |
| July 31, 2019 | 32.79 | d | 2.01 | 2.01 | _ | (4.05) |
| July 31, 2018 | 29.03 | (80.) | 4.36 | 4.28 | _ | (.52) |
| Class C | | | | | | |
| January 31, 2023** | \$36.06 | (.05) | (.23) | (.28) | (.12) | (2.90) |
| July 31, 2022 | 42.30 | (.16) | (2.54) | (2.70) | _ | (3.54) |
| July 31, 2021 | 32.04 | (.17) | 11.00 | 10.83 | (.01) | (.56) |
| July 31, 2020 | 30.72 | (.02) | 3.58 | 3.56 | (.11) | (2.13) |
| July 31, 2019 | 32.77 | (.01) | 2.01 | 2.00 | _ | (4.05) |
| July 31, 2018 | 29.02 | (80.) | 4.35 | 4.27 | _ | (.52) |
| Class R | | | | | | |
| January 31, 2023** | \$39.77 | .03 | (.24) | (.21) | (.31) | (2.90) |
| July 31, 2022 | 46.07 | .04 | (2.80) | (2.76) | _ | (3.54) |
| July 31, 2021 | 34.81 | .02 | 11.96 | 11.98 | (.16) | (.56) |
| July 31, 2020 | 33.17 | .14 | 3.88 | 4.02 | (.25) | (2.13) |
| July 31, 2019 | 34.88 | .15 | 2.20 | 2.35 | (.01) | (4.05) |
| July 31, 2018 | 30.70 | .08 | 4.62 | 4.70 | _ | (.52) |
| Class R6 | | | | | | |
| January 31, 2023** | \$41.32 | .15 | (.25) | (.10) | (.55) | (2.90) |
| July 31, 2022 | 47.63 | .31 | (2.91) | (2.60) | (.17) | (3.54) |
| July 31, 2021 | 35.94 | .27 | 12.36 | 12.63 | (.38) | (.56) |
| July 31, 2020 | 34.17 | .35 | 4.01 | 4.36 | (.46) | (2.13) |
| July 31, 2019 | 35.86 | .37 | 2.25 | 2.62 | (.26) | (4.05) |
| July 31, 2018 | 31.34 | .30 | 4.74 | 5.04 | _ | (.52) |

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

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

| | | | | RATIOS AND SUP | PLEMENTAL DA | ΤΑ | |
|------------------------|--------------------------------------|--------------------------------------|--|--|---|---|------------------------------|
| Total distributions | Non-recurring reimburse- ments | 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 (%) |
| | | | | | | | |
| (3.30) | _ | \$37.07 | (.12)* | \$333,531 | .53* | .22* | 17* |
| (3.54) | _ | 40.54 | (6.55) | 341,880 | 1.02 f | .33 | 46 |
| (.81) | _ | 46.80 | 35.18 | 388,700 | 1.03 | .29 | 54 |
| (2.47) | _ | 35.33 | 12.92 | 297,393 | 1.08 | .67 | 90 |
| (4.17) | _ | 33.64 | 8.65 | 270,420 | 1.10 | .72 | 86 |
| (.52) | e | 35.35 | 15.74 | 260,951 | 1.11 | .47 | 97 |
| | | | | | | | |
| (2.92) | <u> </u> | \$32.94 | (.48)* | \$1,769 | .91* | (.15)* | 17* |
| (3.54) | | 36.14 | (7.25) | 2,222 | 1.77 f | (.43) | 46 |
| (.57) | _ | 42.39 | 34.16 | 4,007 | 1.78 | (.45) | 54 |
| (2.20) | | 32.10 | 12.07 | 4,491 | 1.83 | (.06) | 90 |
| (4.05) | | 30.75 | 7.85 | 5,582 | 1.85 | (.01) | 86 |
| (.52) | e | 32.79 | 14.89 | 6,877 | 1.86 | (.27) | 97 |
| | | | | | | | |
| (3.02) | | \$32.76 | (.49)* | \$10,500 | .91* | (.16)* | 17* |
| (3.54) | | 36.06 | (7.24) | 11,460 | 1.77 f | (.42) | 46 |
| (.57) | | 42.30 | 34.13 | 13,750 | 1.78 | (.46) | 54 |
| (2.24) | | 32.04 | 12.13 | 11,234 | 1.83 | (80.) | 90 |
| (4.05) | | 30.72 | 7.82 | 10,106 | 1.85 | (.03) | 86 |
| (.52) | e | 32.77 | 14.86 | 8,931 | 1.86 | (.26) | 97 |
| | | | | | | | |
| (3.21) | | \$36.35 | (.25)* | \$929 | .65* | .09* | 17* |
| (3.54) | | 39.77 | (6.76) | 1,122 | 1.27 f | .09 | 46 |
| (.72) | _ | 46.07 | 34.80 | 906 | 1.28 | .05 | 54 |
| (2.38) | _ | 34.81 | 12.66 | 1,061 | 1.33 | .44 | 90 |
| (4.06) | _ | 33.17 | 8.40 | 1,257 | 1.35 | .46 | 86 |
| (.52) | e | 34.88 | 15.45 | 1,074 | 1.36 | .23 | 97 |
| | | | | | | | |
| (3.45) | | \$37.77 | .07* | \$22,243 | .34* | .40* | 17* |
| (3.71) | | 41.32 | (6.22) | 22,074 | .67 f | .69 | 46 |
| (.94) | _ | 47.63 | 35.65 | 24,078 | .66 | .65 | 54 |
| (2.59) | _ | 35.94 | 13.39 | 15,440 | .69 | 1.05 | 90 |
| (4.31) | _ | 34.17 | 9.08 | 10,999 | .70 | 1.13 | 86 |
| (.52) | e | 35.86 | 16.23 | 9,092 | .70 | .89 | 97 |
| | | | | | | | |

Financial highlights cont.

| | INVESTMENT O | PERATIONS | LESS DISTRIBUTIONS | | | |
|--------------------|---|---|---|--|----------------------------------|--|
| Period ended | Net asset value, beginning of period | Net investment income (loss) ^a | Net realized and unrealized gain (loss) on investments | Total from investment operations | From net investment income | From net realized gain on investments |
| Class Y | | | | | | |
| January 31, 2023** | \$41.07 | .13 | (.25) | (.12) | (.50) | (2.90) |
| July 31, 2022 | 47.37 | .26 | (2.90) | (2.64) | (.12) | (3.54) |
| July 31, 2021 | 35.74 | .23 | 12.28 | 12.51 | (.32) | (.56) |
| July 31, 2020 | 34.00 | .30 | 3.99 | 4.29 | (.42) | (2.13) |
| July 31, 2019 | 35.71 | .32 | 2.24 | 2.56 | (.22) | (4.05) |
| July 31, 2018 | 31.26 | .23 | 4.74 | 4.97 | _ | (.52) |

^{*} Not annualized.

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

^{**} Unaudited.

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

^b Total return assumes dividend reinvestment and does not reflect the effect of sales charges.

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

d Amount represents less than \$0.01 per share.

e Reflects a non-recurring reimbursement pursuant to a settlement between the Securities and Exchange Commission and Countrywide Financial which amounted to less than \$0.01 per share outstanding on November 29, 2017.

fincludes one-time proxy cost of 0.01%.

| | | | | RATIOS AND SUP | PLEMENTAL DA | ıΤΑ | |
|------------------------|--------------------------------------|--------------------------------------|--|--|---|---|------------------------------|
| Total distributions | Non-recurring reimburse- ments | 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 (%) |
| | | | | | | | |
| (3.40) | _ | \$37.55 | .02* | \$54,437 | .40* | .35* | 17* |
| (3.66) | _ | 41.07 | (6.32) | 63,244 | .77 f | .60 | 46 |
| (.88) | _ | 47.37 | 35.49 | 58,216 | .78 | .54 | 54 |
| (2.55) | _ | 35.74 | 13.23 | 41,773 | .83 | .91 | 90 |
| (4.27) | _ | 34.00 | 8.93 | 32,115 | .85 | .97 | 86 |
| (.52) | e | 35.71 | 16.05 | 29,281 | .86 | .69 | 97 |

Notes to financial statements 1/31/23 (Unaudited)

Within the following Notes to financial statements, references to "State Street" represent State Street Bank and Trust Company, references to "the SEC" represent the Securities and Exchange Commission, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect whollyowned subsidiary of Putnam Investments, LLC and references to "OTC", if any, represent over-the-counter. Unless otherwise noted, the "reporting period" represents the period from August 1, 2022 through January 31, 2023.

Putnam Research Fund (the fund) is a diversified series of Putnam Investment Funds (the Trust), a Massachusetts business trust registered under the Investment Company Act of 1940, as amended, as an open-end management investment company. The goal of the fund is to seek capital appreciation. The fund invests mainly in common stocks (growth or value stocks or both) of large U.S. companies that Putnam Management believes have favorable investment potential. For example, the fund may purchase stocks of companies with stock prices that reflect a value lower than that which Putnam Management places on the company. Putnam Management may also consider other factors it believes will cause the stock price to rise. Putnam Management may consider, among other factors, a company's valuation, financial strength, growth potential, competitive position in its industry, projected future earnings, cash flows and dividends when deciding whether to buy or sell 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 5.75% | 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.

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, share-holder servicing agent and custodian, who each provide services to the fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the fund.

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

Note 1: Significant accounting policies

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

[†] Not available to all investors.

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

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

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

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

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

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depository Receipts, exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. At the close of the reporting period, fair value pricing was used for certain foreign securities in the portfolio. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

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

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

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

Dividend income, net of any applicable withholding taxes, is recognized on the ex-dividend date except that certain dividends from foreign securities, if any, are recognized as soon as the fund is informed of the ex-dividend date. Non-cash dividends, if any, are recorded at the fair value of the securities received. Dividends representing a return of capital or capital gains, if any, are reflected as a reduction of cost and/or as a realized gain.

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

Futures contracts The fund uses futures contracts to equitize cash.

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

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

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

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

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position. Risks may exceed amounts recognized on the Statement of assets and liabilities.

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

Master agreements The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements 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 \$430,555 on open derivative contracts subject to the Master Agreements. Collateral pledged by the fund at period end for these agreements totaled \$120,587 and may include amounts related to unsettled agreements.

Securities lending The fund may lend securities, through its agent, to qualified borrowers in order to earn additional income. The loans are collateralized by cash in an amount at least equal to the fair value of the securities loaned. The fair value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. The remaining maturities of the securities lending transactions are considered overnight and continuous. The risk of borrower default will be borne by the fund's agent; the fund will bear the risk of loss with respect to the investment of the cash collateral. Income from securities lending, net of expenses, is included in investment income on the Statement of operations. Cash collateral is invested in Putnam Cash Collateral Pool, LLC, a limited liability company managed by an affiliate of Putnam Management. Investments in Putnam Cash Collateral Pool, LLC are valued at its closing net asset value each business day. There are no management fees charged to Putnam Cash Collateral Pool, LLC. At the close of the reporting period, the fund received cash collateral of \$4,495,680 and the value of securities loaned amounted to \$4,522,185.

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 \$100 million (\$317.5 million prior to October 14, 2022) unsecured committed line of credit and a \$235.5 million unsecured uncommitted line of credit, both provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the committed line of credit and 1.30% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the uncommitted line of credit. A closing fee equal to 0.04% of the committed line of credit and 0.04% of the uncommitted line of credit has been paid by the participating funds. In addition, a commitment fee of 0.21% per annum on any unutilized portion of the committed line of credit is allocated to the participating funds based on their relative net assets and paid quarterly. During the reporting period, the fund had no borrowings against these arrangements.

Federal taxes It is the policy of the fund to distribute all of its taxable income within the prescribed time period and otherwise comply with the provisions of the Internal Revenue Code of 1986, as amended (the Code), applicable to regulated investment companies. It is also the intention of the fund to distribute an amount sufficient to avoid imposition of any excise tax under Section 4982 of the Code.

The fund is subject to the provisions of Accounting Standards Codification 740 *Income Taxes* (ASC 740). ASC 740 sets forth a minimum threshold for financial statement recognition of the benefit of a tax position taken or expected to be taken in a tax return. The fund did not have a liability to record for any unrecognized tax benefits in the accompanying financial statements. No provision has been made for federal taxes on income, capital gains

or unrealized appreciation on securities held nor for excise tax on income and capital gains. Each of the fund's federal tax returns for the prior three fiscal years remains subject to examination by the Internal Revenue Service.

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

Tax cost of investments includes adjustments to net unrealized appreciation (depreciation) which may not necessarily be final tax cost basis adjustments, but closely approximate the tax basis unrealized gains and losses that may be realized and distributed to shareholders. The aggregate identified cost on a tax basis is \$314,020,569, resulting in gross unrealized appreciation and depreciation of \$128,699,354 and \$14,980,017, respectively, or net unrealized appreciation of \$113,719,337.

Distributions to shareholders Distributions to shareholders from net investment income are recorded by the fund on the ex-dividend date. Distributions from capital gains, if any, are recorded on the ex-dividend date and paid at least annually. The amount and character of income and gains to be distributed are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. Dividend sources are estimated at the time of declaration. Actual results may vary. Any non-taxable return of capital cannot be determined until final tax calculations are completed after the end of the fund's fiscal year. Reclassifications are made to the fund's capital accounts to reflect income and gains available for distribution (or available capital loss carryovers) under income tax regulations.

Expenses of the Trust Expenses directly charged or attributable to any fund will be paid from the assets of that fund. Generally, expenses of the Trust will be allocated among and charged to the assets of each fund on a basis that the Trustees deem fair and equitable, which may be based on the relative assets of each fund or the nature of the services performed and relative applicability to each fund.

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:

| 0.710% | of the first \$5 billion, | 0.510% | of the next \$50 billion, |
|--------|---------------------------|--------|-------------------------------|
| 0.660% | of the next \$5 billion, | 0.490% | of the next \$50 billion, |
| 0.610% | of the next \$10 billion, | 0.480% | of the next \$100 billion and |
| 0.560% | of the next \$10 billion. | 0.475% | of any excess thereafter. |

For the reporting period, the management fee represented an effective rate (excluding the impact from any expense waivers in effect) of 0.278% of the fund's average net assets.

Putnam Management has contractually agreed, through November 30, 2023, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plans, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were not reduced as a result of this limit.

Putnam Investments Limited (PIL), an affiliate of Putnam Management, is authorized by the Trustees to manage a separate portion of the assets of the fund as determined by Putnam Management from time to time. PIL did not manage any portion of the assets of the fund during the reporting period. If Putnam Management were to engage the services of PIL, Putnam Management would pay a quarterly sub-management fee to PIL for its services at an annual rate of 0.25% of the average net assets of the portion of the fund managed by PIL.

The Putnam Advisory Company, LLC (PAC), an affiliate of Putnam Management, is authorized by the Trustees to manage a separate portion of the assets of the fund, as designated from time to time by Putnam Management or PIL. PAC did not manage any portion of the assets of the fund during the reporting period. If Putnam Management or PIL were to engage the services of PAC, Putnam Management or PIL, as applicable, would pay a quarterly subadvisory fee to PAC for its services at the annual rate of 0.25% of the average net assets of the portion of the fund's assets for which PAC is engaged as sub-adviser.

The fund reimburses Putnam Management an allocated amount for the compensation and related expenses of certain officers of the fund and their staff who provide administrative services to the fund. The aggregate amount of all such reimbursements is determined annually by the Trustees.

Custodial functions for the fund's assets are provided by State Street. Custody fees are based on the fund's asset level, the number of its security holdings and transaction volumes.

Putnam Investor Services, Inc., an affiliate of Putnam Management, provides investor servicing agent functions to the fund. Putnam Investor Services, Inc. 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 | \$264,333 |
|---------|-----------|
| Class B | 1,570 |
| Class C | 8,677 |

| Total | \$327.654 |
|----------|-----------|
| Class Y | 46,951 |
| Class R6 | 5,247 |
| Class R | 876 |

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 \$1,980 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$362, as a quarterly retainer, has been allocated to the fund, and an additional fee for each Trustees meeting attended. Trustees also are reimbursed for expenses they incur relating to their services as Trustees.

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

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

The fund has adopted 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% | \$406,393 |
| Class B | 1.00% | 1.00% | 9,646 |
| Class C | 1.00% | 1.00% | 53,315 |
| Class R | 1.00% | 0.50% | 2,693 |
| Total | | | \$472,047 |

For the reporting period, Putnam Retail Management Limited Partnership, acting as underwriter, received net commissions of \$10,575 from the sale of class A shares and received \$13 and \$41 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 no monies 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 (Long-term) | \$70,053,951 | \$87,739,350 |
| U.S. government securities (Long-term) | _ | _ |
| Total | \$70,053,951 | \$87,739,350 |

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:

| | SIX MONTHS ENDED 1/31/23 | | YEAR ENDE | 7/31/22 |
|--|--------------------------|--------------|-----------|--------------|
| Class A | Shares | Amount | Shares | Amount |
| Shares sold | 391,094 | \$14,467,418 | 445,787 | \$19,543,061 |
| Shares issued in connection with reinvestment of distributions | 735,021 | 26,313,735 | 622,254 | 27,976,422 |
| | 1,126,115 | 40,781,153 | 1,068,041 | 47,519,483 |
| Shares repurchased | (563,062) | (21,374,913) | (940,588) | (40,831,544) |
| Net increase | 563,053 | \$19,406,240 | 127,453 | \$6,687,939 |

| | SIX MONTHS EN | DED 1/31/23 | YEAR ENDE | D 7/31/22 |
|--|--------------------------|--------------------------|-----------|--------------|
| Class B | Shares | Amount | Shares | Amount |
| Shares sold | 33 | \$1,105 | 1,620 | \$65,173 |
| Shares issued in connection with | | | | |
| reinvestment of distributions | 4,790 | 152,576 | 7,175 | 288,999 |
| | 4,823 | 153,681 | 8,795 | 354,172 |
| Shares repurchased | (12,600) | (422,872) | (41,859) | (1,640,897) |
| Net decrease | (7,777) | \$(269,191) | (33,064) | \$(1,286,725 |
| | SIX MONTHS EN | DED 1/31/23 | YEAR ENDE | D 7/31/22 |
| Class C | Shares | Amount | Shares | Amount |
| Shares sold | 26,136 | \$858,066 | 36,588 | \$1,472,795 |
| Shares issued in connection with reinvestment of distributions | 28,566 | 904,964 | 28,424 | 1,142,376 |
| | 54,702 | 1,763,030 | 65,012 | 2,615,171 |
| Shares repurchased | (52,004) | (1,704,649) | (72,257) | (2,795,847) |
| Net increase (decrease) | 2,698 | \$58,381 | (7,245) | \$(180,676) |
| | | | | |
| | SIX MONTHS EN | DED 1/31/23 | YEAR ENDE | |
| Class R | Shares | Amount | Shares | Amount |
| Shares sold | 2,705 | \$99,512 | 9,277 | \$435,788 |
| Shares issued in connection with reinvestment of distributions | 2,578 | 90,522 | 2,136 | 94,384 |
| | 5,283 | 190,034 | 11,413 | 530,172 |
| Shares repurchased | (7,938) | (283,891) | (2,867) | (116,684 |
| Net increase (decrease) | (2,655) | \$(93,857) | 8,546 | \$413,488 |
| | SIX MONTHS ENDED 1/31/23 | | YEAR ENDE | D 7/31/22 |
| Class R6 | Shares | Amount | Shares | Amount |
| Shares sold | 60,083 | \$2,271,443 | 102,451 | \$4,568,530 |
| Shares issued in connection with reinvestment of distributions | 49,588 | 1,807,981 | 40,411 | 1,847,977 |
| Terrivestment of distributions | 109,671 | 4,079,424 | 142,862 | 6,416,507 |
| Shares repurchased | (54,980) | (2,099,841) | (114,203) | (5,168,199 |
| Net increase | 54,691 | \$1,979,583 | 28,659 | \$1,248,308 |
| Netmercase | 34,031 | 41,313,303 | 20,033 | 71,240,300 |
| | SIX MONTHS EN | SIX MONTHS ENDED 1/31/23 | | D 7/31/22 |
| Class Y | Shares | Amount | Shares | Amount |
| Shares sold | 131,962 | \$5,056,017 | 1,103,134 | \$49,496,711 |
| Shares issued in connection with reinvestment of distributions | 126,363 | 4,580,671 | 110,888 | 5,043,192 |
| | 258,325 | 9,636,688 | 1,214,022 | 54,539,903 |
| Shares repurchased | (348,452) | (13,347,057) | (903,200) | (40,686,568 |
| <u> </u> | (90,127) | | | |

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 7/31/22 | Purchase cost | Sale proceeds | Investment income | Shares outstanding and fair value as of 1/31/23 |
|--|-----------------------------|------------------|------------------|----------------------|---|
| Short-term investments | 3 | | | | |
| Putnam Cash Collateral Pool, LLC* | \$7,391,219 | \$20,281,427 | \$23,176,966 | \$91,213 | \$4,495,680 |
| Putnam Short Term Investment Fund** | 6,558,450 | 48,361,804 | 46,319,923 | 159,547 | 8,600,331 |
| Total Short-term investments | \$13,949,669 | \$68,643,231 | \$69,496,889 | \$250,760 | \$13,096,011 |

^{*}No management fees are charged to Putnam Cash Collateral Pool, LLC (Note 1). Investment income shown is included in securities lending income on the Statement of operations. There were no realized or unrealized gains or losses during the period.

Note 6: Market, credit and other risks

In the normal course of business, the fund trades financial instruments and enters into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the contracting party to the transaction to perform (credit risk). The fund may be exposed to additional credit risk that an institution or other entity with which the fund has unsettled or open transactions will default. Investments in foreign securities involve certain risks, including those related to economic instability, unfavorable political developments, and currency fluctuations.

The Covid–19 pandemic and efforts to contain its spread have resulted in, among other effects, significant market volatility, exchange trading suspensions and closures, declines in global financial markets, higher default rates, significant changes in fiscal and monetary policies, and economic downturns and recessions. The effects of the Covid–19 pandemic have negatively affected, and may continue to negatively affect, the global economy, the economies of the United States and other individual countries, the financial performance of individual issuers, sectors, industries, asset classes, and markets, and the value, volatility, and liquidity of particular securities and other assets. The effects of the Covid–19 pandemic also are likely to exacerbate other risks that apply to the fund, which could negatively impact the fund's performance and lead to losses on your investment in the fund. The duration of the Covid–19 pandemic and its effects cannot be determined with certainty.

^{**} 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 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:

| Futures contracts (number of contracts) | 10 |
|--|--------------|
| Forward currency contracts (contract amount) | \$25,700,000 |

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

| Statement of | |
|-------------------------------|------------|
| assets and lities location | Fair value |
| Payables | \$432,813 |
| Payables | _ |
| | Payables |

^{*}Includes cumulative appreciation of futures contracts 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 | Fo Futures | orward currency contracts | Total | |
| Foreign exchange contracts | \$— | \$947,917 | \$947,917 | |
| Equity contracts | (734,134) | _ | \$(734,134) | |
| Total | \$(734,134) | \$947.917 | \$213,783 | |

| Change in unrealized appreciation or (depreciation on investments | on) on derivatives recog | nized in net gain or (los | s) |
|--|--------------------------|----------------------------|-------------|
| Derivatives not accounted for as hedging instruments under ASC 815 | Futures | Forward currency contracts | Total |
| Foreign exchange contracts | \$— | \$(804,851) | \$(804,851) |
| Equity contracts | 150,491 | _ | \$150,491 |
| Total | \$150,491 | \$(804,851) | \$(654,360) |

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 | BofA Securities, Inc. | Citibank, N.A. |
|---|-------------------------|----------------------|-----------------------------|----------------|
| Assets: | | | | |
| Futures contracts§ | \$— | \$— | \$52,144 | \$— |
| Forward currency contracts# | _ | _ | _ | _ |
| Total Assets | \$— | \$- | \$52,144 | \$- |
| Liabilities: | | | | |
| Futures contracts§ | _ | _ | _ | _ |
| Forward currency contracts# | 124,903 | 30,246 | _ | 81,940 |
| Total Liabilities | \$124,903 | \$30,246 | \$- | \$81,940 |
| Total Financial and Derivative Net Assets | \$(124,903) | \$(30,246) | \$52,144 | \$(81,940) |
| Total collateral received (pledged)†## | \$(110,589) | \$— | \$— | \$(9,998) |
| Netamount | \$(14,314) | \$(30,246) | \$52,144 | \$(71,942) |
| Controlled collateral received (including TBA commitments)* | \$— | \$— | \$— | \$— |
| Uncontrolled collateral received | \$— | \$- | \$— | \$ |
| Collateral (pledged) (including TBA commitments)* | \$(110,589) | \$- | \$- | \$(9,998) |

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

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

[#]Covered by master netting agreement (Note 1).

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

[§] Includes current day's variation margin only as reported on the Statement of assets and liabilities, which is not collateralized. Cumulative appreciation/depreciation for futures contracts is represented in the table listed after the fund's portfolio. Collateral pledged for initial margin on futures contracts, which is not included in the table above, amounted to \$217,040.

| HSBC Bank USA, National Association | JP Morgan Chase Bank N.A. | Morgan Stanley & Co. International PLC | State Street Bank and Trust Co. | UBSAG | WestPac BankingCorp. | Total |
|---|---------------------------------|---|---------------------------------------|------------|-------------------------|-------------|
| | | | | | | |
| \$— | \$— | \$— | \$— | \$— | \$— | \$52,144 |
| 8,422 | 1,043 | _ | 510 | _ | _ | 9,975 |
| \$8,422 | \$1,043 | \$- | \$510 | \$— | \$- | \$62,119 |
| | | | | | | |
| _ | _ | _ | _ | _ | _ | - |
| 705 | 67,858 | 36,831 | 10,094 | 69,441 | 10,795 | 432,813 |
| \$705 | \$67,858 | \$36,831 | \$10,094 | \$69,441 | \$10,795 | \$432,813 |
| \$7,717 | \$(66,815) | \$(36,831) | \$(9,584) | \$(69,441) | \$(10,795) | \$(370,694) |
| \$— | \$- | \$— | \$- | \$— | \$— | |
| \$7,717 | \$(66,815) | \$(36,831) | \$(9,584) | \$(69,441) | \$(10,795) | |
| | | | | | | |
| \$— | \$— | \$— | \$— | \$— | \$— | \$— |
| \$— | \$— | \$— | \$— | \$— | \$— | \$— |
| \$- | \$— | \$— | \$— | \$— | \$— | \$(120,587) |

Services for shareholders

Investor services

Systematic investment plan Tell us how much you wish to invest regularly — weekly, semimonthly, or monthly — and the amount you choose will be transferred automatically from your checking or savings account. There's no additional fee for this service, and you can suspend it at any time. This plan may be a great way to save for college expenses or to plan for your retirement.

Please note that regular investing does not guarantee a profit or protect against loss in a declining market. Before arranging a systematic investment plan, consider your financial ability to continue making purchases in periods when prices are low.

Systematic exchange You can make regular transfers from one Putnam fund to another Putnam fund. There are no additional fees for this service, and you can cancel or change your options at any time.

Dividends PLUS You can choose to have the dividend distributions from one of your Putnam funds automatically reinvested in another Putnam fund at no additional charge.

Free exchange privilege You can exchange money between Putnam funds free of charge, as long as they are the same class of shares. A signature guarantee is required if you are exchanging more than \$500,000. The fund reserves the right to revise or terminate the exchange privilege.

Reinstatement privilege If you've sold Putnam shares or received a check for a dividend or capital gain, you may reinvest the proceeds with Putnam within 90 days of the transaction and they will be reinvested at the fund's current net asset value — with no sales charge. However, reinstatement of class B shares may have special tax consequences. Ask your financial or tax representative for details.

Check-writing service You have ready access to many Putnam accounts. It's as simple as writing a check, and there are no special fees or service charges. For more information about the check-writing service, call Putnam or visit our website.

Dollar cost averaging When you're investing for long-term goals, it's time, not timing, that counts. Investing on a systematic basis is a better strategy than trying to figure out when the markets will go up or down. This means investing the same amount of money regularly over a long period. This method of investing is called dollar cost averaging. When a fund's share price declines, your investment dollars buy more shares at lower prices. When it increases, they buy fewer shares. Over time, you will pay a lower average price per share.

For more information

Visit the Individual Investors section at putnam.com A secure section of our website contains complete information on your account, including balances and transactions, updated daily. You may also conduct transactions, such as exchanges, additional investments, and address changes. Log on today to get your password.

Call us toll free at 1-800-225-1581 Ask a helpful Putnam representative or your financial advisor for details about any of these or other services, or see your prospectus.

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

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, Chief Compliance Officer, and Chief Risk Officer

Nancy E. Florek Vice President, Assistant Clerk, and Assistant Treasurer

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

This report is for the information of shareholders of Putnam Research Fund. It may also be used as sales literature when preceded or accompanied by the current prospectus, the most recent copy of Putnam's Quarterly Performance Summary, and Putnam's Quarterly Ranking Summary. For more recent performance, please visit putnam.com. Investors should carefully consider the investment objectives, risks, charges, and expenses of a fund, which are described in its prospectus. For this and other information or to request a prospectus or summary prospectus, call 1-800-225-1581 toll free. Please read the prospectus carefully before investing. The fund's Statement of Additional Information contains additional information about the fund's Trustees and is available without charge upon request by calling 1-800-225-1581.

