

Putnam Tax Exempt Income Fund

Summary prospectus

1 | 30 | 18

| FUND SYMBOLS | CLASS A | CLASS B | CLASS C | CLASS M | CLASS T | CLASS Y |
|--------------|---------|---------|---------|---------|---------|---------|
| | PTAEX | PTBEX | PTECX | PTXMX | Pending | PTEYX |

Putnam Tax Exempt Income Fund

Summary Prospectus dated January 30, 2018

Beginning on May 21, 2018, the fund will offer class R6 shares to:

- employer-sponsored retirement plans that are clients of third-party administrators (including affiliates of Putnam) that have entered into agreements with Putnam;
- investors purchasing shares through an asset-based fee program that is sponsored by a registered broker-dealer or other financial institution;
- investors purchasing shares through a commission-based platform of a registered broker-dealer or other financial institution that charges the shareholder additional fees or commissions, other than those described in the prospectus and statement of additional information, and that has entered into an agreement with Putnam Retail Management to offer class R6 shares through such a program;
- corporations, endowments, foundations and other institutional investors that have been approved by Putnam; and
- unaffiliated investment companies (whether registered or private) that have been approved by Putnam.

The summary prospectus is supplemented as follows to add information about class R6 shares. The front cover page is supplemented to add class R6 shares to the list of shares to which the summary prospectus relates, and to indicate that the fund's symbol for class R6 shares is PEXTX.

The following information is added to similar disclosure under *Fees and expenses*:

Shareholder fees *(fees paid directly from your investment)*

| Share class | Maximum sales charge (load) imposed on purchases (as a percentage of offering price) | Maximum deferred sales charge (load) (as a percentage of original purchase price or redemption proceeds, whichever is lower) |
|-------------|--|--|
| Class R6 | NONE | NONE |

Annual fund operating expenses

(expenses you pay each year as a percentage of the value of your investment)

| Share class | Management fees | Distribution and service (12b-1) fees | Other expenses | Total annual fund operating expenses |
|-------------|-----------------|---------------------------------------|----------------|--------------------------------------|
| Class R6 | 0.44% | N/A | 0.09%# | 0.53% |

Other expenses are based on expenses of class A shares for the fund's last fiscal year, restated to reflect current fees and the lower investor servicing fees applicable to class R6 shares.

Example

The following hypothetical example is intended to help you compare the cost of investing in the fund with the cost of investing in other funds. It assumes that you invest \$10,000 in the fund for the time periods indicated and then, except as indicated, redeem all your shares at the end of those periods. It assumes a 5% return on your investment each year and that the fund's operating expenses remain the same. Your actual costs may be higher or lower.

| Share class | 1 year | 3 years | 5 years | 10 years |
|-------------|--------|---------|---------|----------|
| Class R6 | \$54 | \$170 | \$296 | \$665 |

Putnam Tax Exempt Income Fund

Before you invest, you may wish to review the fund's prospectus, which contains more information about the fund and its risks. You may obtain the prospectus and other information about the fund, including the statement of additional information (SAI) and most recent reports to shareholders, at no cost by visiting putnam.com/funddocuments, calling 1-800-225-1581, or e-mailing Putnam at funddocuments@putnam.com.

The fund's prospectus and SAI, both dated 1/30/18, are incorporated by reference into this summary prospectus.

Goal

Putnam Tax Exempt Income Fund seeks as high a level of current income exempt from federal income tax as we believe to be consistent with preservation of capital.

Fees and expenses

The following table describes the fees and expenses you may pay if you buy and hold shares of the fund. You may qualify for sales charge discounts if you and your family invest, or agree to invest in the future, at least \$100,000 in class A shares or \$50,000 in class M shares of Putnam funds. More information about these and other discounts is available from your financial advisor and in *How do I buy fund shares?* beginning on page 12 of the fund's prospectus, in the Appendix to the fund's prospectus, and in *How to buy shares* beginning on page II-1 of the fund's statement of additional information (SAI).

Shareholder fees *(fees paid directly from your investment)*

| Share class | Maximum sales charge (load) imposed on purchases (as a percentage of offering price) | Maximum deferred sales charge (load) (as a percentage of original purchase price or redemption proceeds, whichever is lower) |
|-------------|--|--|
| Class A | 4.00% | 1.00%* |
| Class B | NONE | 5.00%** |
| Class C | NONE | 1.00%*** |
| Class M | 3.25% | NONE |
| Class T | 2.50% | NONE |
| Class Y | NONE | NONE |

Annual fund operating expenses

(expenses you pay each year as a percentage of the value of your investment)

| Share class | Management fees | Distribution and service (12b-1) fees | Other expenses [¶] | Total annual fund operating expenses |
|-------------|-----------------|---------------------------------------|-----------------------------|--------------------------------------|
| Class A | 0.44% | 0.22%† | 0.11% | 0.77% |
| Class B | 0.44% | 0.85% | 0.11% | 1.40% |
| Class C | 0.44% | 1.00% | 0.11% | 1.55% |
| Class M | 0.44% | 0.50% | 0.11% | 1.05% |
| Class T | 0.44% | 0.25% | 0.11%< | 0.80% |
| Class Y | 0.44% | N/A | 0.11% | 0.55% |

* Applies only to certain redemptions of shares bought with no initial sales charge.

** This charge is phased out over six years.

*** This charge is eliminated after one year.

† Represents a blended rate.

< Other expenses are based on class A shares for the fund's last fiscal year, as restated to reflect current fees.

= Restated to reflect current fees.

Example

The following hypothetical example is intended to help you compare the cost of investing in the fund with the cost of investing in other funds. It assumes that you invest \$10,000 in the fund for the time periods indicated and then, except as indicated, redeem all your shares at the end of those periods. It assumes a 5% return on your investment each year and that the fund's operating expenses remain the same. Your actual costs may be higher or lower.

| Share class | 1 year | 3 years | 5 years | 10 years |
|-------------------------|--------|---------|---------|----------|
| Class A | \$475 | \$636 | \$811 | \$1,316 |
| Class B | \$643 | \$743 | \$966 | \$1,508 |
| Class B (no redemption) | \$143 | \$443 | \$766 | \$1,508 |
| Class C | \$258 | \$490 | \$845 | \$1,845 |
| Class C (no redemption) | \$158 | \$490 | \$845 | \$1,845 |
| Class M | \$429 | \$648 | \$886 | \$1,566 |
| Class T | \$330 | \$499 | \$683 | \$1,215 |
| Class Y | \$56 | \$176 | \$307 | \$689 |

Portfolio turnover

The fund pays transaction-related costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher turnover rate may indicate higher transaction costs and may result in higher taxes when the fund's shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or the above example, affect fund performance. The fund's turnover rate in the most recent fiscal year was 35%.

Investments, risks, and performance

Investments

We invest mainly in bonds that pay interest that is exempt from federal income tax (but that may be subject to federal alternative minimum tax (AMT)), are investment-grade in quality, and have intermediate- to long-term maturities (i.e., three years or longer). Under normal circumstances, we invest at least 80% of the fund's net assets in tax-exempt investments, which for purposes of this policy exclude investments paying interest subject to the federal AMT for individuals. This investment policy cannot be changed without the approval of the fund's shareholders. We may consider, among other factors, credit, interest rate and prepayment risks, as well as general market conditions, when deciding whether to buy or sell investments.

Risks

It is important to understand that you can lose money by investing in the fund.

The value of bonds in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general financial market conditions, changing market perceptions (including perceptions about the risk of default and expectations about monetary policy or interest rates), changes in government intervention in the financial markets, and factors related to a specific issuer or industry. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings.

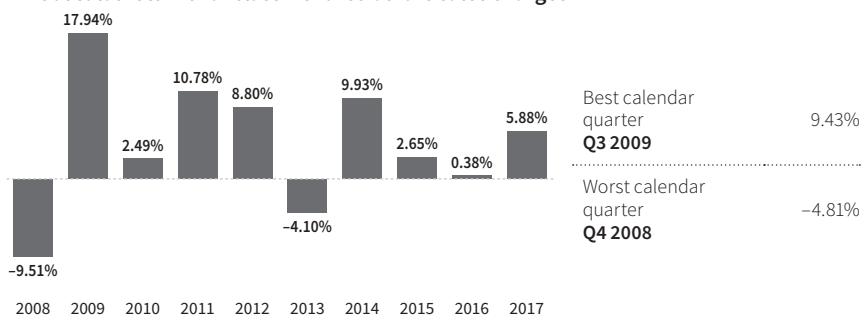
The risks associated with bond investments include interest rate risk, which means the value of the fund's investments is likely to fall if interest rates rise. Bond investments also are subject to credit risk, which is the risk that the issuers of the fund's investments may default on payment of interest or principal. Since the fund invests in tax-exempt bonds, which, to be treated as tax-exempt under the Internal Revenue Code, may be issued only by limited types of issuers for limited types of projects, the fund's investments may be focused in certain market segments. Consequently, the fund may be more vulnerable to fluctuations in the values of the securities it holds than a fund that invests more broadly. Interest rate risk is generally greater for longer-term bonds, and credit risk is generally greater for below-investment-grade bonds, which can be more sensitive to changes in markets, credit conditions and interest rates. Interest the fund receives might be taxable.

The fund may not achieve its goal, and it is not intended to be a complete investment program. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency.

Performance

The performance information below gives some indication of the risks associated with an investment in the fund by showing the fund's performance year to year and over time. The bar chart does not reflect the impact of sales charges. If it did, performance would be lower. Please remember that past performance is not necessarily an indication of future results. Monthly performance figures for the fund are available at putnam.com.

Annual total returns for class A shares before sales charges



Average annual total returns after sales charges

(for periods ended 12/31/17)

| Share class | 1 year | 5 years | 10 years |
|---|--------|---------|----------|
| Class A before taxes | 1.64% | 2.00% | 3.83% |
| Class A after taxes on distributions | 1.60% | 1.97% | 3.80% |
| Class A after taxes on distributions and sale of fund shares | 2.34% | 2.34% | 3.86% |
| Class B before taxes | 0.21% | 1.83% | 3.73% |
| Class C before taxes | 4.04% | 2.03% | 3.43% |
| Class M before taxes | 2.25% | 1.86% | 3.60% |
| Class T before taxes* | 3.18% | 2.27% | 3.94% |
| Class Y before taxes | 6.09% | 3.05% | 4.49% |
| Bloomberg Barclays Municipal Bond Index (no deduction for fees, expenses or taxes) | 5.45% | 3.02% | 4.46% |

* Class T shares were not outstanding during the periods shown. Performance shown for class T shares is derived from the historical performance of class A shares, adjusted up to reflect the lower initial sales charge currently applicable to class T shares and adjusted down by 0.05% to reflect the higher 12b-1 fees applicable to class T shares. The 0.05% downward adjustment reflects the fact that the 12b-1 fees currently applicable to class T shares are 0.05% higher per annum than the 0.20% rate applicable to class A shares prior to April 1, 2005 and up to 0.05% higher per annum than the blended rate applicable to class A shares since April 1, 2005. However, because a 0.05% downward adjustment has been used for all periods, class T share performance since April 1, 2005 may be understated.

After-tax returns reflect the historical highest individual federal marginal income tax rates and do not reflect state and local taxes. Actual after-tax returns depend on an investor's tax situation and may differ from those shown. After-tax returns are shown for class A shares only and will vary for other classes. These after-tax returns do not apply if you hold your fund shares through a 401(k) plan, an IRA, or another tax-advantaged arrangement.

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

Your fund's management

Investment advisor

Putnam Investment Management, LLC

Portfolio managers

Paul Drury

Portfolio Manager, portfolio manager of the fund since 2002

Garrett Hamilton

Portfolio Manager, portfolio manager of the fund since 2016

Sub-advisor

Putnam Investments Limited*

* Though the investment advisor has retained the services of Putnam Investments Limited (PIL), PIL does not currently manage any assets of the fund.

Purchase and sale of fund shares

You can open an account, purchase and/or sell fund shares, or exchange them for shares of another Putnam fund by contacting your financial advisor or by calling Putnam Investor Services at 1-800-225-1581. Purchases for 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.

When opening an account, you must complete and mail a Putnam account application, along with a check made payable to the fund, to: Putnam Investor Services, P.O. Box 8383, Boston, MA 02266-8383. The minimum initial investment of \$500 is currently waived, although Putnam reserves the right to reject initial investments under \$500 at its discretion. There is no minimum for subsequent investments.

You can sell your shares back to the fund or exchange them for shares of another Putnam fund any day the New York Stock Exchange (NYSE) is open. Shares may be sold or exchanged by mail, by phone, or online at putnam.com. Some restrictions may apply.

Tax information

The fund intends to distribute income that is exempt from federal income tax, but distributions will be subject to federal income tax to the extent attributable to other income, including income earned by the fund on investments in taxable securities or capital gains realized on the disposition of its investments.

Financial intermediary compensation

If you purchase the fund through a broker/dealer or other financial intermediary (such as a bank or financial advisor), the fund and its related companies may pay that intermediary for the sale of fund shares and related services. Please bear in mind that these payments may create a conflict of interest by influencing the broker/dealer or other intermediary to recommend the fund over another investment. Ask your advisor or visit your advisor's website for more information.

Information about the Summary Prospectus, Prospectus, and SAI

The summary prospectus, prospectus, and SAI for a fund provide information concerning the fund. The summary prospectus, prospectus, and SAI are updated at least annually and any information provided in a summary prospectus, prospectus, or SAI can be changed without a shareholder vote unless specifically stated otherwise. The summary prospectus, prospectus, and the SAI are not contracts between the fund and its shareholders and do not give rise to any contractual rights or obligations or any shareholder rights other than any rights conferred explicitly by federal or state securities laws that may not be waived.

Additional information, including current performance, is available at putnam.com/funddocuments, by calling 1-800-225-1581, or by e-mailing Putnam at funddocuments@putnam.com.

Class T shares of the fund
are not currently available
for purchase.

