

# Putnam VT High Yield 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/individual/annuities](http://putnam.com/individual/annuities), calling 1-800-225-1581, or e-mailing Putnam at [funddocuments@putnam.com](mailto:funddocuments@putnam.com).

The fund's prospectus and SAI, both dated 4/30/21, are incorporated by reference into this summary prospectus.

## Fund summary

### Goal

Putnam VT High Yield Fund seeks high current income. Capital growth is a secondary goal when consistent with achieving high current income.

### Fees and expenses

The following table describes the fees and expenses you may pay if you buy, hold and sell shares of the fund. You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the table and example below. The fees and expenses information does not reflect insurance-related charges or expenses borne by contract holders indirectly investing in the fund. If it did, expenses would be higher.

### 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 IA	0.56%	N/A	0.16%	0.72%
Class IB	0.56%	0.25%	0.16%	0.97%

### 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. The example does not reflect insurance-related charges or expenses. If it did, expenses would be higher. It assumes that you invest \$10,000 in the fund for the time periods indicated and then redeem or hold 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 IA	\$74	\$230	\$401	\$894
Class IB	\$99	\$309	\$536	\$1,190

### 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. 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 48%.

## Investments, risks, and performance

### Investments

We invest mainly in bonds that are obligations of U.S. companies, are below investment-grade in quality (sometimes referred to as "junk bonds"), and have intermediate- to long-term maturities (three years or longer). Under normal circumstances, we invest at least 80% of the fund's net assets in securities rated below investment-grade. This policy may be changed only after 60 days' notice to shareholders. We may also invest in other debt instruments, including loans. 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. We may also use derivatives, such as futures, options, certain foreign currency transactions and swap contracts, for both hedging and non-hedging purposes.

### Risks

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

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. The novel coronavirus (COVID-19) pandemic and efforts to contain its spread are likely to negatively affect the value, volatility, and liquidity of the securities and other assets in which the fund invests and exacerbate other risks that apply to the fund. These effects could negatively impact the fund's performance and lead to losses on your investment in the fund. The risks associated with bond investments include interest rate risk which is the risk that the value of the fund's investments is likely to fall if interest rates rise. Bond investments are also subject to credit risk, which is the risk that the issuer of a bond may default on payment of interest or principal. Bond investments may be more susceptible to downgrades or defaults during economic downturns or other periods of economic stress. Interest rate risk is generally greater for longer-term bonds, and credit risk is generally greater for below-investment-grade bonds (a significant part of the fund's investments), which may be considered speculative. Our use of derivatives may increase the risks of investing in the fund by increasing investment exposure (which

may be considered leverage) or, in the case of many over-the-counter instruments, because of the potential inability to terminate or sell derivatives positions and the potential failure of the other party to the instrument to meet its obligations.

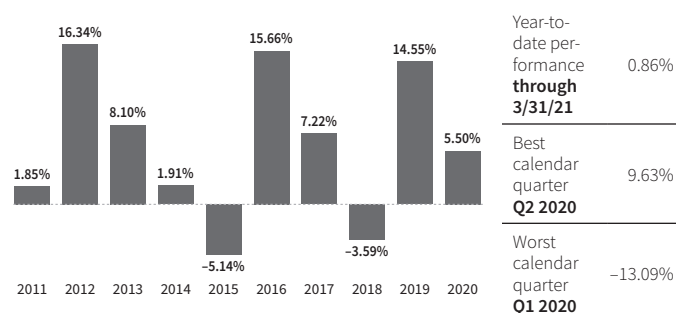
There is no guarantee that the investment techniques, analyses, or judgments that we apply in making investment decisions for the fund will produce the intended outcome or that the investments we select for the fund will perform as well as other securities that were not selected for the fund. We, or the fund's other service providers, may experience disruptions or operating errors that could negatively impact the fund.

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 performance information does not reflect insurance-related charges or expenses. If it did, performance would be lower. Please remember that past performance is not necessarily an indication of future results.

### Annual total returns for class IA shares



### Average annual total returns

(for periods ended 12/31/20)

Share class	1 year	5 years	10 years
Class IA	5.50%	7.64%	5.99%
Class IB	5.21%	7.37%	5.73%
JPMorgan Developed High Yield Index (no deduction for fees, expenses or taxes)	5.34%	8.48%	6.95%

## Your fund's management

### Investment advisor

Putnam Investment Management, LLC

### Portfolio managers

Paul Scanlon, Co-Head of Corporate and Tax-exempt credit, portfolio manager of the fund since 2002

Norman Boucher, Portfolio Manager, portfolio manager of the fund since 2005

Robert Salvin, Co-Head of Corporate and Tax-exempt credit, portfolio manager of the fund since 2005

## 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

Fund shares are offered to separate accounts of various insurers. The fund requires no minimum investment, but insurers may require minimum investments from those purchasing variable insurance products for which the fund is an underlying investment option. Insurers may purchase or sell shares on behalf of separate accounts by submitting an order to Putnam Retail Management any day the New York Stock Exchange (NYSE) is open. Some restrictions may apply.

## Tax information

Generally, owners of variable insurance contracts are not taxed currently on income or gains realized with respect to such contracts. However, some distributions from such contracts may be taxable at ordinary income tax rates and distributions to contract owners younger than 59½ may be subject to a 10% penalty tax. For more information, please see the prospectus (or other offering document) for your variable insurance contract.

## Payments to insurance companies

The fund is offered as an underlying investment option for variable insurance contracts. The fund and its related companies may make payments to the sponsoring insurance company (or its affiliates) and dealers for distribution and/or other services. These payments may create an incentive for the insurance company to include the fund, rather than another investment, as an option in its products and may create a conflict of interest for dealers in recommending the fund over another investment. The prospectus (or other offering document) for your variable insurance contract may contain additional information about these payments.

## 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 is available at [putnam.com/individual/annuities](http://putnam.com/individual/annuities), by calling 1-800-225-1581, or by e-mailing Putnam at [funddocuments@putnam.com](mailto:funddocuments@putnam.com).**