Prospectus and Statement of Additional Information Supplement

January 1, 2024

George Putnam Balanced Fund Putnam BDC Income ETF **Putnam BioRevolution ETF** Putnam Convertible Securities Fund **Putnam Core Equity Fund Putnam Dynamic Asset Allocation Balanced Fund Putnam Dynamic Asset Allocation Equity Fund Putnam Dynamic Asset Allocation** Growth Fund **Putnam Emerging Markets Equity Fund** Putnam Emerging Markets ex-China ETF **Putnam ESG Core Bond ETF** Putnam ESG High Yield ETF Putnam ESG Ultra Short ETF Putnam Focused International **Equity Fund** Putnam Focused Large Cap Growth ETF **Putnam Global Health Care Fund Putnam Government Money Market Fund Putnam High Yield Fund Putnam Income Fund** Putnam International Capital **Opportunities Fund Putnam International Equity Fund Putnam Large Cap Growth Fund** Putnam Large Cap Value Fund **Putnam Money Market Fund Putnam Mortgage Opportunities Fund** Putnam Multi-Asset Income Fund **Putnam Research Fund**

Putnam Retirement Advantage 2030 Fund

Putnam Retirement Advantage 2035 Fund

Putnam Retirement Advantage 2065 Fund

Putnam Short Term Investment Fund Putnam Small Cap Value Fund Putnam Sustainable Future ETF Putnam Sustainable Future Fund Putnam Sustainable Leaders ETF Putnam Sustainable Leaders Fund Putnam Sustainable Retirement 2065 Fund **Putnam Sustainable Retirement** Maturity Fund **Putnam Ultra Short Duration Income Fund** Putnam Ultra Short MAC Series Putnam VT Core Equity Fund Putnam VT Diversified Income Fund Putnam VT Emerging Markets Equity Fund Putnam VT Focused International **Equity Fund** Putnam VT George Putnam Balanced Fund Putnam VT Global Asset Allocation Fund Putnam VT Global Health Care Fund **Putnam VT Government Money** Market Fund Putnam VT High Yield Fund Putnam VT Income Fund Putnam VT International Equity Fund Putnam VT International Value Fund Putnam VT Large Cap Growth Fund Putnam VT Large Cap Value Fund Putnam VT Mortgage Securities Fund Putnam VT Research Fund Putnam VT Small Cap Growth Fund Putnam VT Small Cap Value Fund

Putnam VT Sustainable Future Fund

Putnam VT Sustainable Leaders Fund

On January 1, 2024 (the "Effective Date"), a subsidiary of Franklin Resources, Inc. ("Franklin Resources") acquired Putnam U.S. Holdings I, LLC ("Putnam Holdings") in a stock and cash transaction (the "Transaction"). As a result of the Transaction, Putnam Investment Management, LLC ("Putnam Management"), a wholly-owned subsidiary of Putnam



Holdings and the investment manager to the Putnam family of funds (the "Putnam Funds"), Putnam Investments Limited ("PIL"), an indirect, wholly-owned subsidiary of Putnam Holdings and a sub-adviser to certain of the Putnam Funds, and The Putnam Advisory Company, LLC ("PAC"), an indirect, wholly-owned subsidiary of Putnam Holdings and a sub-adviser to certain of the Putnam Funds, became indirect, wholly-owned subsidiaries of Franklin Resources

Franklin Resources, whose principal executive offices are at One Franklin Parkway, San Mateo, California 94403, is a global investment management organization operating, together with its subsidiaries, as Franklin Templeton. As of November 30, 2023, after giving effect to the Transaction, Franklin Templeton's asset management operations had aggregate assets under management of approximately \$1.546 trillion. As a result of the Transaction, Putnam Management, PIL, and PAC will be able to draw on the broader investment resources, including portfolio management, investment research, trading expertise and other capabilities, of Franklin Templeton to the benefit of the Putnam Funds.

Under the Investment Company Act of 1940, as amended (the "1940 Act"), the Transaction resulted in the automatic termination of the investment management contract between each Putnam Fund and Putnam Management and any related sub-advisory contracts that were in place for each Putnam Fund before the Transaction. However, Putnam Management and, where applicable, the Putnam Funds' sub-adviser(s) continue to provide uninterrupted services with respect to the Putnam Funds listed above pursuant to new investment management and sub-advisory contracts that were previously approved by shareholders of each above-listed Putnam Fund at shareholder meetings held in connection with the Transaction. The terms of the new investment management and sub-advisory contracts are substantially similar to those of the previous investment management and sub-advisory contracts.

The Prospectus and Statement of Additional Information for each of the Putnam Funds listed above are amended to reflect the foregoing.

Prospectus

For each Putnam Fund that offers Class Y shares, the following disclosure replaces and supersedes the corresponding bullet point under "The following investors may purchase class Y shares if approved by Putnam" in the "Here is a summary of the differences among the classes of shares" section:

- current and retired employees of Putnam or an affiliate (including affiliates of Franklin Templeton) and their immediate family members (including an employee's spouse, domestic partner, fiancé(e), or other family members who are living in the same household) as well as, in each case, Putnam-offered health savings accounts, IRAs, and other similar tax-advantaged plans solely owned by the foregoing individuals;
- current directors of Putnam Investments, LLC who commenced service prior to January 1, 2024 and retired directors of Putnam Investments, LLC who served prior to January 1, 2024, regardless of when they retired;
- current employees of Empower Life & Annuity Insurance Company who began their employment prior to January 1, 2024 and retired employees of Empower Life & Annuity Insurance Company who were employees prior to January 1, 2024, regardless of when they retired; and current and retired Trustees of the fund. Upon the departure of any member of this group of individuals from Putnam, Empower Life & Annuity Insurance

Company, or the fund's Board of Trustees, the member's class Y shares convert automatically to class A shares, unless the member's departure is a retirement, as determined by Putnam in its discretion for employees and directors of Putnam and employees of Empower Life & Annuity Insurance Company and by the Board of Trustees in its discretion for Trustees; provided that conversion will not take place with respect to class Y shares held by former Putnam employees and their immediate family members in health savings accounts where it is not operationally practicable due to platform or other limitations; and

For each Putnam Fund that offers Class A shares, the following disclosure replaces and supersedes the corresponding bullet point under "Class A shares" in the "Additional reductions and waivers of sales charges" sub-section in the "Here is a summary of the differences among the classes of shares" section:

(i) current and former Trustees of the fund, their family members, business and personal associates; current and former employees of Putnam Management, certain current corporate affiliates (including affiliates of Franklin Templeton), and certain former corporate affiliates, their family members, business and personal associates; employer-sponsored retirement plans for the foregoing; and partnerships, trusts or other entities in which any of the foregoing has a substantial interest;

Statement of Additional Information

The following disclosure replaces and supersedes the corresponding information in the footnote to the table in the sub-section "Trustee responsibilities and fees" in the section "CHARGES AND EXPENSES":

** Trustee who is an "interested person" (as defined in the 1940 Act) of the fund and Putnam Management. Mr. Reynolds is deemed an "interested person" by virtue of his position as an officer of the fund and his direct beneficial interest in shares of Franklin Resources, of which Putnam Management is an indirect wholly-owned subsidiary. Mr. Reynolds is the President of your fund and each of the other Putnam funds, and prior to January 1, 2024, Mr. Reynolds was President and Chief Executive Officer of Putnam Management and Putnam Investments, LLC, the previous parent company to Putnam Management, PIL, and PAC.

For Putnam BDC Income ETF, Putnam BioRevolution ETF, Putnam Dynamic Asset Allocation Equity Fund, Putnam Emerging Markets ex-China ETF, Putnam Focused Large Cap Growth ETF, and Putnam Ultra Short MAC Series, the following disclosure replaces and supersedes the corresponding information included in the "Share Ownership" section:

In light of its share ownership noted below, Putnam U.S. Holdings I, LLC may be deemed to "control" the fund. Putnam U.S. Holdings I, LLC, a Delaware limited liability company, is owned through a series of subsidiaries by Franklin Resources, Inc., a Delaware corporation, whose principal executive offices are at One Franklin Parkway, San Mateo, California 94403.

The sub-section "Putnam Management and its Affiliates" in the section "MANAGEMENT" is deleted in its entirety and replaced with the following:

Putnam Management and its Affiliates

Putnam Management is one of America's oldest money management firms. Putnam Management's staff of experienced portfolio managers and research analysts selects securities and supervises the fund's portfolio on an ongoing basis. By pooling an investor's money with that of other investors, a greater variety of securities can be purchased than would be the case individually; the resulting diversification helps reduce investment risk. Putnam Management has been managing mutual funds since 1937.

Putnam Management is an indirect, wholly-owned subsidiary of Franklin Resources, Inc. ("Franklin Resources"), a Delaware corporation. Franklin Resources, whose principal executive offices are at One Franklin Parkway, San Mateo, California 94403, is a global investment management organization operating, together with its subsidiaries, as Franklin Templeton. As of November 30, 2023, after giving effect to the Transaction, Franklin Templeton's asset management operations had aggregate assets under management of approximately \$1.546 trillion.

Certain employees and officers of Franklin Resources and its subsidiaries who engage in investment advisory services may be appointed to serve as officers and/or authorized persons of Putnam Management and/or PAC and, in that capacity, may provide investment research, investment recommendations and other services to Putnam Management and/or PAC from time to time.

Trustees and officers of the fund who are also officers of Putnam Management or its affiliates or who are stockholders of Franklin Resources or its affiliates will benefit from the advisory fees, sales commissions, distribution fees and transfer agency fees paid or allowed by the fund.

The table in the sub-section "Trustees" in the section "MANAGEMENT" is deleted in its entirety and replaced with the following:

Name, Address¹, Year of Birth, Position(s) Held with Fund and Length of Service as a Putnam Fund Trustee Liaquat Ahamed (Born 1952), Trustee since 2012	Principal Occupation(s) During Past 5 Years Author; won Pulitzer Prize for Lords of Finance: The Bankers Who Broke the World.	Number of Funds in the Putnam Funds Complex Overseen by Trustee ³	Other Directorships Held by Trustee Chair of the Sun Valley Writers Conference, a literary not-for-profit organization; and a Trustee of the Journal of Philosophy.
Barbara M. Baumann (Born 1955), Trustee since 2010, Vice Chair since 2022	President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.	105	Director of Devon Energy Corporation, a publicly traded independent natural gas and oil exploration and production company; Director of National Fuel Gas Company, a publicly traded energy company that engages in the production, gathering, transportation, distribution and marketing of natural gas; Senior Advisor to the energy private equity firm First Reserve; member of the Finance Committee of the Children's Hospital of Colorado; member of the Investment Committee of the Board of The Denver Foundation; and previously a Director of publicly traded companies Buckeye Partners LP, UNS Energy Corporation, CVR Energy Company, and SM Energy Corporation.
Katinka Domotorffy (Born 1975), Trustee since 2012 Catharine Bond Hill (Born 1954), Trustee since 2017	Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies. Managing Director of Ithaka S+R, a not-forprofit service that helps the academic community navigate economic and technological change. From 2006 to 2016, Dr.	105	Director of the Great Lakes Science Center and of College Now Greater Cleveland. Director of Yale-NUS College; and Trustee of Yale University.
2017	community navigate economic and technological change.		

Name, Address ¹ , Year of Birth, Position(s) Held with Fund and Length of Service as a Putnam Fund Trustee	Principal Occupation(s) During Past 5 Years	Number of Funds in the Putnam Funds Complex Overseen by Trustee ³	Other Directorships Held by Trustee
Kenneth R. Leibler (Born 1949), Trustee since 2006, Vice Chair from 2016 to 2018, Chair since 2018	Vice Chair Emeritus of the Board of Trustees of Beth Israel Deaconess Hospital in Boston. Member of the Investment Committee of the Boston Arts Academy Foundation.	105	Director of Eversource Corporation, which operates New England's largest energy delivery system; previously the Chairman of the Boston Options Exchange, an electronic marketplace for the trading of listed derivatives securities; previously the Chairman and Chief Executive Officer of the Boston Stock Exchange; and previously the President and Chief Operating Officer of the American Stock Exchange.
*Jennifer Williams Murphy (Born 1964), Trustee since 2022	Chief Executive Officer and Founder of Runa Digital Assets, LLC, an institutional investment advisory firm specializing in active management of digital assets. Until 2021, Chief Operating Officer of Western Asset Management, LLC, a global investment adviser, and Chief Executive Officer and President of Western Asset Mortgage Capital Corporation, a mortgage finance real estate investment trust.	105	Previously, a Director of Western Asset Mortgage Capital Corporation.
Marie Pillai (Born 1954), Trustee since 2022	Senior Advisor, Hunter Street Partners, LP, an asset-oriented private investment firm; Specialty Leader and Member of the Curriculum Committee of the Center for Board Certified Fiduciaries, a public benefit corporation providing coursework for developing fiduciaries. Until 2019, Vice President, Chief Investment Officer and Treasurer of General Mills, Inc., a global food company.	105	Member of the Investment Committee of the Bush Foundation, a non-profit organization supporting community problem-solving in Minnesota, North Dakota and South Dakota; Member of the Finance Council and Corporate Board of the Archdiocese of Saint Paul and Minneapolis; Director of Choice Bank, a private, community bank based in North Dakota; previously a Board Member of Catholic Charities of St. Paul and Minneapolis; former Director of the Catholic Community Foundation of Minnesota; and former Investment Advisory Board Member of the University of Minnesota.

Name, Address ¹ , Year of Birth, Position(s) Held with Fund and Length of Service as a Putnam Fund Trustee	Principal Occupation(s) During Past 5 Years	Number of Funds in the Putnam Funds Complex Overseen by Trustee ³	Other Directorships Held by Trustee
George Putnam III (Born 1951), Trustee since 1984	Chair of New Generation Research, Inc., a publisher of financial advisory and other research services, and President of New Generation Advisors, LLC, a registered investment adviser to private funds.	105	Director of The Boston Family Office, LLC, a registered investment adviser; a Director of the Gloucester Marine Genomics Institute; a Trustee of the Lowell Observatory Foundation; and previously a Trustee of the Marine Biological Laboratory.
Manoj P. Singh (Born 1952), Trustee since 2017	Until 2015, Chief Operating Officer and Global Managing Director at Deloitte Touche Tohmatsu, Ltd., a global professional services organization, serving on the Deloitte U.S. Board of Directors and the boards of Deloitte member firms in China, Mexico and Southeast Asia.	105	Director of ReNew Energy Global Plc, a publicly traded renewable energy company; Director of Abt Associates, a global research firm working in the fields of health, social and environmental policy, and international development; Trustee of Carnegie Mellon University; Director of Pratham USA, an organization dedicated to children's education in India; member of the advisory board of Altimetrik, a business transformation and technology solutions firm; and Director of DXC Technology, a global IT services and consulting company.
Mona K. Sutphen (Born 1967), Trustee since 2020	Partner, Investment Strategies at The Vistria Group, a private investment firm focused on middle-market companies in the healthcare, education, and financial services industries. From 2014 to 2018, Partner at Macro Advisory Partners, a global consulting firm.	105	Director of Spotify Technology S.A., a publicly traded audio content streaming service; Director of Unitek Learning, a private nursing and medical services education provider in the United States; Board Member, International Rescue Committee; Co-Chair of the Board of Human Rights First; Trustee of Mount Holyoke College; member of the Advisory Board for the Center on Global Energy Policy at Columbia University's School of International and Public Affairs; previously Director of Pattern Energy and Pioneer Natural Resources, publicly traded energy companies; and previously Managing Director of UBS AG.

Name, Address ¹ , Year of Birth, Position(s) Held with Fund and Length of Service as a Putnam Fund Trustee	Principal Occupation(s) During Past 5 Years	Number of Funds in the Putnam Funds Complex Overseen by Trustee ³	Other Directorships Held by Trustee
Interested Truste	es		
**Robert L. Reynolds (Born 1952), Trustee since 2008	Chair of Great-West Lifeco U.S. LLC. Prior to 2019, also President and Chief Executive Officer of Great-West Financial, a financial services company that provides retirement savings plans, life insurance, and annuity and executive benefits products, and of Great-West Lifeco U.S. LLC, a holding company that owns Putnam Investments and Great-West Financial, and a member of Great-West Financial's Board of Directors. Until 2023, President and Chief Executive Officer of Putnam Investments, President and Chief Executive Officer of Putnam Management, and member of Putnam Investments' Board of Directors.	105	Director of the Concord Museum; Director of Dana-Farber Cancer Institute; Director of the U.S. Ski & Snowboard Foundation; Chair of the Boston Advisory Board of the American Ireland Fund; Council Co-Chair of the American Enterprise Institute; Member of U.S. Chamber of Commerce, Center for Capital Markets Competitiveness; Chair of Massachusetts High Technology Council; Member of the Chief Executives Club of Boston; Member of the Massachusetts General Hospital President's Council; Chairman of the Board of Directors of the Ron Burton Training Village; Director and former Chair of the Massachusetts Competitive Partnership; former Chair of the West Virginia University Foundation; and former Executive Committee Member of the Greater Boston Chamber of Commerce.

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- 1 The address of each Trustee is 100 Federal Street, Boston, MA 02110.
- 2 Each Trustee serves for an indefinite term, until his or her resignation, retirement during the year he or she reaches age 75, death or removal.
- 3 The Putnam funds complex is composed of the Putnam mutual funds, closed-end funds, and exchange-traded funds. As of December 31, 2023, there were 89 mutual funds, 4 closed-end funds and 12 exchange-traded funds. Each Trustee listed in the table above serves as Trustee of each fund in the Putnam funds complex.
- * Ms. Murphy is the founder, controlling member, and Chief Executive Officer of Runa Digital Assets, LLC ("RDA"), the investment manager of Runa Digital Partners, LP ("RDP"), a private investment fund. Ms. Murphy also holds a controlling interest in RDP's general partner and is a limited partner in RDP. A subsidiary of Franklin Templeton and certain individuals employed by Franklin Templeton or its affiliates have made passive investments as limited partners in RDP (one of whom serves on the advisory board for RDA, which has no governance or oversight authority over RDA), representing in the aggregate approximately 33% of RDP as of October 31, 2023. In addition, if certain conditions are met, Franklin Templeton will be entitled to receive a portion of any incentive compensation allocable to RDP's general partner. For so long as Franklin Templeton maintains its investment in RDP, Ms. Murphy also has agreed upon request to advise and consult with Franklin Templeton and its affiliates on the market for digital assets. Ms. Murphy provides similar service to other limited partners in RDP that request her advice. Ms. Murphy also is

- entitled to receive deferred cash compensation in connection with her prior employment by an affiliate of Franklin Templeton, which employment ended at the end of 2021. With regard to Ms. Murphy, the relationships described above may give rise to a potential conflict of interest with respect to the Funds.
- ** Trustee who is an "interested person" (as defined in the 1940 Act) of the fund and Putnam Management. Mr. Reynolds is deemed an "interested person" by virtue of his position as an officer of the fund and his direct beneficial interest in shares of Franklin Resources, of which Putnam Management is an indirect wholly-owned subsidiary. Mr. Reynolds is the President of your fund and each of the other Putnam funds, and prior to January 1, 2024, Mr. Reynolds was President and Chief Executive Officer of Putnam Management and Putnam Investments, LLC, the previous parent company to Putnam Management, PIL, and PAC.

The "Interested Trustee" portion of the sub-section "Trustee Qualifications" in the section "MANAGEMENT" is deleted in its entirety and replaced with the following:

Interested Trustee

Robert L. Reynolds — Mr. Reynolds's extensive experience as a senior executive of a major mutual fund organization in the United States and his previous role as President and Chief Executive Officer of Putnam Management and Putnam Investments, LLC, the previous parent company to Putnam Management, PIL, and PAC.

The sub-section "Officers" in the section "MANAGEMENT" is deleted in its entirety and replaced with the following:

Officers

The other officers of the fund, in addition to Robert L. Reynolds, the fund's President, are shown below. All of the officers of your fund listed below are employees of Putnam Management or its affiliates or are members of the Trustees' independent administrative staff

Name, Address ¹ , Year of Birth, Position(s) Held with Fund	Length of Service with the Putnam Funds ²	Principal Occupation(s) During Past 5 Years and Position(s) with Fund's Investment Adviser and Distributor ³
Jonathan S. Horwitz ⁴ (Born 1955) Executive Vice President, Principal Executive Officer, and Compliance Liaison	Since 2004	Executive Vice President, Principal Executive Officer, and Compliance Liaison, The Putnam Funds.
Stephen J. Tate (Born 1974) Vice President and Chief Legal Officer	Since 2021	General Counsel, Putnam U.S. Holdings I, LLC ("Putnam Holdings"), Putnam Management and Putnam Retail Management (2021–Present).
		Deputy General Counsel and related positions, Putnam Investments, Putnam Management and Putnam Retail Management (2004–2021).
James F. Clark ³ (Born 1974) Vice President and Chief Compliance	Since 2016	Chief Compliance Officer, Putnam Holdings and Putnam Management (2016–Present).
Officer		Associate General Counsel, Putnam Investments, Putnam Management and Putnam Retail Management (2003–2015).
Michael J. Higgins ⁴ (Born 1976) Vice President, Treasurer, and Clerk	Since 2010	Vice President, Treasurer, and Clerk, The Putnam Funds.
Kevin R. Blatchford (Born 1967) Vice President and Assistant Treasurer	Since 2023	Director, Financial Reporting, Putnam Holdings
Kelley Hunt (Born 1984) AML Compliance Officer	Since 2023	Manager, U.S. Financial Crime team, Franklin Templeton

Name, Address ¹ , Year of Birth, Position(s) Held with Fund	Length of Service with the Putnam Funds ²	Principal Occupation(s) During Past 5 Years and Position(s) with Fund's Investment Adviser and Distributor ³
Janet C. Smith (Born 1965) Vice President, Principal Financial Officer, Principal Accounting Officer, and Assistant Treasurer	Since 2007	Head of Fund Administration Services, Putnam Holdings and Putnam Management.
Alan G. McCormack ⁵ (Born 1964) Vice President and Derivatives Risk Manager	Since 2022	Head of Quantitative Equities and Risk, Putnam Management.
Martin Lemaire ⁵ (Born 1984) Vice President and Derivatives Risk Manager	Since 2022	Risk Manager, Putnam Management (2020–Present). Risk Analyst, Putnam Management (2016–2020).
Denere P. Poulack 4 (Born 1968) Assistant Vice President, Assistant Clerk, and Assistant Treasurer	Since 2004	Assistant Vice President, Assistant Clerk, and Assistant Treasurer, The Putnam Funds.

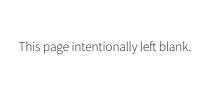
- 1 The address of each Officer, other than Ms. Hunt, is 100 Federal Street, Boston, MA 02110. Ms. Hunt's address is 100 Fountain Parkway, St. Petersburg, FL 33716.
- 2 Each officer serves for an indefinite term, until his or her resignation, retirement, death or removal.
- 3 Prior positions and/or officer appointments with the fund or the fund's investment adviser and distributor have been omitted.
- 4 Officers of the fund indicated are members of the Trustees' independent administrative staff. Compensation for these individuals is fixed by the Trustees and reimbursed to Putnam Management by the funds, except in certain cases where a fund has a unitary fee and/or expense limitation arrangement whereby Putnam Management is responsible for all or a portion of these individuals' compensation.
- 5 Messrs. McCormack and Lemaire each serve as Vice President and Derivatives Risk Manager for the funds, except Putnam Government Money Market Fund, Putnam Money Market Fund, and Putnam VT Government Money Market Fund.

Except as stated above, the principal occupations of the officers and Trustees for the last five years have been with the employers as shown above, although in some cases they have held different positions with their employers.

The sub-section "Principal Underwriter" in the section "MANAGEMENT" is deleted in its entirety and replaced with the following:

Putnam Retail Management, located at 100 Federal Street, Boston, MA 02110, is the principal underwriter of shares of the fund and the other continuously offered Putnam Funds. Putnam Retail Management is a wholly-owned subsidiary of Franklin Resources. Putnam Retail Management is not obligated to sell any specific amount of shares of the fund and will purchase shares for resale only against orders for shares. See "Charges and expenses" in Part I of this SAI for information on sales charges and other payments received by Putnam Retail Management.

Shareholders should retain this Supplement for future reference.





George Putnam Balanced Fund **Putnam BDC Income ETF Putnam BioRevolution ETF** Putnam California Tax Exempt Income Fund **Putnam Convertible Securities Fund Putnam Core Bond Fund Putnam Core Equity Fund Putnam Diversified Income Trust** Putnam Dynamic Asset Allocation **Balanced Fund Putnam Dynamic Asset Allocation Conservative Fund Putnam Dynamic Asset Allocation Equity Fund Putnam Dynamic Asset Allocation Growth Fund Putnam Emerging Markets Equity Fund** Putnam Emerging Markets ex-China ETF **Putnam ESG Core Bond ETF Putnam ESG High Yield ETF** Putnam ESG Ultra Short ETF Putnam Floating Rate Income Fund **Putnam Focused Equity Fund** Putnam Focused International Equity Fund Putnam Focused Large Cap Growth ETF Putnam Focused Large Cap Value ETF Putnam Global Health Care Fund Putnam Global Income Trust Putnam Global Technology Fund **Putnam Government Money Market Fund** Putnam High Yield Fund **Putnam Income Fund** Putnam Intermediate-Term Municipal Income Fund **Putnam International Capital Opportunities Fund Putnam International Equity Fund Putnam International Value Fund Putnam Large Cap Growth Fund** Putnam Large Cap Value Fund **Putnam Massachusetts Tax Exempt**

Putnam Mortgage Securities Fund Putnam Multi-Asset Income Fund Putnam New Jersey Tax Exempt Income Fund Putnam New York Tax Exempt Income Fund Putnam Ohio Tax Exempt Income Fund Putnam PanAgora ESG Emerging Markets **Equity ETF** Putnam PanAgora ESG International Equity ETF Putnam Pennsylvania Tax Exempt Income Fund Putnam Research Fund Putnam Retirement Advantage 2025 Fund Putnam Retirement Advantage 2030 Fund Putnam Retirement Advantage 2035 Fund Putnam Retirement Advantage 2040 Fund Putnam Retirement Advantage 2045 Fund Putnam Retirement Advantage 2050 Fund Putnam Retirement Advantage 2055 Fund Putnam Retirement Advantage 2060 Fund Putnam Retirement Advantage 2065 Fund Putnam Retirement Advantage Maturity Fund Putnam Short Duration Bond Fund Putnam Short Term Investment Fund Putnam Short-Term Municipal Income Fund **Putnam Small Cap Growth Fund** Putnam Small Cap Value Fund Putnam Strategic Intermediate Municipal Fund Putnam Sustainable Future ETF Putnam Sustainable Future Fund Putnam Sustainable Leaders ETF Putnam Sustainable Leaders Fund Putnam Sustainable Retirement 2025 Fund Putnam Sustainable Retirement 2030 Fund Putnam Sustainable Retirement 2035 Fund Putnam Sustainable Retirement 2040 Fund Putnam Sustainable Retirement 2045 Fund Putnam Sustainable Retirement 2050 Fund Putnam Sustainable Retirement 2055 Fund Putnam Sustainable Retirement 2060 Fund Putnam Sustainable Retirement 2065 Fund Putnam Sustainable Retirement Maturity Fund Putnam Tax Exempt Income Fund Putnam Tax-Free High Yield Fund Putnam Ultra Short Duration Income Fund

Putnam Ultra Short MAC Series



Putnam Money Market Fund

Putnam Minnesota Tax Exempt Income Fund

Putnam Mortgage Opportunities Fund

Income Fund

Putnam VT Core Equity Fund
Putnam VT Diversified Income Fund
Putnam VT Emerging Markets Equity Fund
Putnam VT Focused International Equity Fund
Putnam VT George Putnam Balanced Fund
Putnam VT Global Asset Allocation Fund
Putnam VT Global Health Care Fund
Putnam VT Government Money Market Fund
Putnam VT High Yield Fund
Putnam VT Income Fund

Putnam VT International Equity Fund
Putnam VT International Value Fund
Putnam VT Large Cap Growth Fund
Putnam VT Large Cap Value Fund
Putnam VT Mortgage Securities Fund
Putnam VT Research Fund
Putnam VT Small Cap Growth Fund
Putnam VT Small Cap Value Fund
Putnam VT Sustainable Future Fund
Putnam VT Sustainable Leaders Fund

This supplement replaces in its entirety the supplement to the Funds' prospectuses dated May 31, 2023.

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

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

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

Under the Investment Company Act of 1940, as amended, consummation of the transaction will result in the automatic termination of the investment management contract between each Putnam Fund and Putnam Management and any related sub-management and sub-advisory contracts, where applicable. In anticipation of this automatic termination, on June 23, 2023, the Board of Trustees of the Putnam Funds approved a new investment management contract between each Putnam Fund and Putnam Management (and new sub-management and sub-advisory contracts, if applicable), which will be presented to the shareholders of each Putnam Fund for their approval at shareholder meetings currently expected to occur in October 2023. Proxy solicitation materials related to these meetings, which will provide detailed information regarding the proposed transaction, are expected to be mailed to shareholders in the coming weeks.

The foregoing is not a solicitation of any proxy. For more information regarding the funds, or to receive a free copy of materials filed with the Securities and Exchange Commission ("SEC"), please visit Putnam's website at putnam.com/individual. Free copies of these materials can also be found on the SEC's website at http://www.sec.gov. Please read the funds' proxy statement carefully when it becomes available in the coming weeks because it will contain important information. The funds, their trustees, officers, and other members of management may be deemed to be participants in any future solicitation of the funds' shareholders in connection with the forthcoming meeting of shareholders. Shareholders may obtain information regarding the names, affiliations, and interests of these individuals in the funds' proxy statement when it becomes available.



Putnam VT International Value Fund

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FUND SYMBOLS CLASS IA CLASS IB

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This prospectus explains what you should know about Putnam VT International Value Fund, one of the funds of Putnam Variable Trust, which is available for purchase by separate accounts of insurance companies. Please read it carefully. Certain shares of other funds of the Trust are offered through other prospectuses.

These securities have not been approved or disapproved by the Securities and Exchange Commission (SEC) nor has the SEC passed upon the accuracy or adequacy of this prospectus. Any statement to the contrary is a crime.

Fund summary

Goal

Putnam VT International Value Fund seeks capital growth. Current income is a secondary objective.

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 tables and examples 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
ClassIA	0.69%	N/A	0.21%	0.90%
ClassIB	0.69%	0.25%	0.21%	1.15%

^{*} 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. The example does not reflect insurancerelated 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
ClassIA	\$92	\$287	\$498	\$1,108
ClassIB	\$117	\$365	\$633	\$1,398

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 11%.

Investments, risks, and performance

Investments

We invest mainly in common stocks of large and midsize companies outside the United States, with a focus on value stocks. Value stocks are those that we believe are currently undervalued by the market. If we are correct and other investors ultimately recognize the value of the company, the price of its stock may rise. We invest mainly in developed countries, but may invest in emerging

markets. We 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. We may also use derivatives, such as certain foreign currency transactions, warrants, futures, options, and swap contracts, for both hedging and non-hedging purposes. For example, we typically use foreign currency forward contracts in connection with the fund's investments in foreign securities in order to hedge the fund's currency exposure relative to the fund's benchmark index.

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, outbreaks of infectious illnesses or other widespread public health issues, 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, may negatively impact the fund's performance, and may exacerbate other risks to which the fund is subject. Value stocks may fail to rebound, and the market may not favor value-style investing. These risks are generally greater for small and midsize companies. 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.

The value of international investments traded in foreign currencies may be adversely impacted by fluctuations in exchange rates. International investments, particularly investments in emerging markets, may carry risks associated with potentially less stable economies or governments (such as the risk of seizure by a foreign government, the imposition of currency or other restrictions, or high levels of inflation), and may be or become illiquid.

Investments focused in a single region may be affected by common economic forces and other factors. In addition, events in any one country within the region may impact the other countries or the region as a whole. Because the fund currently invests, and may in the future invest significantly in European and Asian companies, the fund is particularly susceptible to economic, political, regulatory and other events or conditions affecting issuers in Europe and Asia. European financial markets have in recent years experienced increased volatility due to concerns with some countries' high levels of sovereign debt, budget deficits, and unemployment. Asia includes countries in various stages of economic development, from emerging market economies to the highly developed economy of Japan. Some parts of Asia may be subject to a greater degree of economic, political and social instability than is the case in the United States.

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 derivative positions and the potential failure of the other party to the instrument to meet its obligations. The risk of a party failing to meet its obligations may increase if the fund has significant investment exposure to that counterparty. The value of derivatives may move in unexpected ways due to unanticipated market movements, the use of leverage, imperfect correlation between the derivative instrument and the reference asset, or other factors, especially in unusual market conditions, and volatility in the value of derivatives could adversely impact the fund's returns, obligations and exposures. Derivatives are also subject to other risks, including liquidity risk (e.g., liquidity demands arising from the requirement to make payments to a derivative counterparty), operational risk (e.g., settlement issues or system failures), and legal risk (e.g., insufficient legal documentation or contract enforceability issues).

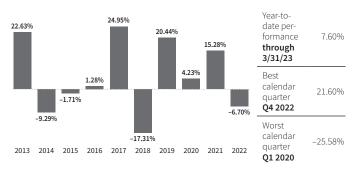
There is no guarantee that the investment techniques, analyses, or judgments that we apply in making investment decisions for the fund will produce the intended outcome or that the investments we select for the fund will perform as well as other securities that were not selected for the fund. We, or 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 12/31/22)

Share class	1 year	5 years	10 years
Class IA	-6.70%	2.23%	4.45%
Class IB	-6.81%	1.97%	4.19%
MSCI EAFE Value Index (ND) (no deduction for fees, expenses or taxes, other than withholding taxes on reinvested dividends)	-5.58%	0.17%	3.51%

Your fund's management

Investment advisor

Putnam Investment Management, LLC

Portfolio managers

Darren Jaroch, Portfolio Manager, portfolio manager of the fund from 2005 to 2008 and since 2009

Lauren DeMore, Portfolio Manager, portfolio manager of the fund since 2019

Sub-advisors

Putnam Investments Limited*

The Putnam Advisory Company, LLC*

* Though the investment advisor has retained the services of both Putnam Investments Limited (PIL) and The Putnam Advisory Company, LLC (PAC), PIL and PAC do 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.

What are the fund's main investment strategies and related risks?

This section contains greater detail on the fund's main investment strategies and the related risks you would face as a fund shareholder. It is important to keep in mind that risk and reward generally go hand in hand; the higher the potential reward, the greater the risk. As mentioned in the fund summary, we pursue the fund's goal by investing mainly in value stocks issued by companies outside the United States. We consider a company to be located outside the United States if the company's securities trade outside the United States, the company is headquartered or organized outside the United States or the company derives a majority of its revenues or profits outside the United States.

• Common stocks. Common stock represents an ownership interest in a company. The value of a company's stock may fall as a result of factors directly relating to that company, such as decisions made by its management or lower demand for the company's products or services. A stock's value may also fall because of factors affecting not just the company, but also other companies in the same industry or in a number of different industries, such as increases in production costs. 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 financials sector such as banks, savings and loan organizations and insurance companies. Financial services companies may be affected by the availability and cost of capital; changes in interest rates, insurance claims activity, industry consolidation and general economic conditions; and reduced profitability from limitations on loans, proprietary trading and interest rates and fees charged as a result of extensive government regulations.

The value of a company's stock may also be affected by changes in financial markets that are relatively unrelated to the company or its industry, such as changes in interest rates, currency exchange rates, or inflation rates. In addition, a company's stock generally pays dividends only after the company invests in its own business and makes required payments to holders of its bonds and other debt. For this reason, the value of a company's stock will usually react more strongly than its bonds and other debt to actual or perceived changes in the company's financial condition or prospects.

<u>Value stocks</u> — Companies whose stocks we believe are undervalued by the market may have experienced adverse business developments or may be subject to special risks that have caused their stocks to be out of favor. If our assessment of a company's prospects is wrong, or if other investors do not similarly recognize the value of the company, then the price of the company's stock

may fall or may not approach the value that we have placed on it. In addition, value stocks, at times, may not perform as well as growth stocks or the stock market in general, and may be out of favor with investors for varying periods of time.

- Foreign investments. Foreign investments involve certain special risks, including:
- Unfavorable changes in currency exchange rates: Foreign investments are typically issued and traded in foreign currencies. As a result, their values may be affected by changes in exchange rates between foreign currencies and the U.S. dollar.
- Political and economic developments: Foreign investments may be subject to the risks of seizure by a foreign government, direct or indirect impact of sovereign debt default, imposition of economic sanctions, tariffs, trade restrictions, currency restrictions or similar actions (or retaliatory measures taken in response to such actions), and tax increases.
- -Unreliable or untimely information: There may be less information publicly available about a foreign company than about most publicly-traded U.S. companies, and foreign companies are usually not subject to accounting, auditing and financial reporting standards and practices as stringent as those in the United States. Foreign securities may trade on markets that are closed when U.S. markets are open. As a result, accurate pricing information based on foreign market prices may not always be available.
- Limited legal recourse: Legal remedies for investors may be more limited than the remedies available in the United States.
- -Limited markets: Certain foreign investments may be less liquid (harder to buy and sell) and more volatile than most U.S. investments, which means we may at times be unable to sell these foreign investments at desirable prices. For the same reason, we may at times find it difficult to value the fund's foreign investments.
- -Trading practices: Brokerage commissions and other fees are generally higher for foreign investments than for U.S. investments. The procedures and rules governing foreign transactions and custody may also involve delays in payment, delivery or recovery of money or investments.

The risks of foreign investments are typically increased in countries with less developed markets, which are sometimes referred to as emerging markets. Emerging markets may have less developed economies and legal and regulatory systems, and may be susceptible to greater political and economic instability than developed foreign markets. Countries with emerging markets are also more likely to experience high levels of inflation or currency devaluation, and investments in emerging markets may be more volatile and less liquid than investments in developed markets. For these and other reasons, investments in emerging markets are often considered speculative.

Certain risks related to foreign investments may also apply to some extent to U.S.-traded investments that are denominated in foreign currencies, investments in U.S. companies that are traded in foreign markets or investments in U.S. companies that have significant foreign operations.

- Geographic focus. If the fund invests a substantial percentage of its assets in issuers located in a single country, a small number of countries, or a particular geographic region, the fund's performance will likely be closely tied to the market, currency, political, economic, regulatory, geopolitical, and other conditions in such countries or region. These conditions could generally have a greater effect on the fund than they would on a more geographically diversified fund, which may result in greater losses and volatility. Because the fund currently invests, and may in the future invest, significantly in European and Asian companies, the fund is particularly susceptible to economic, political, regulatory and other events or conditions affecting issuers in Europe and Asia. European financial markets have in recent years experienced increased volatility due to concerns with some countries' high levels of sovereign debt, budget deficits, and unemployment. Geopolitical concerns, such as the withdrawal of the United Kingdom from the European Union ("EU") and the potential that another member country might exit the Economic and Monetary Union of the EU or the EU, could lead to increased volatility in European markets and negatively affect the fund's investments both in issuers in the exiting country and throughout Europe. Some parts of Asia may be subject to a greater degree of economic, political and social instability than is the case in the United States. Many countries in Asia are developing, both politically and economically, and as a result, companies in certain countries in Asia may be subject to risks like nationalization or other forms of government interference, and some countries may be heavily reliant on only a few industries or commodities. In Japan, the economy is strongly impacted by government intervention and protectionism, as well as international trade, government support of the financial services sector and other troubled sectors, and geopolitical developments. Japan, as well as the other Asian countries, has historically been prone to natural disasters. The occurrence of a natural disaster, including subsequent recovery from a natural disaster, in the region could negatively impact the economy of the affected country or countries. Certain developing economies in Asia are characterized by frequent currency fluctuations, devaluations, and restrictions; unstable employment rates; rapid fluctuation in, among other things, inflation and reliance on exports; and less efficient markets. Currency fluctuations or devaluations in any one country can have a significant effect on the entire region.
- **Derivatives.** We may engage in a variety of transactions involving derivatives, such as certain foreign currency transactions, futures, options, warrants, and swap contracts. Derivatives are financial instruments whose value depends upon, or is derived from, the value of something else, such as one or more underlying investments, pools of investments, indexes or currencies. We

may make use of "short" derivative positions, the values of which typically move in the opposite direction from the price of the underlying investment, pool of investments, index or currency. We may use derivatives both for hedging and non-hedging purposes. For example, the fund expects to use foreign currency transactions to increase or decrease the fund's exposure to a particular currency or group of currencies. The fund may also, from time to time, write (i.e., sell) covered call options or purchase put options on securities to hedge against declines in the value of securities in the fund's portfolio. We may also use derivatives as a substitute for a direct investment in the securities of one or more issuers. For example, the fund may invest in index futures contracts as a substitute for a direct investment in securities. However, we may also choose not to use derivatives based on our evaluation of market conditions or the availability of suitable derivatives. Investments in derivatives may be applied toward meeting a requirement to invest in a particular kind of investment if the derivatives have economic characteristics similar to that investment

Derivatives involve special risks and may result in losses. The successful use of derivatives depends on our ability to manage these sophisticated instruments. Some derivatives are "leveraged," which means they provide the fund with investment exposure greater than the value of the fund's investment in the derivatives. As a result, these derivatives may magnify or otherwise increase investment losses to the fund. The risk of loss from certain short derivative positions is theoretically unlimited. The value of derivatives may move in unexpected ways due to unanticipated market movements, the use of leverage, imperfect correlation between the derivative instrument and the reference asset, or other factors, especially in unusual market conditions, and volatility in the value of derivatives could adversely impact the fund's returns, obligations and exposures.

Other risks arise from the potential inability to terminate or sell derivative positions. Derivatives may be subject to liquidity risk due to the fund's obligation to make payments of margin, collateral, or settlement payments to counterparties. A liquid secondary market may not always exist for the fund's derivative positions. In fact, certain over-the-counter instruments (investments not traded on an exchange) may not be liquid. Over-the-counter instruments also involve the risk that the other party to the derivative transaction may not be willing or able to meet its obligations with respect to the derivative transaction. The risk of a party failing to meet its obligations may increase if the fund has significant exposure to that counterparty. Derivative transactions may also be subject to operational risk, including due to documentation and settlement issues, system failures, inadequate controls and human error and legal risk due to insufficient documentation, insufficient capacity or authority of a counterparty, or issues with respect to the legality or enforceability of the derivative contract. For further information about additional types and risks of derivatives, see Miscellaneous Investments, Investment Practices and Risks in the Statement of Additional Information (SAI).

- Small and midsize companies. These companies, some of which may have a market capitalization of less than \$1 billion, are more likely than larger companies to have limited product lines, markets or financial resources, lack profitability or depend on a small management group. Stocks of these companies often trade in smaller volumes, and their prices may fluctuate more than stocks of larger companies. Stocks of small and midsize companies may therefore be more vulnerable to adverse developments than those of larger companies. In addition, stocks of small and midsize companies, at times, may not perform as well as stocks of larger companies or the stock market in general, and may be out of favor with investors for varying periods of time. Small companies in foreign countries could be relatively smaller than those in the United States.
- ESG considerations. We expect to integrate environmental, social, or governance ("ESG") considerations, where we consider them material and relevant, into our fundamental research process and investment decision-making for the fund, although ESG considerations do not represent a primary focus of the fund. We believe that ESG considerations, like other, more traditional subjects of investment analysis such as market position, growth prospects, and business strategy, have the potential to impact financial risk and investment returns. We believe that ESG considerations are best analyzed in combination with a company's fundamentals, including a company's industry, geography, and strategic position. When considering ESG factors, we use company disclosures, public data sources, and independent third-party data as inputs into our analytical processes. The consideration of ESG factors as part of the fund's investment process does not mean that the fund pursues a specific "ESG" or "sustainable" investment strategy, and we may make investment decisions for the fund other than on the basis of relevant ESG considerations.
- Liquidity and illiquid investments. We may invest up to 15% of the fund's net assets in illiquid investments, which may be considered speculative and which may be difficult to sell. The sale of many of these investments is prohibited or limited by law or contract. Some investments may be difficult to value for purposes of determining the fund's net asset value. Certain other investments may not have an active trading market due to adverse market, economic, industry, political, regulatory, geopolitical, environmental, public health, and other conditions, including investors trying to sell large quantities of a particular investment or type of investment, or lack of market makers or other buyers for a particular investment or type of investment. We may not be able to sell the fund's illiquid investments when we consider it desirable to do so, or we may be able to sell them only at less than their value.
- Market risk. 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 (including perceptions about monetary policy, interest rates,

inflation or the risk of default); government actions (including protectionist measures, intervention in the financial markets or other regulation, and changes in fiscal, monetary or tax policies); geopolitical events or changes (including natural disasters, terrorism and war); outbreaks of infectious illnesses or other widespread public health issues (including epidemics and pandemics); and factors related to a specific issuer, geography, industry or sector. Foreign financial markets have their own market risks, and they may be more or less volatile than U.S. markets and may move in different directions. During a general downturn in financial markets, multiple asset classes may decline in value simultaneously. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings. During those periods, the fund may experience high levels of shareholder redemptions, and may have to sell securities at times when it would otherwise not do so, and at unfavorable prices. These risks may be exacerbated during economic downturns or other periods of economic stress.

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, including the risks disclosed in this prospectus, 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 and operational risk. The fund is actively managed and its performance will reflect, in part, our ability to make investment decisions that seek to achieve the fund's investment objective. 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. As a result, the fund may underperform its benchmark or other funds with a similar investment goal and may realize losses. In addition, we, or the fund's other service providers, may experience disruptions or operating errors that could negatively impact the fund. Although service providers may have operational risk management policies and procedures and take appropriate precautions to avoid and mitigate risks that could lead to disruptions and operating errors, it may not be possible to identify all of the operational risks that may affect the fund or to develop

processes and controls to completely eliminate or mitigate their occurrence or effects.

• Other investments. In addition to the main investment strategies described above, the fund may make other types of investments, such as investments in U.S. companies, preferred stocks, convertible securities, and debt instruments.

The fund may also invest in cash or cash equivalents, including money market instruments or short-term instruments such as commercial paper, bank obligations (e.g., certificates of deposit and bankers' acceptances), repurchase agreements, and U.S. Treasury bills or other government obligations. The fund may also from time to time invest all or a portion of its cash balances in money market and/or short-term bond funds advised by Putnam Management or its affiliates. The percentage of the fund invested in cash and cash equivalents and such money market and shortterm bond funds is expected to vary over time and will depend on various factors, including market conditions, purchase and redemption activity by fund shareholders, and our assessment of the cash level that is appropriate to allow the fund to pursue investment opportunities as they arise and to meet shareholder redemption requests. Large cash positions may dampen performance and may prevent the fund from achieving its goal. The fund may also loan portfolio securities to earn income. These practices may be subject to other risks, as described under Miscellaneous Investments, Investment Practices and Risks in the SAI.

- Temporary defensive strategies. In response to adverse market, economic, political or other conditions, we may take temporary defensive positions, such as investing some or all of the fund's assets in cash and cash equivalents, that differ from the fund's usual investment strategies. However, we may choose not to use these temporary defensive strategies for a variety of reasons, even in very volatile market conditions. If we do employ these strategies, the fund may miss out on investment opportunities, and may not achieve its goal. Additionally, while temporary defensive strategies are mainly designed to limit losses, they may not work as intended.
- Changes in policies. The Trustees may change the fund's goal, investment strategies and other policies set forth in this prospectus without shareholder approval, except as otherwise provided in the prospectus or SAI.
- Portfolio turnover rate. The fund's portfolio turnover rate measures how frequently the fund buys and sells investments. A portfolio turnover rate of 100%, for example, would mean that the fund sold and replaced securities valued at 100% of the fund's assets within a one-year period. From time to time the fund may engage in frequent trading. High turnover may cause a fund to pay more brokerage commissions and to incur other transaction costs, which may detract from performance. The fund's portfolio turnover rate and the amount of brokerage commissions it pays will vary over time based on market conditions.

• Portfolio holdings. The SAI includes a description of the fund's policies with respect to the disclosure of its portfolio holdings. For more specific information on the fund's portfolio, you may visit the Putnam Investments website, putnam.com/individual/annuities, where the fund's top 10 holdings and related portfolio information may be viewed monthly beginning approximately 15 days after the end of each month, and full portfolio holdings may be viewed quarterly beginning on the 8th business day after the end of each calendar quarter. This information will remain available on the website at least until the fund files a Form N-CSR or publicly available Form N-PORT with the SEC for the period that includes the date of the information, after which such information can be found on the SEC's website at http://www.sec.gov.

Who oversees and manages the fund?

The fund's Trustees

As a shareholder of a mutual fund, you have certain rights and protections, including representation by a Board of Trustees. The Putnam Funds' Board of Trustees oversees the general conduct of the fund's business and represents the interests of the Putnam fund shareholders. At least 75% of the members of the Putnam Funds' Board of Trustees are independent, which means they are not officers of the fund or affiliated with Putnam Investment Management, LLC (Putnam Management).

The Trustees periodically review the fund's investment performance and the quality of other services such as administration, custody, and investor services. At least annually, the Trustees review the fees paid to Putnam Management and its affiliates for providing or overseeing these services, as well as the overall level of the fund's operating expenses. In carrying out their responsibilities, the Trustees are assisted by an administrative staff, auditors and legal counsel that are selected by the Trustees and are independent of Putnam Management and its affiliates.

Contacting the fund's Trustees

Address correspondence to: The Putnam Funds Trustees 100 Federal Street Boston, MA 02110

The fund's investment manager

The Trustees have retained Putnam Management, which has managed mutual funds since 1937, to be the fund's investment manager, responsible for making investment decisions for the fund and managing the fund's other affairs and business.

The basis for the Trustees' approval of the fund's management contract and the sub-management and sub-advisory contracts described below is discussed in the fund's semiannual report to shareholders dated June 30, 2022.

The fund pays a monthly management fee to Putnam Management. The fee is calculated by applying a rate to the fund's average net assets for the month. The rate is based on the monthly average of the aggregate net assets of other open-end funds sponsored by Putnam Management (excluding net assets of such funds that are invested in, or that are invested in by, other such funds to the extent necessary to avoid "double counting" of those assets), and generally declines as the aggregate net assets increase.

The fund paid Putnam Management a management fee (after any applicable waivers) of 0.69% of average net assets for the fund's last fiscal year.

Putnam Management's address is 100 Federal Street, Boston, MA 02110.

Putnam Management has retained its affiliate PIL to make investment decisions for such fund assets as may be designated from time to time for its management by Putnam Management. PIL is not currently managing any fund assets. If PIL were to manage any fund assets, Putnam Management (and not the fund) would pay a quarterly sub-management fee to PIL for its services at the annual rate of 0.25% of the average net asset value (NAV) of any fund assets managed by PIL. PIL, which provides a full range of international investment advisory services to institutional clients, is located at 16 St James's Street, London, England, SW1A 1ER.

Putnam Management and PIL have retained their affiliate PAC to make investment decisions for such fund assets as may be designated from time to time for its management by Putnam Management. PAC is not currently managing any fund assets. If PAC were to manage any fund assets, Putnam Management or PIL, as applicable (and not the fund), would pay a quarterly sub-advisory fee to PAC for its services at the annual rate of 0.25% of the average NAV of any fund assets managed by PAC. PAC, which provides financial services to institutions and individuals through separately-managed accounts and pooled investment vehicles, has its headquarters at 100 Federal Street, Boston, MA 02110, with additional investment management personnel located in Singapore.

Pursuant to these arrangements, Putnam investment professionals who are based in foreign jurisdictions may serve as portfolio managers of the fund or provide other investment services, consistent with local regulations.

• Portfolio managers. The officers of Putnam Management identified below are jointly and primarily responsible for the day-to-day management of the fund's portfolio.

Portfolio managers	Joined fund	Employer	Positions over past five years
Darren Jaroch	from 2005 to 2008 and since 2009	Putnam Management 1999 – Present	Portfolio Manager
Lauren DeMore	2019	Putnam Management 2006 – Present	Portfolio Manager Previously, Assistant Portfolio Manager, Portfolio Manager, Analyst and Analyst

The SAI provides information about these individuals' compensation, other accounts managed by these individuals and these individuals' ownership of securities in the fund.

How to buy and sell fund shares

The Trust has an underwriting agreement relating to the fund with Putnam Retail Management, 100 Federal Street, Boston, Massachusetts 02110. Putnam Retail Management presently offers shares of the fund continuously to separate accounts of various insurers. The underwriting agreement presently provides that Putnam Retail Management accepts orders for shares at NAV and no sales commission or load is charged.

Shares are sold or redeemed at the NAV per share next determined after receipt of an order. Orders for purchases or sales of shares of the fund must be received by Putnam Retail Management before the close of regular trading on the NYSE in order to receive that day's NAV. No fee is charged to a separate account when it redeems fund shares.

Please check with your insurance company to determine whether the fund is available under your variable annuity contract or variable life insurance policy. The fund may not be available in your state due to various insurance regulations. This prospectus should be read in conjunction with the prospectus of the separate account of the specific insurance product which accompanies this prospectus.

The fund currently does not foresee any disadvantages to policy owners arising out of the fact that the fund offers its shares to separate accounts of various insurance companies to serve as the investment medium for their variable products. Nevertheless, the Trustees intend to monitor events in order to identify any material irreconcilable conflicts which may possibly arise, and to determine what action, if any, should be taken in response to such conflicts. If such a conflict were to occur, one or more insurance companies' separate accounts might be required to withdraw their investments in the fund and shares of another fund may be substituted. This might force the fund to sell portfolio securities at disadvantageous prices. In addition, the Trustees may refuse to sell shares of the fund to any separate account or may suspend or terminate the offering of shares of the fund if such action is required by law or regulatory authority or is in the best interests of the shareholders of the fund.

The fund typically expects to send you payment for your shares one business day after your request is received in good order. However, it is possible that payment of redemption proceeds may take up to seven days. Under unusual circumstances, the Trust may suspend redemptions or postpone payment for more than seven days, as permitted by federal securities law. Under normal market conditions, the fund typically expects to satisfy redemption requests by using holdings of cash and cash equivalents or selling portfolio assets to generate cash. Under stressed market conditions, the fund may also satisfy redemption requests by borrowing under the fund's lines of credit or interfund lending

arrangements. For additional information regarding the fund's lines of credit and interfund lending arrangements, please see the SAI.

To the extent consistent with applicable laws and regulations, the fund reserves the right to satisfy all or a portion of a redemption request by distributing securities or other property in lieu of cash ("in-kind" redemptions), under both normal and stressed market conditions. The fund generally expects to use in-kind redemptions only in stressed market conditions or stressed conditions specific to the fund, such as redemption requests that represent a large percentage of the fund's net assets in order to minimize the effect of the large redemption on the fund and its remaining shareholders. Any in-kind redemption will be effected through a pro rata distribution of all publicly traded portfolio securities or securities for which quoted bid prices are available, subject to certain exceptions. The securities distributed in an in-kind redemption will be valued in the same manner as they are valued for purposes of computing the fund's net asset value. Once distributed in-kind to an investor, securities may increase or decrease in value before the investor is able to convert them into cash. Any transaction costs or other expenses involved in liquidating securities received in an in-kind redemption will be borne by the redeeming investor. The fund has committed, in connection with an election under Rule 18f-1 under the Investment Company Act of 1940, to pay all redemptions of fund shares by a single shareholder during any 90-day period in cash, up to the lesser of (i) \$250,000 or (ii) 1% of the fund's net assets measured as of the beginning of such 90-day period. For information regarding procedures for in-kind redemptions, please contact Putnam Retail Management.

How does the fund price its shares?

The price of the fund's shares is based on its NAV. The NAV per share of each class equals the total value of its assets, less its liabilities, divided by the number of its outstanding shares. Shares are only valued as of the scheduled close of regular trading on the NYSE each day the exchange is open.

The fund values its investments for which market quotations are readily available at market value. It values all other investments and assets at their fair value, which may differ from recent market prices. For example, the fund may value a stock at its fair value when the relevant exchange closes early or trading in the stock is suspended. It may also value a stock at fair value if recent transactions in the stock have been very limited or if, in the case of a security traded on a market that closes before the NYSE closes, material information about the issuer becomes available after the close of the relevant market.

The fund translates prices for its investments quoted in foreign currencies into U.S. dollars at current exchange rates, which are generally determined as of 4:00 p.m. Eastern Time each day the NYSE is open. As a result, changes in the value of those currencies in relation to the U.S. dollar may affect the fund's NAV. Because

foreign markets may be open at different times than the NYSE, the value of the fund's shares may change on days when shareholders are not able to buy or sell them. Many securities markets and exchanges outside the U.S. close before the close of the NYSE, and the closing prices for securities in those markets or exchanges may not reflect events that occur after the close but before the scheduled close of regular trading on the NYSE. As a result, the fund has adopted fair value pricing procedures, which, among other things, require the fund to fair value foreign equity securities if there has been a movement in the U.S. market that exceeds a specified threshold. Although the threshold may be revised from time to time and the number of days on which fair value prices will be used will depend on market activity, it is possible that fair value prices will be used by the fund to a significant extent. As noted above, the value determined for an investment using the fund's fair value pricing procedures may differ from recent market prices for the investment.

Distribution plan and payments to dealers

The Trust has adopted a Distribution Plan with respect to class IB shares to compensate Putnam Retail Management for services provided and expenses incurred by it as principal underwriter of the class IB shares, including the payments to insurance companies and their affiliated dealers mentioned below. The plan provides for payments by the fund to Putnam Retail Management at the annual rate (expressed as a percentage of average net assets) of up to 0.35% on class IB shares. The Trustees currently limit payments on class IB shares to 0.25% of average net assets. Because these fees are paid out of the fund's assets on an ongoing basis, they will increase the cost of your investment.

Putnam Retail Management compensates insurance companies (or affiliated broker-dealers) whose separate accounts invest in the Trust through class IB shares for providing services to their contract holders investing in the Trust.

Putnam Retail Management makes quarterly payments to dealers at the annual rate of up to 0.25% of the average NAV of class IB shares.

Putnam Retail Management may suspend or modify its payments to dealers. The payments are also subject to the continuation of the Distribution Plan, the terms of service agreements between dealers and Putnam Retail Management, and any applicable limits imposed by the Financial Industry Regulatory Authority (FINRA).

In addition to the payments described above with respect to class IB shares, Putnam Retail Management and its affiliates also pay additional compensation to selected insurance companies (or affiliated broker-dealers) to whom shares of the fund are offered ("Record Owners") and to dealers that sell variable insurance products ("dealers") in recognition of their marketing and/or administrative services support. These payments may create an incentive for a Record Owner firm, dealer firm or their

representatives to recommend or offer shares of the fund or other Putnam funds, or insurance products for which the fund serves as an underlying investment, to its customers. These additional payments are made by Putnam Retail Management and its affiliates and do not increase the amount paid by you or the fund as shown under Fund summary — Fees and expenses.

The additional payments to Record Owners and dealers by Putnam Retail Management and its affiliates are generally based on one or more of the following factors: average net assets of the fund attributable to that Record Owner or dealer, sales or net sales of the fund attributable to that Record Owner or dealer, or on the basis of a negotiated lump sum payment for services provided. Payments made by Putnam Retail Management and its affiliates for marketing and/or administrative support services to any one Record Owner or dealer are not expected, with certain limited exceptions, to exceed 0.25% of the average assets of the fund attributable to that Record Owner or dealer on an annual basis. These payments are made for marketing and/or administrative support services provided by Record Owners and dealers, including business planning assistance, educating dealer personnel about the fund and shareholder financial planning needs, placement on the dealer's preferred or recommended fund company list, access to sales meetings, sales representatives and management representatives of the dealer and administrative services performed by the Record Owner or dealer. Putnam Retail Management and its affiliates may make other payments (including payments in connection with educational seminars or conferences) or allow other promotional incentives to Record Owners and dealers to the extent permitted by SEC and National Association of Security Dealers, Inc. (as adopted by FINRA) rules and by other applicable laws and regulations.

You can find a list of all Record Owners and dealers to which Putnam made marketing and/or administrative support services payments in 2022 in the SAI, which is on file with the SEC and is also available on Putnam's website at putnam.com. You can also find other details in the SAI about the payments made by Putnam Retail Management and its affiliates and the services provided by your Record Owner or dealer. In addition, you can ask your Record Owner or dealer for information about any payments it receives from Putnam Retail Management and its affiliates and any services provided by your Record Owner or dealer.

Policy on excessive short-term trading

• Risks of excessive short-term trading. Excessive short-term trading activity may reduce the fund's performance and harm all fund shareholders by interfering with portfolio management, increasing the fund's expenses and diluting the fund's NAV. Depending on the size and frequency of short-term trades in the fund's shares, the fund may experience increased cash volatility, which could require the fund to maintain undesirably large cash positions or buy or sell portfolio securities it would not have bought or sold otherwise. The need to execute additional

portfolio transactions due to these cash flows may also increase the fund's brokerage and administrative costs.

Because the fund invests in foreign securities, its performance may be adversely impacted and the interests of longer-term shareholders may be diluted as a result of time-zone arbitrage, a short-term trading practice that seeks to exploit changes in the value of the fund's investments that result from events occurring after the close of the foreign markets on which the investments trade, but prior to the later close of trading on the NYSE, the time as of which the fund determines its NAV. If an arbitrageur is successful, he or she may dilute the interests of other shareholders by trading shares at prices that do not fully reflect their fair value.

When the fund invests in securities that may trade infrequently or may be more difficult to value, such as securities of smaller companies, it may be susceptible to trading by short-term traders who seek to exploit perceived price inefficiencies in the fund's investments. In addition, the market for securities of smaller companies may at times show "market momentum," in which positive or negative performance may continue from one day to the next for reasons unrelated to the fundamentals of the issuer. Short-term traders may seek to capture this momentum by trading frequently in the fund's shares, which will reduce the fund's performance and may dilute the interests of other shareholders. Because securities of smaller companies may be less liquid than securities of larger companies, the fund may also be unable to buy or sell these securities at desirable prices when the need arises (for example, in response to volatile cash flows caused by short-term trading). Similar risks may apply if the fund holds other types of less liquid securities, including belowinvestment-grade bonds.

• Fund policies and limitations. In order to protect the interests of long-term shareholders of the fund, Putnam Management and the fund's Trustees have adopted policies and procedures intended to discourage excessive short-term trading. The fund seeks to discourage excessive short-term trading by using fair value pricing procedures to value investments under some circumstances. Because the fund invests in foreign securities, fair value pricing may be used to a significant extent with respect to these securities. In addition, Putnam Management monitors aggregate cash flows in each insurance company separate account that invests in the fund. If high cash flows relative to the size of the account or other information indicate that excessive short-term trading may be taking place in a particular separate account, Putnam Management will contact the insurance company that maintains accounts for the underlying contract holders and seek to have the insurance company enforce the separate account's policies on excessive short-term trading. As noted below, each insurance company's policies on excessive short-term trading will vary, and some insurance companies may not have adopted specific policies on excessive short-term trading.

As noted above, the fund's shareholders are separate accounts sponsored by various insurance companies. Because Putnam Management currently does not have comprehensive access to trading records of individual contract holders, it is difficult (and in some cases impossible) for Putnam Management to determine if a particular contract holder is engaging in excessive short-term trading. In certain circumstances, there currently are also operational or technological constraints on Putnam Management's ability to monitor trading activity. In addition, even in circumstances when Putnam Management has access to sufficient information to permit a review of trading, its detection methods may not capture all excessive short-term trading.

As a result of these limitations, the fund's ability to monitor and deter excessive short-term trading ultimately depends on the capabilities, policies and cooperation of the insurance companies that sponsor the separate accounts. Some of the separate accounts have adopted transfer fees, limits on exchange activity, or other measures to attempt to address the potential for excessive short-term trading, while other separate accounts currently have not. For more information about any measures applicable to your investment, please see the prospectus of the separate account of the specific insurance product that accompanies this prospectus. The measures used by Putnam Management or a separate account may or may not be effective in deterring excessive short-term trading. In addition, the terms of the particular insurance contract may also limit the ability of the insurance company to address excessive short-term trading. As a result, the fund can give no assurances that market timing and excessive short-term trading will not occur in the fund.

In compliance with Rule 22c-2 under the Investment Company Act of 1940, as amended, Putnam Retail Management and Putnam Investor Services, on behalf of the fund, have entered into written agreements with the fund's financial intermediaries, under which the intermediary must, upon request, provide the fund with certain shareholder identity and trading information so that the fund can enforce its market timing policies.

• Account monitoring. In instances where trading records of individual contract holders are made available to Putnam Management, Putnam Management measures excessive short-term trading in the fund by the number of "round trip" transactions within a specified period of time. A "round trip" transaction is defined as a transfer into a fund followed, or preceded, by a transfer out of the same fund. A transfer is defined as a transaction requested by the contract owner to reallocate part or all of their contract value among the funds available in the contract. If Putnam Management's Compliance Department determines that a contract holder has engaged in excessive short-term trading, Putnam Management will request that the separate account's financial intermediary issue a written warning to the contract holder. Putnam Management's practices for measuring excessive short-term trading activity and requesting warnings to be issued may change from time to time. Some types

of transactions are exempt from monitoring, including, but not limited to, transfers that are executed automatically pursuant to a company-sponsored contractual or systematic program such as transfer of assets as a result of "dollar cost averaging" programs, asset allocation programs or automatic rebalancing programs. Also exempt are annuity payouts, loans, and systematic withdrawal programs; payment of a death benefit; any deduction of fees; payments such as loan repayments, scheduled contributions, withdrawals or surrenders; or retirement plan salary reduction contributions or planned premium payments.

• Account restrictions. In addition to these monitoring practices, Putnam Management and the fund reserve the right to reject or restrict transfers for any reason. Continued excessive short-term trading activity by a contract holder following a warning may lead to termination of the transfer privilege for that contract holder. Putnam Management may determine that a contract holder's trading activity is excessive or otherwise potentially harmful based on various factors, including trading history in the fund or other Putnam funds, and may aggregate activity in multiple accounts in the fund or other Putnam funds that Putnam Management believes are under common ownership or control for purposes of determining whether the activity is excessive. If Putnam Management identifies a contract holder engaging in excessive trading, depending on the capabilities of the intermediary, it may revoke certain privileges. Putnam Management may also temporarily or permanently barthe contract holder or insurance company separate account from investing in the fund or other Putnam funds. Putnam Management may take these steps in its discretion even if the contract holder's activity does not fall within Putnam Management's current monitoring parameters for the fund.

Fund distributions and taxes

The fund normally distributes any net investment income and any net realized capital gains annually. Distributions will be reinvested in additional shares of the fund, unless an election is made on behalf of a separate account to receive some or all of the distributions in cash.

Distributions are reinvested without a sales charge, using the NAV determined on the ex-dividend date. Distributions on each share are determined in the same manner and are paid in the same amount, regardless of class, except for such differences as are attributable to different class expenses.

Generally, holders of variable annuity and variable life 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. In addition, distributions made to a contract holder who is younger than 59½ may be subject to a 10% penalty tax. Investors should ask their own tax advisors for more information on their own tax situation, including possible foreign, state or local taxes.

In order for investors to receive the favorable tax treatment available to holders of variable annuity and variable life insurance contracts, the separate accounts underlying such contracts, as well as the funds in which such accounts invest, must meet certain diversification requirements. The fund intends to diversify its assets in accordance with these requirements. If the fund does not meet such requirements, income allocable to the contracts would be taxable currently to the holders of such contracts. In addition, if the Internal Revenue Service finds an impermissible level of "investor control" over the investment options underlying variable annuity or variable life insurance contracts, the advantageous tax treatment provided with respect to insurance company separate accounts under the Internal Revenue Code of 1986, as amended, will no longer be available. Please see the SAI for further discussion.

The fund intends to qualify as a "regulated investment company" for federal income tax purposes and to meet all other requirements necessary for it to be relieved of federal income taxes on income and gains it timely distributes to the separate accounts. For information concerning federal income tax consequences for the holders of variable annuity contracts and variable life insurance policies, contract holders should consult the prospectus of the applicable separate account.

The fund's investments in foreign securities may be subject to foreign withholding or other taxes. In that case, the fund's return on those investments would be decreased.

The fund's use of derivatives, if any, may affect the amount and timing of distributions to shareholders, potentially requiring the fund to liquidate other investments, including when it is not advantageous to do so, in order to satisfy its distribution requirements.

The foregoing discussion is very general and is based on the assumption that the shareholders in the fund will be insurance company separate accounts. For further information, please see Taxes in the SAL

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.

Financial highlights

The financial highlights tables are intended to help you understand the fund's recent financial performance. Certain information reflects financial results for a single fund share. The total returns represent the rate that an investor would have earned or lost on an investment in the fund, assuming reinvestment of all dividends and distributions. Total returns and expense ratios do not reflect insurance related charges or expenses; if these charges and expenses were reflected, performance would be lower and expenses would be higher. This information has been derived from the fund's financial statements, which have been audited by PricewaterhouseCoopers LLP. The Independent Registered Public Accounting Firm's report and the fund's financial statements are included in the fund's annual report to shareholders, which is available upon request.

Financial highlights

(For a common share outstanding throughout the period)

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INVESTMENT OPERATIONS:			T .		LESS DIS	TRIBUTI	ONS:			RATIOSAND	SUPPLEN	IENTAL DA	ATA:
Period ended	Net asset value, beginning of period	Net investment income (loss) a	Net realized and unrealized gain (loss) on investments	Total from investment operations	From net investment income	From net realized gain on investments	Total distributions	Net asset value, end of period	Total return at net asset value (%) ^{b,c}	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) c.d	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%)
ClassIA													
12/31/22	\$11.52	.29	(1.03)	(.74)	(.23)	(.36)	(.59)	\$10.19	(6.70)	\$33,090	.92 e	2.91	11
12/31/21	10.35	.27	1.29	1.56	(.25)	(.14)	(.39)	11.52	15.28	36,527	.87	2.41	15
12/31/20	10.44	.20	.09	.29	(.25)	(.13)	(.38)	10.35	4.23	33,437	.94	2.28	17
12/31/19	9.47	.29	1.55	1.84	(.30)	(.57)	(.87)	10.44	20.44	35,693	.92	2.96	15
12/31/18	11.71	.28	(2.27)	(1.99)	(.25)	_	(.25)	9.47	(17.31)	34,394	.92	2.53	17
Class IB													
12/31/22	\$11.37	.26	(1.00)	(.74)	(.21)	(.36)	(.57)	\$10.06	(6.81)	\$52,403	1.17e	2.67	11
12/31/21	10.23	.24	1.27	1.51	(.23)	(.14)	(.37)	11.37	14.94	49,158	1.12	2.14	15
12/31/20	10.32	.18	.08	.26	(.22)	(.13)	(.35)	10.23	3.94	36,020	1.19	2.06	17
12/31/19	9.36	.26	1.54	1.80	(.27)	(.57)	(.84)	10.32	20.22	32,572	1.17	2.70	15
12/31/18	11.59	.25	(2.26)	(2.01)	(.22)	_	(.22)	9.36	(17.61)	31,226	1.17	2.25	17

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.

 $^{{\}bf c}\,$ The charges and expenses at the insurance company separate account level are not reflected.

d Includes amounts paid through expense offset and/or brokerage/service arrangements, if any. Also excludes acquired fund fees and expenses, if any.

e Includes one-time proxy cost of 0.02%.

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For more information about Putnam VT International Value Fund

The fund's SAI and annual and semiannual reports to shareholders include additional information about the fund. The SAI, and the auditor's report and the financial statements included in the fund's most recent annual report to shareholders, are incorporated by reference into this prospectus, which means they are part of this prospectus for legal purposes. The fund's annual report discusses the market conditions and investment strategies that significantly affected the fund's performance during its last fiscal year. You may get free copies of these materials, request other information about any Putnam fund, or make shareholder inquiries, by contacting your financial representative, by visiting Putnam's website at putnam.com/individual/annuities, or by calling Putnam toll-free at 1-800-225-1581.

You may access reports and other information about the fund on the EDGAR Database on the Securities and Exchange Commission's website at http://www.sec.gov. You may get copies of this information, with payment of a duplication fee, by electronic request at the following E-mail address: publicinfo@sec.gov. You may need to refer to the fund's file number.

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