

Putnam VT Multi-Cap Growth Fund*

Prospectus

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This prospectus explains what you should know about Putnam VT Multi-Cap Growth Fund, one of the funds of Putnam Variable Trust, which are 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 nor has the Commission passed upon the accuracy or adequacy of this prospectus. Any statement to the contrary is a crime.

*Prior to September 1, 2010, Putnam VT Multi-Cap Growth Fund was known as Putnam VT New Opportunities Fund.

Fund summary

Goal

Putnam VT Multi-Cap Growth Fund seeks long-term capital appreciation.

Fees and expenses

The following table describes the fees and expenses you may pay if you buy and hold shares of the fund. The fees and expenses information does not reflect insurance-related charges or expenses borne by contract holders indirectly investing in the fund. If it did, expenses would be higher.

Annual fund operating expenses

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

Share class	Management fees	Distribution and service (12b-1) fees	Other expenses	Total annual fund operating expenses
Class IA	0.56%	N/A	0.19%	0.75%
Class IB	0.56%	0.25%	0.19%	1.00%

Example

The following hypothetical example is intended to help you compare the cost of investing in the fund with the cost of investing in other funds. The example does not reflect insurance-related charges or expenses. If it did, expenses would be higher. It assumes that you invest \$10,000 in the fund for the time periods indicated and then redeem or hold all your shares at the end of those periods. It assumes a 5% return on your investment each year and that the fund's operating expenses remain the same. Your actual costs may be higher or lower.

Share class	1 year	3 years	5 years	10 years
Class IA	\$77	\$240	\$417	\$930
Class IB	\$102	\$318	\$552	\$1,227

Portfolio turnover

The fund pays transaction-related costs 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 86%.

Investments, risks, and performance

Investments

We invest mainly in common stocks of U.S. companies of any size, with a focus on growth stocks. Growth stocks are issued by companies whose earnings are expected to grow faster than those of similar firms, and whose business growth and other characteristics may lead to an increase in stock price. We may consider, among other factors, a company's valuation, financial strength, competitive position in its industry, projected future earnings, cash flows and dividends when deciding whether to buy or sell investments.

Risks

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

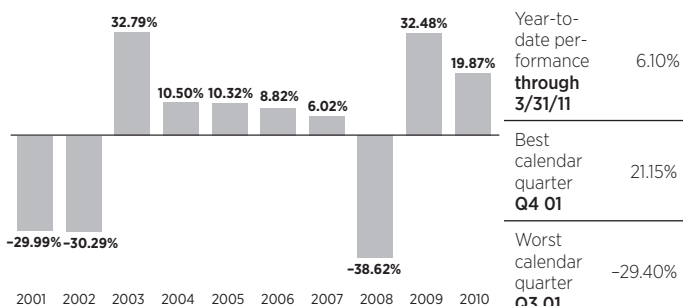
The prices of stocks in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including both general financial market conditions and factors related to a specific company or industry. These risks are generally greater for small and midsize companies. Growth stocks may be more susceptible to earnings disappointments, and the market may not favor growth-style investing.

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 ending 12/31/10)

Share class	1 year	5 years	10 years
Class IA	19.87%	2.38%	-1.18%
Class IB	19.56%	2.12%	-1.42%
Russell 3000 Growth Index (no deduction for fees or expenses)	17.64%	3.88%	0.30%

Your fund's management

Investment advisor

Putnam Investment Management, LLC

Portfolio manager

Robert Brookby, Portfolio Manager, portfolio manager of the fund since 2010

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 59 ½ 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 in growth stocks of U.S. companies of any size. From time to time, the fund may invest a significant portion of its assets in companies in a particular capitalization range, which would make the fund more vulnerable to adverse developments affecting companies in that range.

- **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. 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 or currency exchange 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. Stocks of smaller companies may be more vulnerable to adverse developments than those of larger companies.

Growth stocks — Stocks of companies we believe are fast-growing may trade at a higher multiple of current earnings than other stocks. The values of these stocks may be more sensitive to changes in current or expected earnings than the values of other stocks. If our assessment of the prospects for a company's earnings growth is wrong, or if our judgment of how other investors will value the company's earnings growth is wrong, then the price of the company's stock may fall or may not approach the value that we have placed on it.

- **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, or to depend on a small, inexperienced management group. Stocks of these companies often trade less frequently and in limited volume, 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.
- **Foreign investments.** We may invest in foreign investments, although they do not represent a primary focus of the fund. Foreign investments involve certain special risks. For example, their values may decline in response to changes in currency exchange rates, unfavorable political and legal developments, unreliable or untimely information, and economic and financial instability. In addition, the liquidity of these investments may be more limited than for most U.S. investments, which means we may at times be unable to sell them at desirable prices. Foreign settlement procedures may also involve additional risks. These risks are generally greater in the case of developing (also known as emerging) markets, which typically have less developed legal and financial systems.

Certain of these risks 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.

- **Derivatives.** We may engage in a variety of transactions involving derivatives, such as futures, options, warrants and swap contracts, although they do not represent a primary focus of the fund. 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” derivatives positions, the values of which 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, including as a substitute for a direct investment in the securities of one or more issuers. 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 that 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 derivatives positions is theoretically unlimited. The prices of derivatives may move in unexpected ways due to the use of leverage or other factors, especially in unusual market conditions, and may result in increased volatility.

Other risks arise from the potential inability to terminate or sell derivatives positions. A liquid secondary market may not always exist for the fund’s derivatives positions at any time. In fact, many over-the-counter instruments (investments not traded on an exchange) will not be liquid. Over-the-counter instruments also involve the risk that the other party to the derivatives transaction will not meet its obligations. For further information about the risks of derivatives, see *Miscellaneous investments, investment practices and risks* in the statement of additional information (SAI).

- **Other investments.** In addition to the main investment strategies described above, we may make other types of investments, such as investments in preferred stocks, convertible securities and debt instruments. The fund may also loan its portfolio securities to earn income. These practices may be subject to other risks, as described under the heading *Miscellaneous investments, investment practices and risks* in the SAI.

- **Alternative strategies.** At times we may judge that market conditions make pursuing the fund’s usual investment strategies inconsistent with the best interests of its shareholders. We then may temporarily invest some or all of the fund’s assets using alternative strategies that are mainly designed to limit

losses. However, we may choose not to use these strategies for a variety of reasons, even in very volatile market conditions. These strategies may cause the fund to miss out on investment opportunities, and may prevent the fund from achieving its goal.

- **Changes in policies.** The Trustees may change the fund’s goal, investment strategies and other policies set forth in this prospectus without shareholder approval.

- **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 the fund to pay more brokerage commissions and 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, and click on *Annuities*. 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 beginning on the last business day of the month after the end of each calendar quarter. This information will remain available on the website until the fund files a Form N-CSR or N-Q with the Securities and Exchange Commission (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 an officer 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
One Post Office Square
Boston, MA 02109

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 contract described below is discussed in the fund's semi-annual report to shareholders dated June 30, 2010.

The fund pays a monthly management fee to Putnam Management. The fee is calculated by applying to the fund's average net assets for the month a rate based on the monthly average of the aggregate net assets of all open-end funds sponsored by Putnam Management (excluding fund assets that are invested in other Putnam funds).

Based on the fund's current management contract, the fund paid Putnam Management a management fee (after any applicable waivers) of 0.56% of average net assets for the fund's last fiscal year. Putnam Management's address is One Post Office Square, Boston, MA 02109.

Putnam Management has retained its affiliate Putnam Investments Limited (PIL) to make investment decisions for such fund assets as may be designated from time to time for its management by Putnam Management. Putnam Management (and not the fund) will pay a quarterly sub-management fee to PIL for its services at the annual rate of 0.35% of the average aggregate net asset value of any fund assets managed by PIL. PIL, which provides a full range of international investment advisory services to institutional clients, is located at Cassini House, 57-59 St. James's Street, London, England, SW1A 1LD.

Pursuant to this arrangement, 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 manager.** The officer of Putnam Management identified below is primarily responsible for the day-to-day management of the fund's portfolio.

Portfolio manager	Joined fund	Employer	Positions over past five years
Robert Brookby	2010	Putnam Management 2008 - Present	Portfolio Manager
		American Century Investments Prior to 2008	Portfolio Manager

The SAI provides information about this individual's compensation, other accounts managed by this individual and this individual's 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, One Post Office Square, Boston, Massachusetts 02109. 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 net asset value and no sales commission or load is charged.

Shares are sold or redeemed at the net asset value 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 net asset value. No fee is charged to a separate account when it redeems fund shares.

Please check with your insurance company to determine which funds are available under your variable annuity contract or variable life insurance policy. Certain funds 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 policyowners 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. Under unusual circumstances, the fund may suspend repurchases or postpone payment for up to seven days or longer, as permitted by federal securities law. Redemption proceeds may be paid in securities or other property rather than in cash if Putnam determines it is in the best interest of the fund.

How does the fund price its shares?

The price of the fund's shares is based on its net asset value (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 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 traded on a U.S. exchange at its fair value when the 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 3:00 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, therefore, the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the close of the NYSE. As a result, the fund has adopted fair value pricing procedures, which, among other things, require the fund to assess the fair value of foreign equity securities if there has been a movement in the U.S. market that exceeds a specified threshold that may change from time to time. 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, over time

these fees will increase the cost of your investment and may cost you more than paying other types of sales charges.

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 net asset value 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 the heading *Fund summary — Fees and expenses* at the front of this prospectus.

These 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 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 2010 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.** The expected tax advantages associated with the insurance products that invest in the fund (such as tax deferral for gains realized from exchanges among the fund and other funds of the Trust) may make the fund more attractive to excessive short-term traders, although other aspects of these products (such as the penalty tax on some withdrawals) may discourage 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.

When 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 net asset value. 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.

Because 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 below-investment-grade bonds.

• **Fund policies and limitations.** 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. 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.

Fund distributions and taxes

The fund will normally distribute any net investment income and any net realized capital gains at least annually. Distributions will be made by reinvestment of distributions 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 net asset value 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 59 ½ 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 comply 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 (IRS) 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 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, if any, may be subject to foreign withholding taxes. In that case, the fund's return on those investments would be decreased.

Investments in derivative financial instruments, including investments by which the fund seeks exposure to assets other than securities, are subject to numerous special and complex tax rules. The fund's use of derivatives, if any, may affect the amount and timing of distributions to shareholders, potentially requiring the fund to liquidate investments, including when it is not advantageous to do so, in order to satisfy its distribution requirements. As a result, the fund's intention to qualify as a regulated investment company and receive favorable treatment under the federal income tax rules may limit its ability to invest in such instruments. In addition, because the application of these rules may be uncertain under current law, an adverse determination or future IRS guidance with respect to these rules may affect whether the fund has made sufficient distributions and otherwise satisfied the relevant requirements to maintain its qualification as a regulated investment company and avoid a fund-level tax.

The foregoing discussion 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 SAI.

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. Its 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)

Period ended	INVESTMENT OPERATIONS:				LESS DISTRIBUTIONS:				RATIOS AND SUPPLEMENTAL DATA:			
	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	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 (%) ^{b,d}	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%)
Putnam VT Multi-Cap Growth Fund (Class IA)												
12/31/10	\$17.34	.07	3.36	3.43	(.10)	(.10)	\$20.67	19.87	\$600,549	.75	.38	85.61
12/31/09	13.19	.09	4.16	4.25	(.10)	(.10)	17.34	32.48	495,050	.81 ^f	.62 ^f	63.73
12/31/08	21.55	.08	(8.39) ^{g,h}	(8.31)	(.05)	(.05)	13.19	(38.62) ^h	442,197	.76 ^f	.46 ^f	78.52
12/31/07	20.36	.05	1.17	1.22	(.03)	(.03)	21.55	6.02	926,866	.72 ^f	.24 ^f	139.35
12/31/06	18.74	.03	1.62	1.65	(.03)	(.03)	20.36	8.82	1,145,101	.71 ^f	.16 ^f	84.06
Putnam VT Multi-Cap Growth Fund (Class IB)												
12/31/10	\$17.08	.02	3.31	3.33	(.06)	(.06)	\$20.35	19.56	\$192,569	1.00	.13	85.61
12/31/09	12.98	.05	4.10	4.15	(.05)	(.05)	17.08	32.14	77,225	1.06 ^f	.37 ^f	63.73
12/31/08	21.19	.04	(8.25) ^{g,h}	(8.21)	—	—	12.98	(38.75) ^h	59,123	1.01 ^f	.21 ^f	78.52
12/31/07	20.04	— ^e	1.15	1.15	—	—	21.19	5.74	123,258	.97 ^f	(.01) ^f	139.35
12/31/06	18.46	(.02)	1.60	1.58	—	—	20.04	8.56	145,998	.96 ^f	(.09) ^f	84.06

^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 The charges and expenses at the insurance company separate account level are not reflected.

^c Total return assumes dividend reinvestment.

^d Includes amounts paid through expense offset arrangements and/or brokerage/service arrangements.

^e Amount represents less than \$0.01 per share.

^f Reflects an involuntary contractual expense limitation in effect during the period. For periods prior to December 31, 2009 certain fund expenses were waived in connection with the fund's investment in Putnam Prime Money Market Fund. As a result of such limitation and/or waivers, the expenses of each class reflect a reduction of the following amounts:

	Percentage of average net assets
12/31/09	<0.01%
12/31/08	<0.01
12/31/07	<0.01
12/31/06	<0.01

^g Reflects a non-recurring reimbursement pursuant to a settlement between the Securities and Exchange Commission (SEC) and Knight Securities, L.P. which amounted to \$0.02 per share.

^h Reflects a non-recurring litigation payment received by the fund from Enron Corporation which amounted to \$0.10 per share outstanding as of December 29, 2008. This payment resulted in an increase to total returns of 0.46% for the year ended December 31, 2008.

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For more information about Putnam VT Multi-Cap Growth Fund

The fund's SAI and annual and semi-annual reports to shareholders include additional information about the fund. The SAI, and the independent registered public accounting firm'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 or by calling Putnam toll-free at 1-800-225-1581. The fund's SAI may also be obtained by visiting putnam.com/funddocuments. Shareholder reports are not available on Putnam's website because fund shares are not directly offered to the general public.

You may review and copy information about the fund, including its SAI, at the Securities and Exchange Commission's Public Reference Room in Washington, D.C. You may call the Commission at 1-202-551-8090 for information about the operation of the Public Reference Room. You may also access reports and other information about the fund on the EDGAR Database on the 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, or by writing the Commission's Public Reference Section, Washington, D.C. 20549-1520. You may need to refer to the fund's file number.

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