



American Century Investments® VP Large Company Value Fund

Class I: AVVIX
Class II: AVVTX

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus, reports to shareholders, and other information about the fund online at the web addresses listed below. You can also get this information at no cost by calling or sending an email request. The fund's prospectus and other information are also available from insurance companies through which shares of the fund may be purchased or sold.

Retail Investors

www.americancentury.com/vpdocs
1-800-345-2021 or 816-531-5575
prospectus@americancentury.com

Financial Professionals

www.americancentury.com/fadocs
1-800-345-6488
advisor_prospectus@americancentury.com

This summary prospectus incorporates by reference the fund's prospectus and statement of additional information (SAI), each dated May 1, 2021 (as supplemented at the time you receive this summary prospectus), as well as the Report of Independent Registered Public Accounting Firm and the financial statements included in the fund's annual report to shareholders, dated December 31, 2020. The fund's SAI and annual report may be obtained, free of charge, in the same manner as the prospectus.

Investment Objective

The fund seeks long-term capital growth. Income is a secondary objective.

Fees and Expenses

The following table describes the fees and expenses you may pay if you buy and hold shares of the fund. The table does not include the fees and expenses associated with your variable annuity or variable life insurance contract. Had they been included, fees and expenses presented below would have been higher. For information regarding the fees and expenses associated with your variable annuity or variable life insurance contract, please refer to your insurance product prospectus.

Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)		
	<i>Class I</i>	<i>Class II</i>
Management Fee	0.90%	0.80%
Distribution and Service (12b-1) Fees	None	0.25%
Other Expenses	0.01%	0.01%
Total Annual Fund Operating Expenses	0.91%	1.06%
Fee Waiver ¹	0.17%	0.17%
Total Annual Fund Operating Expenses After Fee Waiver	0.74%	0.89%

¹ The advisor has agreed to waive 0.17 percentage points of the fund's management fee. The advisor expects this waiver to continue until April 30, 2022 and cannot terminate it prior to such date without the approval of the Board of Directors.

Example

The example below is intended to help you compare the costs of investing in the fund with the costs of investing in other mutual funds. The example does not include fees and expenses associated with your variable annuity or variable life insurance contract. Had they been included, fees and expenses would have been higher. The example assumes that you invest \$10,000 in the fund for the time periods indicated and then redeem all of your shares at the end of those periods, and that you earn a 5% return each year. The example also assumes that the fund's operating expenses remain the same, except that it reflects the rate and duration of any fee waivers noted in the table above. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	<i>1 year</i>	<i>3 years</i>	<i>5 years</i>	<i>10 years</i>
Class I	\$76	\$274	\$488	\$1,104
Class II	\$91	\$321	\$569	\$1,279

Portfolio Turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or “turns over” its portfolio). A higher portfolio turnover rate may indicate higher transaction costs. These costs, which are not reflected in annual fund operating expenses or in the example, affect the fund's performance. During the most recent fiscal year, the fund's portfolio turnover rate was 77% of the average value of its portfolio.

Principal Investment Strategies

The fund invests primarily in larger companies. Under normal market conditions, the portfolio managers will invest at least 80% of the fund's net assets in equity securities of companies comprising the Russell 1000® Index. Though market capitalization may change from time to time, as of February 28, 2021, the market capitalization range of the Russell 1000® Index was approximately \$572.3 million to \$2.0 trillion.

In selecting stocks for the fund, the portfolio managers look for companies whose stock price may not adequately reflect the company's value. The managers attempt to purchase the stocks of these undervalued companies and hold each stock until the price has increased to, or is higher than, a level the managers believe more accurately reflects the fair value of the company.

The portfolio managers may sell stocks from the fund's portfolio if they believe a stock no longer meets their valuation criteria.

Principal Risks

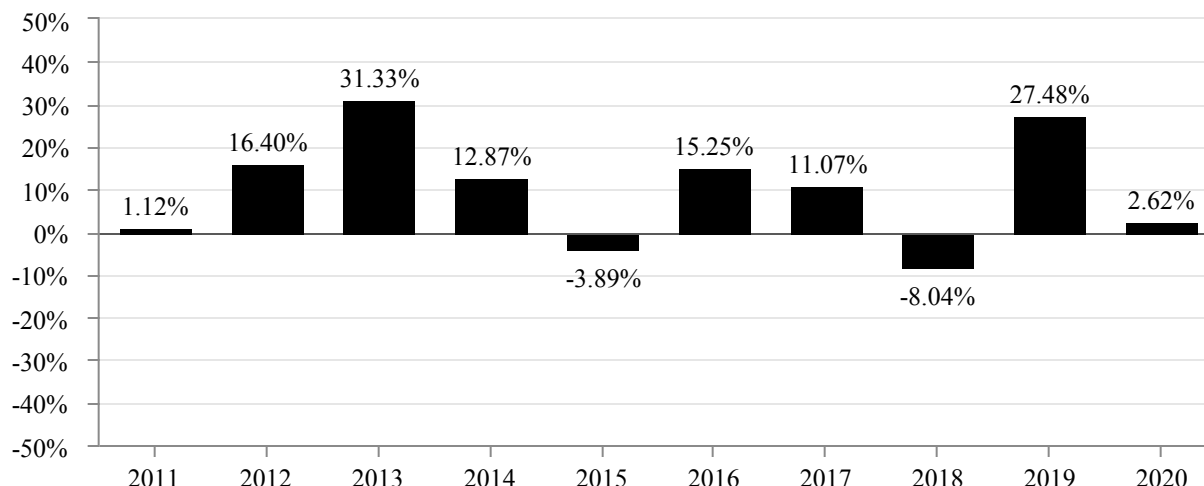
- **Style Risk** – If the market does not consider the individual stocks purchased by the fund to be undervalued, the value of the fund's shares may decline, even if stock prices generally are rising.
- **Market Risk** – The value of the fund's shares will go up and down based on the performance of the companies whose securities it owns and other factors generally affecting the securities market. Market risks, including political, regulatory, economic and social developments, can affect the value of the fund's investments. Natural disasters, public health emergencies, terrorism and other unforeseeable events may lead to increased market volatility and may have adverse long-term effects on world economies and markets generally.
- **Public Health Emergency Risk** — A pandemic, caused by the infectious respiratory illness COVID-19, is causing market disruption and other economic impacts. Markets have experienced volatility, reduced liquidity, and increased trading costs. These events may continue to impact the fund and its underlying investments.
- **Price Volatility Risk** – The value of the fund's shares may fluctuate significantly in the short term.
- **Redemption Risk** – The fund may need to sell securities at times it would not otherwise do so in order to meet shareholder redemption requests. Selling securities to meet such redemptions may cause the fund to experience a loss or increase the fund's transaction costs. To the extent that an insurance company has a large position in the fund, the fund may experience relatively large redemptions if such insurance company reallocates its assets.
- **Principal Loss Risk** – At any given time your shares may be worth less than the price you paid for them. In other words, it is possible to lose money by investing in the fund.

An investment in the fund is not a bank deposit, and it is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.

Fund Performance

The following bar chart and table provide some indication of the risks of investing in the fund. The bar chart shows changes in the fund's performance from year to year for Class I shares. The table shows how the fund's average annual returns for the periods shown compared with those of a broad measure of market performance. Fees associated with your variable annuity or variable life insurance contract are not reflected in the chart or table below. Had they been included, returns presented below would have been lower. The fund's past performance is not necessarily an indication of how the fund will perform in the future.

Calendar Year Total Returns



Highest Performance Quarter (4Q 2020): 13.63%

Lowest Performance Quarter (1Q 2020): -25.01%

Average Annual Total Returns

For the calendar year ended December 31, 2020

	1 year	5 years	10 years
Class I	2.62%	9.01%	9.94%
Class II	2.49%	8.85%	9.78%
Russell 1000 [®] Value Index (reflects no deduction for fees, expenses or taxes)	2.80%	9.73%	10.49%
S&P 500 [®] Index (reflects no deduction for fees, expenses or taxes)	18.40%	15.20%	13.87%

Portfolio Management

Investment Advisor

American Century Investment Management, Inc.

Portfolio Managers

Phillip N. Davidson, CFA, Senior Vice President and Executive Portfolio Manager, has been a member of the team that manages the fund since 2016.

Brian Woglom, CFA, Vice President and Senior Portfolio Manager, has been a member of the team that manages the fund since 2016.

Philip Sundell, CFA, Portfolio Manager, has been a member of the team that manages the fund since 2016.

Purchase and Sale of Fund Shares

The fund only offers shares through insurance company separate accounts. For instructions on how to purchase and redeem shares through your separate account, read the prospectus provided by your insurance company. Orders for fund shares will be priced at the net asset value next determined after the order is received in the form required by the agreement between the fund, its investment advisor and/or its distributor and the insurance company from which you have purchased your separate account. There are no sales commissions or redemption charges. However, certain sales or deferred sales charges and other charges may apply to the variable annuity or life insurance contracts. Those charges are disclosed in the separate account prospectus.

Tax Information

Consult the prospectus of your insurance company separate account for a discussion of the tax status of your variable contract.

Payments to Broker-Dealers and Other Financial Intermediaries

The fund is offered as an underlying investment option for variable annuity or life insurance contracts. The fund and its related companies pay the sponsoring insurance company and its related companies for distribution and other services. These payments may influence the insurance company to include the fund over another investment as an option in its products. Ask your salesperson or visit your insurance company's website for more information.