Summary Prospectus May 1, 2020

American Century Investments[®] VP Balanced Fund



Class I: AVBIX

Class II: AVBTX

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.

Beginning on January 1, 2021, as permitted by regulations adopted by the Securities and Exchange Commission, you may not be receiving paper copies of the fund's shareholder reports from the insurance company that offers your contract unless you specifically request paper copies from your insurance company or from your financial intermediary. Instead, the shareholder reports will be made available on a website, and your insurance company will notify you by mail each time a report is posted and provide you with a website link to access the report. Instructions for requesting paper copies will be provided by your insurance company.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. You may elect to receive shareholder reports and other communications from your insurance company electronically by following the instructions provided by your insurance company.

You may elect to receive all future reports in paper free of charge from your insurance company. If your insurance company informs you that future reports will be delivered via web access, you can inform your insurance company that you wish to continue receiving paper copies of your shareholder reports by following the instructions provided by your insurance company or by contacting your financial intermediary. Your election to receive reports in paper will apply to all portfolio companies available under your contract.

Retail Investors americancentury.com/vp-prospectus 1-800-345-2021 or 816-531-5575 prospectus@americancentury.com Financial Professionals americancentury.com/fa-prospectus 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, 2020 (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, 2019. 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 and current income by investing approximately 60% of its assets in equity securities and the remainder in bonds and other fixed-income securities.

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)

	Class I	Class II
Management Fee	0.90%	0.90%
Distribution and Service (12b-1) Fees	None	0.25%
Other Expenses	0.01%	0.01%
Total Annual Fund Operating Expenses	0.91%	1.16%
Fee Waiver ¹	0.05%	0.05%
Total Annual Fund Operating Expenses After Fee Waiver	0.86%	1.11%

¹ The advisor has agreed to waive 0.05 percentage points of the fund's management fee. The advisor expects this waiver to continue until April 30, 2021 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:

	1 year	3 years	5 years	10 years	
Class I	\$88	\$286	\$500	\$1,115	
Class II	\$113	\$364	\$634	\$1,404	

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 115% of the average value of its portfolio.

Principal Investment Strategies

For the equity portion of the fund, the portfolio managers select stocks using quantitative management techniques in a two-step process. First, the managers rank stocks, primarily those of large (those with a market cap greater than \$2 billion), publicly-traded U.S. companies from most attractive to least attractive based on an objective set of measures, including valuation, quality, growth and sentiment. Second, the portfolio managers use a quantitative model to build a portfolio of stocks from the ranking described above that they believe will provide the optimal balance between risk and expected return. The portfolio managers generally sell a stock when they believe it has become less attractive relative to other opportunities, its risk characteristics outweigh its return opportunity or specific events alter its prospects.

For the fixed-income portion of the fund, the portfolio managers invest in a diversified portfolio of high- and medium-grade nonmoney market debt securities. These securities, which may be payable in U.S. or foreign currencies, may include corporate bonds and notes, government securities, bank loans, securities backed by mortgages or other assets and collateralized debt obligations (including collateralized loan obligations). Shorter-term debt securities round out the portfolio.

Principal Risks

- Style Risk If at any time the market is not favoring the quantitative investment style used to manage the fund's equity portion, that portion's gains may not be as big as, or its losses may be bigger than, those of other equity funds using different investment styles.
- **Investment Process Risk** Stocks selected by the portfolio managers using quantitative models may perform differently than expected due to the portfolio managers' judgments regarding the factors used in the models, the weight placed on each factor, changes from the factors' historical trends, and technical issues with the construction and implementation of the models (including, for example, data problems and/or software or other implementation issues). There is no guarantee that the use of the quantitative models will result in effective investment decisions for the fund. Additionally, the commonality of portfolio holdings across quantitative investment managers may amplify losses.
- Benchmark Correlation The performance of the fund's equity portion will be similar to the performance of the S&P 500[®] Index. If the S&P 500[®] goes down, it is likely that the fund's performance will go down.
- 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.
- Interest Rate Risk Investments in debt securities are sensitive to interest rate changes. Generally, the value of debt securities and the funds that hold them decline as interest rates rise. The fund's fixed-income investments are designed to reduce this risk. Interest rate risk, however, is generally higher for the fixed-income portion of VP Balanced than for funds that have shorter-weighted maturities, such as money market funds and short-term bond funds. A period of rising interest rates may negatively affect the fund's performance.
- Credit Risk Debt securities, even investment-grade debt securities, are subject to credit risk. Credit risk is the risk that the inability or perceived inability of the issuer to make interest and principal payments will cause the value of the securities to decrease. As a result the fund's share price could also decrease. Changes in the credit rating of a debt security held by the fund could have a similar effect.
- **Prepayment Risk** The fund may invest in debt securities backed by mortgages or other assets. If these underlying assets are prepaid, the fund may benefit less from declining interest rates than funds of similar maturity that invest less heavily in mortgageand asset-backed securities.
- Foreign Debt Securities Risk Foreign debt securities have certain unique risks, such as currency risk, social, political and economic risk, and foreign market and trading risk. Debt securities of foreign issuers may be less liquid, more volatile and harder to value than U.S. securities.
- **Bank Loan Risk** The market for bank loans may not be highly liquid and the fund may have difficulty selling them. In connection with purchasing loan participations, the fund generally will have no right to enforce compliance by borrowers with loan terms nor any set off rights, and the fund may not benefit directly from any posted collateral. As a result, the fund may be subject to the credit risk of both the borrower and the lender selling the participation. Bank loan transactions may take more than seven days to settle, meaning that proceeds would be unavailable to make additional investments or meet redemptions.
- Collateralized Debt Obligations Collateralized debt obligations and collateralized loan obligations (CLOs) are subject to credit, interest rate, valuation, and prepayment and extension risks. These securities also are subject to risk of default on the underlying asset, particularly during periods of economic downturn. The market value of CLOs may be affected by, among other things, changes in the market value of the underlying assets held by the CLO, changes in the distributions on the underlying assets, defaults and recoveries on the underlying assets, capital gains and losses on the underlying assets, prepayments on underlying assets and the availability, prices and interest rates of underlying assets.
- **Derivative Risk** The use of derivative instruments involves risks different from, or possibly greater than, the risks associated with investing directly in securities and other traditional instruments. Derivatives are subject to a number of risks, including liquidity, interest rate, market, credit and correlation risk.
- Liquidity Risk The fund may also be subject to liquidity risk. During periods of market turbulence or unusually low trading activity, in order to meet redemptions it may be necessary for the fund to sell securities at prices that could have an adverse effect on the fund's share price. Changing regulatory and market conditions, including increases in interest rates and credit spreads may adversely affect the liquidity of the fund's investments.
- Price Volatility 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** — 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.

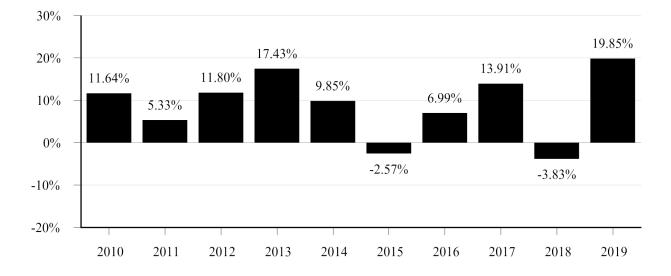
An investment in the fund is not a bank deposit, and it is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency.

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.

The blended index is considered the benchmark for the fund. It combines two widely known indices in proportion to the asset mix of the fund. Accordingly, 60% of the index is represented by the S&P $500^{\text{®}}$ Index, which reflects the approximately 60% of the fund's assets invested in stocks. The blended index's remaining 40% is represented by the Bloomberg Barclays U.S. Aggregate Bond Index, which reflects the roughly 40% of the fund's assets invested in fixed-income securities.

Calendar Year Total Returns



Highest Performance Quarter (1Q 2019): 9.66%

Lowest Performance Quarter (4Q 2018): -8.66%

Average Annual Total Returns For the calendar year ended December 31, 2019	l year	5 years	10 years	
Class I	19.85%	6.47%	8.78%	
Class II ⁽¹⁾	19.39%	6.19%	8.51%	
S&P 500® Index (reflects no deduction for fees, expenses or taxes)	31.49%	11.69%	13.55%	
Bloomberg Barclays U.S. Aggregate Bond Index (reflects no deduction for fees, expenses or taxes)	8.72%	3.05%	3.74%	
Blended Index (reflects no deduction for fees, expenses or taxes)	22.18%	8.37%	9.77%	

¹ Historical performance for Class II prior to its inception (May 2, 2016) is based on the performance of Class I shares. Class II performance has been adjusted to reflect differences in expenses between classes.

Portfolio Management

Investment Advisor

American Century Investment Management, Inc.

Portfolio Managers

Claudia Musat, Vice President, Portfolio Manager and Quantitative Analyst, has been a member of the team that manages the fund since 2010.

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

Robert V. Gahagan, Senior Vice President and Senior Portfolio Manager, has served on teams managing fixed-income investments for American Century since joining the advisor in 1983.

Brian Howell, Vice President and Senior Portfolio Manager, has served on teams managing fixed-income investments for American Century since joining the advisor in 1987.

Charles Tan, Senior Vice President and Co-Chief Investment Officer, Global Fixed Income, has served on teams managing fixed-income investments since joining the advisor in 2018.

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.

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