Columbia VP US Equities 2 (USD)

Overall Morningstar Rating™
2,899 US VA Sub Small Growth

Performance 09-30-2018
Quarterly Returns
1st Qtr 2nd Qtr 3rd Qtr 4th Qtr Total %
2016 -2.01 1.74 7.19 8.75 16.21
2017 -1.13 1.40 3.74 2.77 9.32
2018 -0.54 6.36 1.43 — 7.29

Trailing Returns
1 Yr 3 Yr 5 Yr 10 Yr Incept
Load-adj Mthly — — — — —
Std 09-30-2018 -1.04 — 2.40 — 9.11
Total Return 10.26 11.50 6.67 — 10.15
+/- Std Index -7.65 -5.81 -7.28 — -0.63
+/- Cat Index 10.90 -6.48 -5.47 — 0.00

% Rank Cat
— — — 1.44 1.92 1.96 1.81 2.11 2.30 2.47
US Stocks 94.97 94.67 0.00
Non-US Stocks 3.73 3.73 0.00
Bonds 0.00 0.00 0.00
Other/Not Clsd — — —
Total 100.00 100.44 0.44

R-Squared 0.92
Alpha 0.23
Beta 1.09
Sharpe Ratio 0.98
MPT Statistics
Standard Index Russell 2000 TR USD
Russell 2000 TR USD 131.44
73.03 AAA

Morningstar Rating™
1 1 —
Morningstar Risk — —
Morningstar Return — —

Standard Index S&P 500 TR USD
Category Index Russell 2000 Growth TR USD
Morningstar Cat US VA Sub Small Growth

Investment Style
Equity Stocks %
— 100k
88k 80k 40k 20k 10k 4k
Growth of $10,000
— RVS R5A1012-Columbia VP US Equities 2
22,958
Category Average 28,855
Standard Index 31,842

Performance Quartile
(within category)
No. of Funds in Cat 3003

Portfolio Analysis 08-31-2018
Asset Allocation % Net Long % Short %
Cash 1.00 1.84 0.44
US Stocks 94.97 94.67 0.00
Non-US Stocks 3.73 3.73 0.00
Bonds 0.00 0.00 0.00
Other/Not Clsd — — —
Total 100.00 100.44 0.44

Equity Style Portfolio Statistics
Value Blend Growth
P/E Ratio TTM 17.4 0.84 0.84
P/B Ratio TTM 10.1 0.72 0.51
PEG Ratio TTM 2.5 0.74 0.59
QoA Avg Mkt Cap — 2388 0.02 0.05

Fixed-Income Style
Avg Eff Maturity — — —
Avg Eff Duration — — —
Avg Wtd Coupon — — —
Avg Wtd Price — — —

Credit Quality Breakdown — Bond %
— B
— BBB
— BB
— A
— AAA

Region Exposure
Americas 99.60 0.98
Greater Europe 1.6 4.56
Greater Asia 0.4 5.74

Risk and Return Profile
3 Yr 5 Yr 10 Yr
2016 2017 2018
— — —
Standard Deviation 12.36 12.85 —
Mean 11.50 6.67 —
Sharpe Ratio 0.87 0.52 —

Portfolio Management
Manager: Columbia Mgmt Investment Advisers, LLC
Advisor: Columbia Wanger Asset Management LLC
Sub Advisor:

Fund Operations
Manager: Multiple
Advisor: Columbia Mgmt Investment Advisers, LLC
Sub Advisor: Columbia Wanger Asset Management LLC
Fund Inception: 05-07-2010
Fund Net Assets ( $ mil): 2150 2671 2869 2889 3003

Fund Expenses
Management Fees % 0.84
Gross Expense Ratio % 1.10

Columbia Mgmt Investment Advisers, LLC
Columbia Wanger Asset Management LLC

Release date 09-30-2018 | Note: Portions of the analyses are based on pre-inception returns. Please read disclosure for more information.
Standardized and Tax Adjusted Returns Disclosure Statement

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor’s shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end please visit http://advisor.morningstar.com/familyinfo.asp.

Standardized Returns assume reinvestment of dividends and capital gains. They depict performance without adjusting for the effects of taxation, but are adjusted to reflect sales charges and ongoing fund expenses.

If adjusted for taxation, the performance quoted would be significantly reduced. For variable annuities, additional expenses will be taken into account, including M&E risk charges, fund-level expenses such as management fees and operating fees, contract-level administration fees, and charges such as surrender, contract, and sales charges. The maximum redemption fee is the maximum amount a fund may charge if redeemed in a specific time period after the fund’s purchase.

After-tax returns are calculated using the highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor’s tax situation and may differ from those shown. The after-tax returns shown are not relevant to investors who hold their fund shares through tax-deferred arrangements such as 401(k) plans or an IRA. After-tax returns exclude the effects of either the alternative minimum tax or phase-out of certain tax credits. Any taxes due are as of the time the distributions are made, and the taxable amount and tax character of each distribution are as specified by the fund on the dividend declaration date. Due to foreign tax credits or realized capital losses, after-tax returns may be greater than before-tax returns. After-tax returns for exchange-traded funds are based on net asset value.

Money Market Fund Disclosures

If money market fund(s) are included in the Standardized Returns table below, each money market fund’s name will be followed by a superscripted letter that links it to the applicable disclosure below:

Institutional Money Market Funds (designated by an “S”):
You could lose money by investing in the fund. Because the share price of the fund will fluctuate, when you sell your shares they may be worth more or less than what you originally paid for them. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund’s liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund’s sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen to rely on the ability to impose liquidity fees and suspend redemptions (designated by an “L”)

Retail Money Market Funds (designated by an “L”):
You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. The fund may impose a fee upon sale of your shares or may temporarily suspend your ability to sell shares if the fund’s liquidity falls below required minimums because of market conditions or other factors. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund’s sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Government Money Market Funds that have chosen not to rely on the ability to impose liquidity fees and suspend redemptions (designated by an “N”):
You could lose money by investing in the fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund’s sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Annualized returns 09-30-2018

<table>
<thead>
<tr>
<th>Standardized Returns (%)</th>
<th>7-day Yield</th>
<th>7-day Yield</th>
<th>1Yr</th>
<th>5Yr</th>
<th>10Yr</th>
<th>Since Inception</th>
<th>Inception Date</th>
<th>Sep Acct</th>
<th>Max Front Load %</th>
<th>Max Back Load %</th>
<th>Net Exp Ratio %</th>
<th>Gross Exp Ratio %</th>
<th>Max Redemption %</th>
</tr>
</thead>
<tbody>
<tr>
<td>RVS R5A1012-Columbia VP US Equities 2</td>
<td>—</td>
<td>—</td>
<td>-1.04</td>
<td>2.40</td>
<td>9.11</td>
<td>07-2010</td>
<td>NA</td>
<td>NA</td>
<td>2.05</td>
<td>2.05</td>
<td>8.00</td>
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<tr>
<td>BBgBarc US Agg Bond TR USD</td>
<td>-1.22</td>
<td>2.16</td>
<td>3.77</td>
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<tr>
<td>MSCI EAFE NR USD</td>
<td>2.74</td>
<td>4.42</td>
<td>5.38</td>
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<tr>
<td>Russell 2000 TR USD</td>
<td>15.24</td>
<td>11.07</td>
<td>11.11</td>
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## Annualized Returns 09-30-2018

<table>
<thead>
<tr>
<th>Standardized Returns (%)</th>
<th>7-day Yield</th>
<th>7-day Yield</th>
<th>1Yr</th>
<th>5Yr</th>
<th>10Yr</th>
<th>Since Inception</th>
<th>Sep Acct Date</th>
<th>Max Front Load %</th>
<th>Max Back Load %</th>
<th>Net Exp Ratio %</th>
<th>Gross Exp Ratio %</th>
<th>Max Redemption %</th>
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<tr>
<td>S&amp;P 500 TR USD</td>
<td>17.91</td>
<td>13.95</td>
<td>11.97</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>USTREAS T-Bill Auction Ave 3 Mon</td>
<td>1.73</td>
<td>0.56</td>
<td>0.34</td>
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<td></td>
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</tr>
</tbody>
</table>
### Non-Std Load Adjusted Returns (VA Only)

<table>
<thead>
<tr>
<th>Holdings Date</th>
<th>Symbol</th>
<th>Type</th>
<th>Holdings</th>
<th>% of Assets</th>
<th>Holding Value $</th>
<th>7-day Yield</th>
<th>1 Yr Ret %</th>
<th>3 Yr Ret %</th>
<th>5 Yr Ret %</th>
<th>10 Yr Ret %</th>
<th>Since Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>—</td>
<td>VAUSA0JUS3</td>
<td>VA</td>
<td>100.00</td>
<td>100</td>
<td>—</td>
<td>—</td>
<td>-1.04</td>
<td>6.06</td>
<td>2.40</td>
<td>—</td>
<td>05-2010</td>
</tr>
</tbody>
</table>

**Performance Disclosure**

The performance data quoted represents past performance and does not guarantee future results. The investment return and principal value of an investment will fluctuate; thus an investor’s shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than return data quoted herein. For performance data current to the most recent month-end, please visit [http://advisor.morningstar.com/familyinfo.asp](http://advisor.morningstar.com/familyinfo.asp).
Variable Annuity Subaccount Detail Report Disclosure Statement

The Variable Annuity Subaccount Detail Report is supplemental sales material and therefore must be preceded or accompanied by the current prospectus, or equivalent, of the subaccounts and variable annuity contract and this disclosure statement.

The Detail Report describes a particular subaccount of a variable annuity contract. An annuity is a tax-deferred investment structured to convert a sum of money into a series of payments over time. Variable annuity policies have limitations and are not viewed as short-term liquid investments. An insurance company’s fulfillment of a commitment to pay a minimum death benefit, a schedule of payments, a fixed investment account guaranteed by the insurance company or another form of guarantee depends on the claims paying ability of the issuing insurance company. Any such guarantee does not affect or apply to the investment return or principal value of the separate account and its subaccount. The financial ratings quoted for an insurance company do not apply to the separate account and its subaccount. Variable annuity contracts are not FDIC-insured, may lose money and are not guaranteed by a bank or other financial institution. If the variable annuity subaccount is invested in a money-market fund, that investment in the fund is not insured or guaranteed by the FDIC or any other government agency. It is possible to lose money by investing in the fund. All data presented is based on the most current information available to Morningstar, Inc.

Morningstar Investment Management LLC, a registered investment adviser and wholly owned subsidiary of Morningstar, Inc., provides various institutional investment consulting services, including asset allocation advice to investment advisors who have or will be creating a fund-of-fund/asset allocation product. However, despite the fact that such a relationship may exist, the information displayed for those products will not be influenced as they are objective measures and/or are derived by quantitative driven formulas (i.e., Morningstar Rating). For more information on these Morningstar relationships, please visit the Release Notes section of this product.

Performance

The performance data given represents past performance and should not be considered indicative of future results. Principal value and investment return will fluctuate, so that an investor’s units, when redeemed, may be worth more or less than the original investment. Fund portfolio statistics change over time.

Total Return reflects the investment experience of the subaccount since the inception date of the underlying fund. The total returns assume reinvestment of dividends and capital gains and are adjusted to reflect fees and expenses, such as M&E risk charges, administration fees, sales charges (including surrender charges), contract fees and fund-level expenses such as management fees and operating fees. They are not adjusted to reflect the effects of taxation if redeemed early. Adjusting for the effects of taxation would reduce the performance quoted.

Pre-inception returns will be calculated for the subaccount. These adjusted historical returns are based on the inception date of the oldest share class of the underlying fund. If a particular subaccount includes pre-inception returns, the return history will be italized for any time periods prior to the inception date of the subaccount. These returns will be adjusted to reflect the same fees and expenses as referenced under the Total Return section above.

While the inclusion of pre-inception data provides valuable insight into the probable long-term behavior of a subaccount based on its underlying fund performance, investors should be aware that an adjusted historical return can only provide an approximation of that behavior. These adjusted historical returns are not actual returns. Calculation methodologies utilized by Morningstar may differ from those applied by other entities, including the subaccount itself.

Standardized Returns, both monthly and quarterly, assume reinvestment of dividends and capital gains. They are also adjusted to reflect expenses, including M&E risk charges, administration fees, fund-level expenses such as management fees and operating fees, and contract-level charges, such as surrender, contract and sales charges. Standardized Returns are calculated in accordance with the rules outlined in SEC Rule 482, forms N-3 and N-4, and reflect the investment experience from the inception date of the subaccount within the separate account.

Non-standardized, load-adjusted returns illustrate performance that is adjusted to reflect recurring and non-recurring charges such as surrender fees, contract charges, maximum front-end load, maximum deferred load, maximum M&E charges, administrative fees and underlying fund-level expenses for various time periods. Non-standardized performance returns assume reinvestment of dividends and capital gains. If adjusted for the effects of taxation, the subaccount returns would be significantly reduced. The main differences between non-standardized, load-adjusted returns and standardized returns are that non-standardized load-adjusted returns allow calculations of various time periods, and they may include pre-inception data. When subaccount returns reflect pre-inception data, it will be represented in italics.

Morningstar % Rank within the Morningstar Category does not account for a subaccount’s sales charges (if applicable). Rankings will not be provided for periods less than one-year.

Current 7-day yield is a yield quotation based on the seven days ended on the date of the most recent balance sheet of the Registrant included in the registrant statement. It is computed by determining the net change (exclusive of capital change and income other than investment income) in the value of the hypothetical pre-existing account having a balance of one accumulation unit of the account or subaccount at the beginning of the period, subtracting a hypothetical charge reflecting deductions from contract owner accounts, and dividing the difference by the value of the account at the beginning of the base period to obtain the base period return. The base period return is then multiplied by (365/7), with the resulting yield figure carried to at least the nearest hundredth of one percent. The current 7-day yield more closely reflects the current earnings of the money-market subaccount than the total return calculation. Morningstar does not calculate the current yield, but instead collects it from surveys that we conduct.

Growth of $10,000

The graph compares the growth of $10,000 invested in a subaccount (as though the subaccount’s inception date is that of the underlying fund) with that of an index and with that of the average for all subaccounts in its Morningstar category. The return reflects performance without adjusting for sales charges, contract-level charges or the effects of taxation, but is adjusted to reflect M&E risk charges and administrative fees and fund-level expenses such as management and operating fees and assumes reinvestment of dividends and capital gains. If performance were adjusted for sales charges and contract-level charges, those charges would significantly reduce the performance quoted. The index is an unmanaged portfolio of specified securities and cannot be invested in directly. Please review the index definitions below for further information. The index and the category average do not reflect any initial or ongoing expenses. A sub-account’s portfolio may differ significantly from the securities in the index. The index is chosen by Morningstar.
Risk and Return
The Morningstar Rating™ for funds, or “star rating”, is calculated for subaccounts whose underlying investments have with at least a three-year history. It is calculated based on a Morningstar Risk-Adjusted Return measure that accounts for variation in a managed product’s monthly excess performance, placing more emphasis on downward variations and rewarding consistent performance. The Morningstar Rating does not include any adjustment for sales loads. The top 10% of products in each product category receive 5 stars, the next 22.5% receive 4 stars, the next 35% receive 3 stars, the next 22.5% receive 2 stars, and the bottom 10% receive 1 star. The Overall Morningstar Rating for a managed product is derived from a weighted average of the performance figures associated with its three-, five-, and 10-year (if applicable) Morningstar Rating metrics. The weights are: 100% three-year rating for 36-59 months of total returns, 60% five-year rating/40% three-year rating for 60-119 months of total returns, and 50% 10-year rating/30% five-year rating/20% three-year rating for 120 or more months of total returns. While the 10-year overall star rating formula seems to give the most weight to the 10-year period, the most recent three-year period actually has the greatest impact because it is included in all three rating periods.

Please note that some Morningstar proprietary calculations, including the Morningstar Rating, are calculated based on adjusted historical returns. If the extended performance rating is in effect, the “stars” are represented as unshaded stars. This investment’s independent Morningstar Rating metric is compared against the variable annuity subaccount universe’s actual performance breakpoints to determine its extended performance rating. The Overall Morningstar Rating for a variable annuity subaccount is derived from a weighted average of the actual performance figures associated with its three-, five- and 10-year (if applicable) Morningstar Rating metrics.

Morningstar Return rates a subaccount’s performance relative to the other subaccounts in its Morningstar Category. It is an assessment of a subaccount’s excess return over a risk-free rate (the return of the 90-day Treasury Bill) in comparison to the subaccounts in its Morningstar Category. In each Morningstar Category, the top 10% of subaccounts earn a High Morningstar Return (HIGH), the next 22.5% Above Average (+AVG), the middle 35% Average (AVG), the next 22.5% Below Average (-AVG), and the bottom 10% Low (LOW). Morningstar Return is measured for up to three time periods (three-, five- and 10-years). These separate measures are then weighted and averaged to produce an overall measure for the subaccount. Subaccounts with less than three years of performance history are not rated.

Morningstar Risk evaluates a subaccount’s downside volatility relative to that of other subaccounts in its Morningstar Category. It is an assessment of the variations in a subaccount’s monthly total returns, with an emphasis on downside variations, in comparison to the subaccounts in its Morningstar Category. In each Morningstar Category, the 10% of subaccounts with the lowest measured risk are described as Low Risk (LOW), the next 22.5% Below Average (-AVG), the middle 35% Average (AVG), the next 22.5% Above Average (+AVG), and the top 10% High (HIGH). Morningstar Risk is measured for up to three time periods (three-, five- and 10-years). These separate measures are then weighted and averaged to produce an overall measure for the subaccount. Subaccounts with less than three years of performance history are not rated.

The subaccounts of unregistered variable annuities, as well as those of registered group variable annuities that are solely available for use in qualified plans, are rated based on their position within the bell curve of the open end fund peer group (a.k.a. category), rather than the variable annuity subaccount peer group. These ratings are calculated by using an overlay of the open end fund peer group break points and therefore do not contribute to the category average or number of funds within the subaccount peer group.

Risk Measures
The risk measures below are calculated for subaccounts with at least a three-year history.

R-squared reflects the percentage of a subaccount’s movements that is explained by movements in its benchmark index, showing the degree of correlation between the subaccount and the benchmark. This figure is also helpful in assessing how likely it is that alpha and beta are statistically significant.

Beta is a measure of a subaccount’s sensitivity to market movements. A portfolio with a beta greater than 1 is more volatile than the market, and a portfolio with a beta less than 1 is less volatile than the market.

Alpha measures the difference between a subaccount’s actual returns and its expected performance, given its level of risk as measured by beta. Alpha is often seen as a measure of the value added or subtracted by a portfolio manager.

The Sharpe ratio uses standard deviation and excess return to determine reward per unit of risk.

Standard deviation is a statistical measure of the volatility of the subaccount’s returns.

Mean represents the annualized geometric return for the period shown.

Best fit index: Alpha, beta, and R-squared statistics are presented for a broad market index and a “Best fit” index. The Best-Fit index identified in this report was determined by Morningstar by calculating R-squared for the fund against approximately 100 indexes tracked by Morningstar. The index representing the highest R-squared is identified as the best-fit index. The best-fit index may not be the fund’s benchmark, nor does it necessarily contain the types of securities that may be held by the fund.

Asset Allocation
The weighting of the portfolio in various asset classes, including “Other” is shown in the table. “Other” includes security types that are not neatly classified in the other asset classes, such as convertible bonds and preferred stocks.

In the table, allocation to the classes is shown for long positions, short positions, and net (long positions net of short) positions. These statistics summarize what the managers are buying and how they are positioning the portfolio. When short positions are captured in these portfolio statistics, investors get a more robust description of the funds’ exposure and risk.

Most managed product portfolios hold fairly conventional securities, such as long positions in stocks and bonds. Other portfolios use other investment strategies or securities, such as short positions or derivatives, to reduce transaction costs, enhance returns, or reduce risk. Some of these securities and strategies behave like conventional securities, while others have unique return and risk characteristics.

Most portfolios take long positions in securities. Long positions involve buying the security outright and then selling it later, with the hope that the security price rises over time. In contrast, short positions are taken to benefit from anticipated price declines. In this type of transaction, the investor borrows the security from another investor, sells it and receives cash, and then is obligated to buy it back at some point in the future. If the price falls after the short sale, the investor will have sold high and can now buy low to close the short position and lock in a profit. However, if the price of the security increases after the short sale, the investor will experience losses by buying it at a higher price than
the sale price.

The strategy of selling securities short is prevalent in specialized portfolios, such as long-short, market-neutral, bear-market, and hedge funds. Most conventional portfolios do not typically short securities, although they may reserve the right to do so under special circumstances. Funds may also short derivatives, and this is sometimes more efficient than shorting individual securities. Short positions produce negative exposure to the security that is being shorted. This means that when the security rises in value, the short position will fall in value and vice versa. Morningstar's portfolio statistics will capture this negative exposure. For example, if a fund has many short stock positions, the percent of assets in stocks in the asset allocation breakdown may be negative. Funds must provide their broker with cash collateral for the short position, so funds that short often have a large cash position, sometimes even exceeding 100% cash.

Note that all other portfolio statistics presented in this report are based on the long holdings of the fund only.

**Style Analysis**

Data in this section is as of the date listed in the report and is the most recent information available to Morningstar. Please note there are no assurances that the information in this section will remain the same and is only valid for one point in time, which is the as of date.

The Morningstar Style Box reveals a fund's investment style as of the date noted on this report.

For equity funds the vertical axis shows the market capitalization of the long stocks owned and the horizontal axis shows investment style (value, blend, or growth).

For fixed-income funds, the vertical axis shows the credit quality of the long bonds owned and the horizontal axis shows interest rate sensitivity as measured by a bond's effective duration.

Morningstar seeks credit rating information from fund companies on a periodic basis (e.g., quarterly). In compiling credit rating information Morningstar accepts credit ratings reported by fund companies that have been issued by all Nationally Recognized Statistical Rating Organizations (NRSROs). For a list of NRSROs, please visit http://www.sec.gov/divisions/marketreg/ratingagency.htm. Additionally, Morningstar accepts foreign credit ratings from widely recognized or registered rating agencies. If two rating organizations/agencies have rated a security, fund companies are to report the lower rating; if three or more organizations/agencies have rated a security, fund companies are to report the median rating, and in cases where there are more than two organization/agency ratings and a median rating does not exist, fund companies are to use the lower of the two middle ratings. PLEASE NOTE: Morningstar, Inc. is not itself an NRSRO nor does it issue a credit rating on the fund. An NRSRO or rating agency ratings can change from time-to-time.

For credit quality, Morningstar combines the credit rating information provided by the fund companies with an average default rate calculation to come up with a weighted-average credit quality. The weighted-average credit quality is currently a letter that roughly corresponds to the scale used by a leading NRSRO. Bond funds are assigned a style box placement of “low”, “medium”, or “high” based on their average credit quality. Funds with a low credit quality are those whose weighted-average credit quality is determined to be less than "BBB-"; medium based on those less than “AA-”, but greater or equal to “BBB-”; and high are those with a weighted-average credit quality of “AA-” or higher. When classifying a bond portfolio, Morningstar first maps the NRSRO credit ratings of the underlying holdings to their respective default rates (as determined by Morningstar’s analysis of actual historical default rates). Morningstar then averages these default rates to determine the average default rate for the entire bond fund. Finally, Morningstar maps this average default rate to its corresponding credit rating along a convex curve.

For interest-rate sensitivity, Morningstar obtains from fund companies the average effective duration. Generally, Morningstar classifies a fixed-income fund’s interest-rate sensitivity based on the effective duration of the Morningstar Core Bond Index (MCBI), which is currently three years. The classification of Limited will be assigned to those funds whose average effective duration is between 25% to 75% of MCBI’s average effective duration; funds whose average effective duration is between 75% to 125% of the MCBI will be classified as Moderate; and those that are at 125% or greater of the average effective duration of the MCBI will be classified as Extensive.

For municipal bond funds, Morningstar also obtains from fund companies the average effective duration. In these cases static breakpoints are utilized. These breakpoints are as follows: (i) Limited: 4.5 years or less; (ii) Moderate: more than 4.5 years but less than 7 years; and (iii) Extensive: more than 7 years. In addition, for non-US taxable and non-US domiciled fixed income funds static duration breakpoints are used: (i) Limited: less than or equal to 3.5 years; (ii) Moderate: greater than 3.5 and less than equal to 6 years; (iii) Extensive: greater than 6 years.

Turnover Ratio of a subaccount is a decent proxy for how frequently a manager trades his or her portfolio. The inverse of a fund’s turnover ratio is the average holding period for a security in that subaccount. As turnover increases, a fund’s brokerage costs typically rise as well.

**Equity Portfolio Statistics**

The referenced data elements below are a weighted average of the long equity holdings in the portfolio.

The Price/Earnings ratio is a weighted average of the price/earnings ratios of the stocks in the subaccount’s portfolio. The P/E ratio of a stock is calculated by dividing the current price of the stock by its trailing 12 months’ earnings per share. In computing the average, Morningstar weights each portfolio holding by the percentage of equity assets it represents.

The Price/Cash Flow ratio is a weighted average of the price/cash-flow ratios of the stocks in a subaccount’s portfolio. Price/cash-flow shows the ability of a business to generate cash and acts as a gauge of liquidity and solvency.

The Price/Book ratio is a weighted average of the price/book ratios of all the stocks in the subaccount’s portfolio. The P/B ratio of a company is calculated by dividing the market price of its stock by the company’s per-share book value. Stocks with negative book values are excluded from this calculation.

The geometric average market capitalization of a subaccount’s equity portfolio gives you a measure of the size of the companies in which the mutual fund invests.

**Fixed Income Portfolio Statistics**

The referenced data elements below are a weighted average of the long fixed income holdings in the portfolio.

Duration is a time measure of a bond’s interest rate sensitivity. Average effective duration is a weighted average of the duration of the underlying fixed income securities within the portfolio.

Average effective maturity is a weighted average of all the maturities of the bonds owned by the fund, weighted by the percentage of assets represented by each maturity. The duration of the fund portfolio is a measure of the sensitivity of a bond portfolio’s price to changes in interest rates. Similar to the way that an individual bond’s duration measures how sensitive a bond’s price is to interest rate changes, the duration of a bond portfolio measures how sensitive the overall portfolio’s price is to interest rate changes. Duration is a measure of the time period over which the cash flows from a bond portfolio (or a bond) are extended, and is a measure of the time it will take to get the portfolio’s cash flows to an investor. It is a monetary measure of the time value of money. Duration is expressed as a percentage of the portfolio’s market value. A longer-duration portfolio means that the portfolio has more money invested in bonds with longer maturities, and that a larger portion of its cash flows come from bonds that mature farther into the future. The maturity of a bond portfolio is a measure of the average time period over which the cash flows from a bond portfolio (or a bond) are paid. The maturity of a bond portfolio is a measure of the time value of money. Maturity is expressed as a percentage of the portfolio’s market value. A longer-maturity portfolio means that the portfolio has more money invested in bonds with longer maturities, and that a larger portion of its cash flows come from bonds that mature farther into the future.
bonds in a portfolio, computed by weighting each maturity date by the market value of the security.

Average weighted coupon is generated from the subaccount’s portfolio by weighting the coupon of each bond by its relative size in the portfolio. Coupons are fixed percentages paid out on a fixed-income security on an annual basis.

Average weighted price is generated from the fund’s portfolio by weighting the price of each bond by its relative size in the portfolio. This number reveals if the fund favors bonds selling at prices above or below face value (premium or discount securities, respectively). A higher number indicates a bias toward premiums. This statistic is expressed as a percentage of par (face) value.

Credit quality breakdowns are shown for corporate-bond holdings and depict the quality of bonds in the underlying portfolio. The report shows the percentage of fixed-income securities that fall within each credit quality rating as assigned by an NRSRO. Bonds not rated by an NRSRO are included in the not rated (NR) category.

**Fees and Expenses**

Contract Charge is the yearly fee charged to compensate the insurance company for the cost of maintaining and administering the variable annuity contract.

Surrender Charges are deducted from a contract if an investor makes a withdrawal prior to a specified time.

Front Loads are assessed by the insurance company on the initial contribution.

M&E Risk charge -- the mortality and expense risk charge -- is the percentage of the subaccount’s assets that the insurance company deducts to cover costs associated with mortality and expense risk.

Administration Fees are the percentage of the subaccount’s assets that the insurance company deducts to cover the costs involved in offering and administering the subaccount, such as the cost of distribution and printing of correspondence.

Fund Expense is equal to the percentage of fund assets deducted each year for ongoing fund operating expenses, including management fees.

**Contract Operations**

Death Benefit: the payment guaranteed to the investor if he or she dies before the annuitization date. There are six types of death benefits: (1) accumulation value (AV) - the beneficiary receives the value of the contract as of the death of the contractholder, (2) rising floor (RF) - insurance company guarantees a minimum investment return in addition to all the money invested in the contract, (3) principal (PR) - beneficiary receives the greater of the contract value or the total premiums less surrenders, (4) stepped up (SU) - a benchmark periodically set up by an insurance company of a contractholder’s contract value, which guarantees that the beneficiary will not receive less than that benchmark until a new one is set, (5) purchase payment (PP) - the amount of money paid to an insurance company to purchase an insurance contract, and (6) cash value (CV) - the amount available in cash upon cancellation of an insurance contract before it becomes payable upon death or maturity.

Premium Type: variable annuities offer Flexible Premium (XP) and Single Premium (SP) payment plans.

**Fund Expenses**

Prospectus Gross Expense Ratio reflects the annual percentage of a fund’s assets paid out in expenses. Expenses include management, 12b-1, transfer agent and all other asset-based fees associated with the fund’s daily operations and distribution, with the exception of brokerage commissions. It does not reflect expenses that have been reimbursed by the investment advisor, reductions from brokerage service arrangements or other expense offset arrangements.

Prospectus Net Expense Ratio reflects actual expenses paid by the fund as well as any voluntary waivers, reductions from brokerage service arrangements and any other expense offset arrangements.

**Expense Ratio %**

The expense ratio is the annual fee that all funds charge their shareholders. It expresses the percentage of assets deducted each fiscal year for fund expenses, including 12b-1 fees, management fees, administrative fees, operating costs, and all other asset-based costs incurred by the fund. Portfolio transaction fees, or brokerage costs, as well as front-end or deferred sales charges are not included in the expense ratio. The expense ratio, which is deducted from the fund’s average net assets, is accrued on a daily basis. The gross expense ratio, in contrast to the net expense ratio, does not reflect any fee waivers in effect during the time period.

**Investment Risks**

**International/Emerging Market Equities**: Investing in international securities involves special additional risks. These risks include, but are not limited to, currency risk, political risk, and risk associated with varying accounting standards. Investing in emerging markets may accentuate these risks.

**Sector Strategies**: Portfolios that invest exclusively in one sector or industry involve additional risks. The lack of industry diversification subjects the investor to increased industry-specific risks.

**Non-Diversified Strategies**: Portfolios that invest a significant percentage of assets in a single issuer involve additional risks, including share price fluctuations, because of the increased concentration of investments.

**Small Cap Equities**: Portfolios that invest in stocks of small companies involve additional risks. Smaller companies typically have a higher risk of failure, and are not as well established as larger blue-chip companies. Historically, smaller-company stocks have experienced a greater degree of market volatility than the overall market average.

**Mid Cap Equities**: Portfolios that invest in companies with market capitalization below $10 billion involve additional risks. The securities of these companies may be more volatile and less liquid than the securities of larger companies.

**High-Yield Bonds**: Portfolios that invest in lower-rated debt securities (commonly referred to as junk bonds) involve additional risks because of the lower credit quality of the securities in the portfolio. The investor should be aware of the possible higher level of volatility, and increased risk of default.

**Tax-Free Municipal Bonds**: The investor should note that the income from tax-free municipal bond funds may be subject to state and local taxation and the Alternative Minimum Tax.

**Bonds**: Bonds are subject to interest rate risk. As the prevailing level of bond interest rates rise, the value of bonds already held in a portfolio declines.

**Flows, Cash Flows, Yield Curve**

**Call Premiums**

**General**

**Premium (SP) payment plans.**

Premium Type: variable annuities offer Flexible Premium (XP) and Single Premium (SP) payment plans.
HOLDRs: The investor should note that these are narrow industry-focused products that, if the industry is hit by hard times, will lack diversification and possible loss of investment would be likely. These securities can trade at a discount to market price, ownership is of a fractional share interest, the underlying investments may not be representative of the particular industry, the HOLDR might be delisted from the AMEX if the number of underlying companies drops below nine, and the investor may experience trading halt.

Hedge Funds: The investor should note that hedge fund investing involves specialized risks that are dependent upon the type of strategies undertaken by the manager. This can include distressed or event-driven strategies, long/short strategies, using arbitrage (exploiting price inefficiencies), international investing, and use of leverage, options and/or derivatives. Although the goal of hedge fund managers may be to reduce volatility and produce positive absolute return under a variety of market conditions, hedge funds may involve a high degree of risk and are suitable only for investors of substantial financial means who could bear the entire loss of their investment.

Bank Loan/Senior Debt: Bank loans and senior loans are impacted by the risks associated with fixed income in general, including interest rate risk and default risk. They are often non-investment grade, therefore, the risk of default is high. These securities are also relatively illiquid. Managed products that invest in bank loans/senior debt are often highly leveraged, producing a high risk of return volatility.

Exchange Traded Notes (ETNs): ETNs are unsecured debt obligations. Any repayment of notes is subject to the issuer’s ability to repay its obligations. ETNs do not typically pay interest.

Leveraged ETFs: Leveraged investments are designed to meet multiples of the return performance of the index they track and seek to meet their fund objectives on a daily basis (or other time period stated within the prospectus objective). The leverage/gearing ratio is the amount of excess return that a leveraged investment is designed to achieve in comparison to its index performance (i.e. 200%, 300%, -200%, or -300% of 2X, 3X, -2X, -3X). Compounding has the ability to affect the performance of the fund to be either greater or less than the index performance multiplied by the multiple stated within the funds objective over a stated time period.

Short Positions: When a short position moves in an unfavorable way, the losses are theoretically unlimited. The broker may demand more collateral and a manager might have to close out a short position at an inopportune time to limit further losses.

Long-Short: Due to the strategies used by long-short funds, which may include but are not limited to leverage, short selling, short-term trading, and investing in derivatives, these funds may have greater risk, volatility, and expenses than those focusing on traditional investment strategies.

Liquidity Risk: Closed-end fund, ETF, and HOLDTR trading may be halted due to market conditions, impacting an investor’s ability to sell a fund.

Market Price Risk: The market price of ETFs, HOLDRs, and closed-end funds traded on the secondary market is subject to the forces of supply and demand and thus independent of the NAV. This can result in the market price trading at a premium or discount to the NAV, which will affect an investor’s value.

Market Risk: The market prices of ETFs and HOLDRs can fluctuate as a result of several factors, such as security-specific factors or general investor sentiment. Therefore, investors should be aware of the prospect of market fluctuations and the impact it may have on the market price.

Target-Date Funds: Target-date funds typically invest in other mutual funds and are designed for investors who are planning to retire during the target date year. The fund’s target date is the approximate date when investors expect to begin withdrawing their money. A target-date fund’s investment objective/strategy typically becomes more conservative over time, primarily by reducing its allocation to equity mutual funds and increasing its allocations in fixed-income mutual funds. An investor’s principal value in a target-date fund is not guaranteed at any time, including at the fund’s target date.

High double- and triple-digit returns: High double- and triple-digit returns were the result of extremely favorable market conditions, which may not continue to be the case. High returns for short time periods must not be a major factor when making investment decisions.

Benchmark Disclosure

**BBgBarc US Agg Bond TR USD**
This index is composed of the BarCap Government/Credit Index, the Mortgage-Backed Securities Index, and the Asset-Backed Securities Index. The returns we publish for the index are total returns, which includes the daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core US Aggregate Bond ETF.

**MSCI EAFE NR USD**
This Europe, Australasia, and Far East index is a market-capitalization-weighted index of 21 non-U.S., industrialized country indexes.

This disclosure applies to all MSCI indices: Certain information included herein is derived by Morningstar in part from MSCI’s Index Constituents (the “Index Data”). However, MSCI has not reviewed any information contained herein and does not endorse or express any opinion such information or analysis. MSCI does not make any express or implied warranties, representations or guarantees concerning the Index Data or any information or data derived therefrom, and in no event will MSCI have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) relating to any use of this information.

**Russell 2000 Growth TR USD**
Tracks the companies within the Russell 2000 Index that have higher price-to-book ratios and higher forecasted growth values. The constituents displayed for this index are from the following proxy: iShares Russell 2000 Growth ETF.

**Russell 2000 TR USD**
Consists of the 2000 smallest companies in the Russell 3000 Index. The constituents displayed for this index are from the following proxy: iShares Russell 2000 ETF.

**S&P 500 TR USD**
A market capitalization-weighted index composed of the 500 most widely held stocks whose assets and/or revenues are based in the US; it’s often used as a proxy for the U.S. stock market. TR (Total Return) indexes include daily reinvestment of dividends. The constituents displayed for this index are from the following proxy: iShares Core S&P 500 ETF.

**USTREAS T-Bill Auction Ave 3 Mon**
Three-month T-bills are government-backed, short-term investments considered to be risk-free and as good as cash because the maturity is only three months. Morningstar collects yields on the T-bill on a weekly basis from the Wall Street Journal.