2021 Asset allocation guide
Plan smart with the right mix of investments*

Intelligent Variable Annuity®
Intelligent Life® Variable Universal Life Insurance
Intelligent Life® Survivorship Variable Universal Life Insurance

*This guide is reviewed and/or updated annually. Visit TIAA.org/annuityperformance or TIAA.org/lifeproformance for the most current version.
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Put your investments to work

You’ve taken a big step in pursuing your financial goals by choosing TIAA-CREF Life Insurance Company (TIAA Life). Now, it’s time to figure out what kinds of investments you want to fund your variable insurance product.

Having the right asset allocation—or blend of investments like stocks, bonds and real estate—can help ensure your product selection is in sync with your goals and needs. It can also help you build a strategy that takes on the right amount of risk based on your preferences and time line.

Design your plan in five simple steps

Use this guide to help you better understand what approach is right for you. Just answer some questions to identify your risk preferences, investment style and asset allocation. Then, choose one of our recommended portfolios or build your own portfolio. You’ll then be ready to put your investment strategy in motion.

Don’t go it alone
Reach out to a TIAA Consultant to help you navigate this guide

We’re ready to help you build your future

TIAA’s Investment Management Group (IMG) is a team of dedicated investment professionals. Using sophisticated tools, technology, experience and rigorous analysis, IMG also:

Selects funds from the available lineup*
Finds the best opportunities for potential growth
Matches funds with asset allocation strategies to build model portfolios

*Fund selections from the available TIAA Life Variable Products Lineup TIAA.org/lifeperformance, TIAA.org/annuityperformance.
How does the RTQ work?

The risk tolerance questionnaire (RTQ) is a tool that based on your self-reported responses, can help measure your general willingness and ability to withstand the risks inherent in investing in capital markets. This questionnaire measures risk preferences based on two factors: (1) how you say you feel about the trade-offs between expected returns and expected volatility, and (2) what you believe your emotional reactions would be to changes in your portfolio’s value, from both gains and losses.

Using a unit-weighted sum of your responses to the questions within this questionnaire, an overall risk score is generated to reflect your risk tolerance profile. Your score can then be mapped to the following risk tolerance profiles: Conservative, Moderately Conservative, Moderate, Moderately Aggressive and Aggressive.

Questions regarding potential returns or losses are meant to apply an average or estimated return for the asset classes depicted, to assist in the determination of risk tolerance, and are not meant to illustrate past or expected performance of the portfolios constructed by Morningstar Investment Management LLC or available through TIAA.

Your responses to this RTQ can help your financial professional discover information about your goals, your risk and return preferences, your anticipated responses to volatility, and other relevant information. The gathering of this information can help your financial professional better understand your financial situation by also asking for additional information about your assets, needs, preferences and goals. Based on this more complete understanding, your financial professional can help formulate your financial plan, investment strategy or recommend TIAA products and services (“investment portfolio”).

Limitations of the RTQ

There is no guarantee that this risk tolerance assessment tool or its scoring method completely assesses your tolerance for risk or attitudes about gains and losses. While the questionnaire can help inform your risk tolerance profile, you are ultimately responsible for selecting the risk tolerance profile that you are most comfortable using for your investment portfolio. The RTQ scores alone should not be the sole method for making this decision. Although the RTQ scoring process is objective, subjectivity cannot be completely eliminated. For example, you may struggle to understand the questions or may not have clearly defined risk preferences. Your financial professional can assist in walking through the questionnaire, but the risk tolerance profile used for your investment portfolio is your decision. Ultimately, with the help of your financial professional, you should work to determine your investment portfolio, which may represent a different asset mix than might be indicated by your risk tolerance score.

Additionally, although your Consultant may use the results of this questionnaire to help identify an investment portfolio recommendation, there is no guarantee that the resulting asset mix appropriately reflects your ability or willingness to withstand investment risk.

Please make sure to review all of the documents and disclosures associated with the investment portfolio to make fully informed decisions.

This Risk Tolerance Questionnaire is a tool made available to you through a license agreement between Morningstar Investment Management LLC and TIAA. The decision to use the RTQ tool is at the sole discretion of TIAA. This RTQ does not consider all factors necessary to make an investment decision (e.g., personal and financial information and investment objective). The results of the RTQ should not be viewed as advice or establishing any kind of advisory relationship with Morningstar Investment Management LLC. The use of the RTQ should not be construed as a form of endorsement by Morningstar Investment Management LLC of your investment portfolio, nor is Morningstar Investment Management LLC acting in the capacity of advisor to individual investors. Please consult with your Consultant to obtain relevant fund prospectuses and read them carefully prior to investing. Morningstar Investment Management LLC is a registered investment adviser and subsidiary of Morningstar, Inc. Morningstar Investment Management LLC is not affiliated with TIAA.
Determine your risk tolerance

**Time horizon**

1. Approximately when do you plan to make your first withdrawal from your investment account? (Choose one only)
   
   a. Less than 2 years  
      (0 points)
   
   b. 2 years  
      (1 points)
   
   c. 3 to 4 years  
      (3 points)
   
   d. 5 to 7 years  
      (7 points)
   
   e. 8 to 10 years  
      (9 points)
   
   f. 11 years or more  
      (11 points)

2. Once you begin making withdrawals from your investment account, how long do you expect the withdrawals to last? (Choose one only)

   a. I will be taking a lump-sum distribution.  
      (0 points)
   
   b. 1 to 4 years  
      (2 points)
   
   c. 5 to 7 years  
      (4 points)
   
   d. 8 to 10 years  
      (5 points)
   
   e. 11 years or more  
      (6 points)

**Time horizon score**

(Sum of scores from questions 1 and 2)

1. ____________

2. ____________

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The results of the RTQ should also not be viewed as advice or establishing any kind of advisory relationship with TIAA or any of its affiliates. Advisory services are provided by Advice & Planning Services, a division of TIAA-CREF Individual & Institutional Services, LLC, a registered investment advisor. Brokerage services are provided by TIAA Brokerage Services, a division of TIAA-CREF Individual & Institutional Services, LLC, a registered broker-dealer. TIAA-CREF Individual & Institutional Services, LLC, member of FINRA and SIPC, distributes securities products. Investment, insurance, and annuity products are not FDIC insured, are not guaranteed, are not deposited, are not insured by any federal government agency, are not a condition to any banking service or activity and may lose value.
**Risk tolerance**

3. Which statement best reflects your willingness to experience changes in account value for the potential, but not guarantee of, growth of your portfolio?  
*(Choose one only)*

a. I want to preserve my wealth, even if it means not keeping pace with inflation.  
   *(0 points)*

b. I want some small return and would be satisfied just keeping pace with inflation.  
   *(3 points)*

c. I want to grow my portfolio at a steady pace over time and I am comfortable with some market swings.  
   *(6 points)*

d. I want significant growth in my portfolio and I am willing to have significant fluctuations in the value of my investments in trying to achieve this.  
   *(9 points)*

e. I want to maximize growth, and I am willing to face dramatic fluctuations and downturns in the value of my investments in trying to achieve this.  
   *(12 points)*

4. The graph illustrates the hypothetical range of outcomes for five portfolios over a one-year period in which the loss is just as likely to occur as the gain. Which portfolio would you feel most comfortable with?  
*(Choose one only)*

![Graph showing portfolio outcomes]

a. -27% loss and 46% gain  
   *(12 points)*

b. -20% loss and 35% gain  
   *(9 points)*

c. -17% loss and 30% gain  
   *(6 points)*

d. -13% loss and 24% gain  
   *(3 points)*

e. -7% loss and 13% gain  
   *(0 points)*
Risk tolerance (continued)

5. I am comfortable with investments that may frequently experience large declines in value in the short term if there is the potential for longer-term higher returns.
(Choose one only)

   a. Strongly agree (12 points)
   b. Agree (9 points)
   c. Neutral (6 points)
   d. Disagree (3 points)
   e. Strongly disagree (0 points)

6. What would you do if your portfolio fell 20%? For example, if you had a portfolio that started at $100,000, this would mean it would now be worth $80,000. Would you be most likely to:
(Choose one only)

   a. Not make any changes to my portfolio (12 points)
   b. Think about changing to more conservative investments but wait and see what happens (6 points)
   c. Change substantially to more conservative investments quickly (0 points)

7. Which statements most closely describes your emotional reactions to market downturns:
(Choose one only)

   a. Investment losses make me very uncomfortable. When markets become volatile, I check my portfolio often so I can make adjustments. (0 points)
   b. Investment losses make me a bit uneasy, but not enough to do anything. However, if the volatility lasts a long time, I would think about changing my investments. (6 points)
   c. I understand that most investments will have periods of losses, but that’s just a natural part of investing and it does not have much of an effect on me. I would not make adjustments to my portfolio based on market ups-and-downs. (12 points)

Risk tolerance score
(Sum of scores from questions 3 and 7)

__________
How to use your scores

To find your risk profiles, plot your time horizon score from page 3 and your risk tolerance score from page 5 on the grid below. For example, if your time horizon score is 6 and your risk tolerance score is 24, your portfolio is 2.

<table>
<thead>
<tr>
<th>Time horizon score (from page 3)</th>
<th>Risk tolerance score (from page 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–7</td>
<td>0–7</td>
</tr>
<tr>
<td>8–22</td>
<td>8–22</td>
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<tr>
<td>23–37</td>
<td>23–37</td>
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<tr>
<td>38–52</td>
<td>38–52</td>
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<tr>
<td>53–60</td>
<td>53–60</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk score</th>
<th>0–7</th>
<th>8–22</th>
<th>23–37</th>
<th>38–52</th>
<th>53–60</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–2</td>
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<td>Conservative</td>
<td>Conservative</td>
<td>Conservative</td>
<td>Conservative</td>
</tr>
<tr>
<td>3–6</td>
<td>Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate Conservative</td>
</tr>
<tr>
<td>7–10</td>
<td>Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>11–14</td>
<td>Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate</td>
<td>Moderate Aggressive</td>
<td>Moderate Aggressive</td>
</tr>
<tr>
<td>15–17</td>
<td>Conservative</td>
<td>Moderate Conservative</td>
<td>Moderate</td>
<td>Moderate Aggressive</td>
<td>Aggressive</td>
</tr>
</tbody>
</table>

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Identify your investment style

Once you identify your risk tolerance, you can choose an investment style. Whether you prefer a more hands-on approach or want to go with the flow, there are two typical types of investment approaches: active or passive.²

**Actively managed investments**

Active fund managers make deliberate—or active—decisions to buy, sell or hold securities. They conduct their own research to determine a method to strive to outperform a recognized market index.

**Passively managed investments**

Passive fund managers try to match the performance of an index—not beat it. They do not make ongoing buy, sell and hold decisions based on their research.

**What’s an index?**

It’s a group of investments intended to represent a particular sector of the market. For example, the S&P 500®, one of the most well-known indexes, tracks 500 large companies on the New York Stock Exchange. You cannot invest directly in an index.

² Please note that the terms active and passive refer to the management of the underlying funds in the portfolio models, and not the management of the overall models.
Finding your target allocation

Now, use your risk profile from page 6 to find your target allocation. The pie charts below show suggested allocations based on different time horizons and levels of risk tolerance.3

### Conservative

- **Domestic stocks**: 19%
- **International stocks**: 11%
- **Bonds/Fixed income**: 69%
- **Cash equivalents**: 1%

The **Conservative** portfolio is designed to potentially provide stability and protection from loss to investors who either have a short time horizon and/or a primary goal of avoiding potential loss. The stability of this portfolio comes at the expense of achieving potentially higher long-term returns.

### Moderate-Conservative

- **Domestic stocks**: 29%
- **International stocks**: 16%
- **Bonds/Fixed income**: 54%
- **Cash equivalents**: 1%

The **Moderate-Conservative** portfolio primarily attempts to avoid short-term loss, but still seeks somewhat higher returns over the long term. To achieve higher potential returns, some fluctuations in investment value are to be expected.

### Moderate

- **Domestic stocks**: 38%
- **International stocks**: 22%
- **Bonds/Fixed income**: 39%
- **Cash equivalents**: 1%

The **Moderate** portfolio is designed for those who are equally concerned with risk and return. The objective for this portfolio is to provide returns that outpace inflation over the long term. Those using the suggested allocation for this portfolio should be comfortable with fluctuations in the portfolio’s value and occasional short-term loss.

### Moderate-Aggressive

- **Domestic stocks**: 45%
- **International stocks**: 28%
- **Bonds/Fixed income**: 26%
- **Cash equivalents**: 1%

The **Moderate-Aggressive** portfolio is designed for investors seeking greater accumulation over intermediate to long-term horizons. Those using the suggested allocation for this portfolio must be comfortable with more-than-average volatility and potential short-term losses to achieve the desired higher returns.

### Aggressive

- **Domestic stocks**: 53%
- **International stocks**: 34%
- **Bonds/Fixed income**: 12%
- **Cash equivalents**: 1%

The **Aggressive** portfolio is designed for investors seeking the potential for even greater returns over a long-term horizon. Those using the suggested allocation for this portfolio must be comfortable with experiencing frequent short-term loss and extreme volatility in portfolio value in exchange for potentially higher returns over the long term.

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3 The portfolios provided by IMG, may not take into account your particular goals or preferences. Please note that no strategy can eliminate or anticipate all market risks, and losses can occur.
Consider a recommended portfolio or build your own

You can have your allocations match one of the IMG-built model portfolios. Or, you can select your investments and choose how your assets are allocated starting on page 11. Consider working with your Consultant to help you decide the right approach.

### 2020 “Active” model portfolios*

<table>
<thead>
<tr>
<th>Fund name</th>
<th>Conservative</th>
<th>Moderate-Conservative</th>
<th>Moderate</th>
<th>Moderate-Aggressive</th>
<th>Aggressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIAA-CREF Life Growth Equity Fund</td>
<td>7%</td>
<td>10%</td>
<td>13%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>PVC Equity Income Account—Class I</td>
<td>5%</td>
<td>9%</td>
<td>11%</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>Franklin Small-Mid Cap Growth VIP Fund</td>
<td>2%</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Neuberger Berman AMT Mid Cap Intrinsic Value Portfolio—I Class</td>
<td>3%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Wanger USA</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Delaware VIP Small-Cap Value Series—Standard Class</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>TIAA-CREF Life International Equity Fund</td>
<td>8%</td>
<td>12%</td>
<td>16%</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>Templeton Developing Markets VIP Fund</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>TIAA-CREF Life Core Bond Fund</td>
<td>61%</td>
<td>48%</td>
<td>35%</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>T. Rowe Price Limited—Term Bond Portfolio</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>PIMCO VIT Emerging Markets Bond Portfolio—Institutional Class</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Vanguard VIF High Yield Bond Portfolio</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>TIAA-CREF Life Money Market Fund</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Portfolio weighted average expense ratio†</td>
<td>0.47</td>
<td>0.51</td>
<td>0.56</td>
<td>0.60</td>
<td>0.64</td>
</tr>
</tbody>
</table>

*This guide along with the model portfolios are reviewed annually by TIAA. The most current version is maintained at [TIAA.org/lifeperformance](http://TIAA.org/lifeperformance) and [TIAA.org/annuityperformance](http://TIAA.org/annuityperformance). These model allocations may change over time, and you should review this guide at least annually. Contact TIAA to make any allocation changes.
### 2020 “Passive” model portfolios*

<table>
<thead>
<tr>
<th>Fund name</th>
<th>Conservative</th>
<th>Moderate-Conservative</th>
<th>Moderate</th>
<th>Moderate-Aggressive</th>
<th>Aggressive</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIAA-CREF Life Stock Index Fund</td>
<td>12%</td>
<td>19%</td>
<td>24%</td>
<td>30%</td>
<td>36%</td>
</tr>
<tr>
<td>Vanguard VIF Mid-Cap Index Portfolio</td>
<td>5%</td>
<td>8%</td>
<td>10%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Wanger USA</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>DFA VA US Targeted Value Portfolio</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>TIAA-CREF Life International Equity Fund</td>
<td>8%</td>
<td>12%</td>
<td>16%</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>Templeton Developing Markets VIP Fund</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Vanguard VIF Total Bond Market Index Portfolio</td>
<td>61%</td>
<td>48%</td>
<td>35%</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>T. Rowe Price Limited-Term Bond Portfolio</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>PIMCO VIT Emerging Markets Bond Portfolio—Institutional Class</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Vanguard VIF High Yield Bond Portfolio</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>TIAA-CREF Life Money Market Fund</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
<tr>
<td><strong>Portfolio weighted average expense ratio</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td><strong>0.24</strong></td>
<td><strong>0.27</strong></td>
<td><strong>0.30</strong></td>
<td><strong>0.33</strong></td>
<td><strong>0.36</strong></td>
</tr>
</tbody>
</table>

Although asset allocation is intended to mitigate investment risk, implementation does not guarantee a profit or protect against a loss. It’s important to review your allocations at least annually.

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<sup>*This guide along with the model portfolios are reviewed annually by TIAA. The most current version is maintained at [TIAA.org/lifeperformance](http://TIAA.org/lifeperformance) and [TIAA.org/annuityperformance](http://TIAA.org/annuityperformance). These model allocations may change over time, and you should review this guide at least annually. Contact TIAA to make any allocation changes.</sup>

<sup>4 The expenses for each fund is weighted pursuant to the recommended allocation amount, resulting in the total weighted expense for each portfolio. Expenses for each portfolio can be found in the policy and fund prospectuses.</sup>
Build your own portfolio

You can choose from a wide array of investments—listed by classification in this section*—to build your portfolio. Work with your Consultant to help you select investments and determine how your assets are allocated. You and your Consultant can also refer to this section when completing your application. (For more on the investment firms, see page 14.)

### Domestic equity

<table>
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<tr>
<th>Large-cap</th>
<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td></td>
<td></td>
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<tr>
<td>PVC Equity Income Account—Class I</td>
<td>Franklin Mutual Shares VIP Fund</td>
<td>Janus Henderson Forty Portfolio</td>
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<tr>
<td>TIAA-CREF Life Large-Cap Value Fund</td>
<td>Neuberger Berman AMT Sustainable Equity Portfolio—I Class⁵</td>
<td>MFS Growth Series⁶—Initial Class</td>
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<td>DFA VA US Large Value Portfolio</td>
<td>TIAA-CREF Life Social Choice Equity Fund</td>
<td>PSF PGIM Jennison Focused Blend Portfolio—Class II⁷</td>
</tr>
<tr>
<td></td>
<td>TIAA-CREF Life Stock Index Fund</td>
<td>ClearBridge Variable Aggressive Growth Portfolio—Class 1</td>
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<td>PSF PGIM Jennison Value Portfolio—Class II⁸</td>
<td>MFS Massachusetts Investors Growth Stock Portfolio—Initial Class</td>
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<td>Vanguard VIF Equity Index Portfolio</td>
<td>TIAA-CREF Life Growth Equity Fund</td>
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<td>Vanguard VIF Total Stock Market Index Portfolio</td>
<td>TIAA-CREF Life Growth &amp; Income Fund</td>
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<tr>
<td></td>
<td>Vanguard VIF Capital Growth Portfolio</td>
<td>Vanguard VIF Capital Growth Portfolio</td>
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<table>
<thead>
<tr>
<th>Mid-cap</th>
<th>Blend</th>
<th>Growth</th>
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<tbody>
<tr>
<td>Value</td>
<td></td>
<td></td>
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<tr>
<td>Neuberger Berman AMT Mid Cap Intrinsic Value Portfolio—I Class</td>
<td>PVC MidCap Account¹—Class I</td>
<td>Franklin Small-Mid Cap Growth VIP Fund</td>
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<td>Janus Henderson Mid Cap Value Portfolio</td>
<td>Vanguard VIF Mid-Cap Index Portfolio</td>
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<td>Matson Money U.S. Equity VI Portfolio</td>
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<table>
<thead>
<tr>
<th>Small-cap</th>
<th>Blend</th>
<th>Growth</th>
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<tbody>
<tr>
<td>Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware VIP Small-Cap Value Series—Standard Class</td>
<td>Royce Capital Fund Micro-Cap Portfolio—Investment Class</td>
<td>ClearBridge Variable Small Cap Growth Portfolio—Class I</td>
</tr>
<tr>
<td>DFA VA US Targeted Value Portfolio</td>
<td>Royce Capital Fund Small-Cap Portfolio—Investment Class</td>
<td>Vanguard VIF Small Company Growth Portfolio⁹</td>
</tr>
<tr>
<td></td>
<td>TIAA-CREF Life Small-Cap Equity Fund</td>
<td>Wanger USA</td>
</tr>
</tbody>
</table>

⁵ Effective May 1, 2019, Neuberger Berman AMT Large Cap Value Portfolio—Class I merged with Neuberger Berman AMT Sustainable Equity Portfolio—I Class and is closed to new investors.
⁶ Effective February 18, 2013, the MFS Growth Series is closed to new investors.
⁷ Closed to new contract owners effective August 15, 2013.
⁸ Effective May 1, 2020, the Vanguard VIF Small Company Growth Portfolio is closed to new investors.
⁹ Effective April 26, 2021, the Prudential Series Fund—Value Portfolio became PSF PGIM Jennison Value Portfolio.
¹⁰ Effective April 26, 2021, the Prudential Series Fund—Jennison 20/20 Focus Portfolio became PSF PGIM Jennison Focused Blend Portfolio.

*Classification of the investment options was made by Morningstar.

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## International/Global equity

<table>
<thead>
<tr>
<th>Value</th>
<th>Blend</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Large-cap</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware VIP International Series—Standard Class</td>
<td>TIAA-CREF Life International Equity Fund</td>
<td>MFS Global Equity Series—Initial Class</td>
</tr>
<tr>
<td>Templeton Developing Markets VIP Fund</td>
<td>John Hancock Emerging Markets Value Trust</td>
<td>Vanguard VIF International Portfolio</td>
</tr>
<tr>
<td>DFA VA International Value Portfolio</td>
<td>Janus Henderson Overseas Portfolio</td>
<td></td>
</tr>
<tr>
<td>DFA VA Equity Allocation Portfolio</td>
<td>Vanguard VIF Total International Stock Market Index Portfolio</td>
<td></td>
</tr>
<tr>
<td><strong>Mid-cap</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matson Money International Equity VI Portfolio</td>
<td>DFA VA International Small Portfolio</td>
<td>Wanger International</td>
</tr>
</tbody>
</table>

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**Notes:**
- 11 Effective December 11, 2020, Delaware VIP International Value Equity Series—Standard Class merged with Delaware VIP International Series—Standard Class and is closed to new investors.
- 12 Effective February 18, 2013, the Janus Henderson Overseas Portfolio is closed to new investors.
- 13 Consists of both domestic and international equity.

## Fixed income

<table>
<thead>
<tr>
<th>Short term</th>
<th>Intermediate term</th>
<th>Long term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DFA VA Short-Term Fixed Portfolio</td>
<td>TIAA-CREF Life Core Bond Fund</td>
<td>PIMCO VIT Real Return Portfolio—Institutional Class</td>
</tr>
<tr>
<td>Matson Money Fixed Income VI Portfolio</td>
<td>DFA VA Global Bond Portfolio</td>
<td>PIMCO VIT Global Bond Opportunities Portfolio (Unhedged)—Institutional Class</td>
</tr>
<tr>
<td></td>
<td>Vanguard VIF Total Bond Market Index Portfolio</td>
<td>DFA VIT Inflation Protected Securities Portfolio</td>
</tr>
<tr>
<td></td>
<td>Vanguard VIF Global Bond Index Portfolio</td>
<td></td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. Rowe Price Limited—Term Bond Portfolio</td>
<td>LVIP Delaware Diversified Income Fund—Standard Class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PIMCO VIT Emerging Markets Bond Portfolio—Institutional Class</td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vanguard VIF High Yield Bond Portfolio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Asset Variable Global High Yield Bond Portfolio—Class I</td>
<td></td>
</tr>
</tbody>
</table>

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**Notes:**
- 14 Effective May 1, 2020, TIAA-CREF Life Bond Fund has been renamed as TIAA-CREF Life Core Bond Fund.
- 15 The PIMCO VIT Real Return Portfolio is primarily invested in inflation-protected securities.
- 16 Not available in Intelligent Variable Annuity (IVA).
- 17 Effective April 30, 2021, Delaware VIP Diversified Income Series—Standard Class merged into the LVIP Delaware Diversified Income Fund—Standard Class.
### Other

<table>
<thead>
<tr>
<th>Balanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calamos Growth &amp; Income Portfolio(^{18})</td>
</tr>
<tr>
<td>DFA VA Global Moderate Allocation Portfolio</td>
</tr>
<tr>
<td>Franklin Income VIP Fund</td>
</tr>
<tr>
<td>Vanguard VIF Balanced Portfolio</td>
</tr>
<tr>
<td>Vanguard VIF Conservative Allocation Portfolio</td>
</tr>
<tr>
<td>Vanguard VIF Moderate Allocation Portfolio</td>
</tr>
<tr>
<td>PIMCO VIT All Asset Portfolio—Institutional Class</td>
</tr>
<tr>
<td>TIAA-CREF Life Balanced Fund</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Suisse Trust-Commodity Return Strategy Portfolio</td>
</tr>
<tr>
<td>VY Clarion Global Real Estate Portfolio—Class I</td>
</tr>
<tr>
<td>MFS Utilities Series—Initial Class</td>
</tr>
<tr>
<td>PIMCO VIT Commodity Real Return Strategy Portfolio—Institutional Class</td>
</tr>
<tr>
<td>PSF Natural Resources Portfolio—Class II(^{19})</td>
</tr>
<tr>
<td>TIAA-CREF Life Real Estate Securities Fund</td>
</tr>
<tr>
<td>T. Rowe Price Health Sciences Portfolio I</td>
</tr>
<tr>
<td>Vanguard VIF Real Estate Index Portfolio</td>
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</table>

<table>
<thead>
<tr>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIAA-CREF Life Money Market Fund</td>
</tr>
</tbody>
</table>

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\(^{18}\) Effective July 30, 2012, the Calamos Growth & Income Portfolio is closed to new investors.

\(^{19}\) Effective April 26, 2021, the Prudential Series Fund—Natural Resources Portfolio became PSF Natural Resources Portfolio.

Money in the TIAA Life Fixed Account is part of the TIAA Life General Account and is managed by TIAA investment professionals. It is only available in Intelligent Life Variable Universal Life Insurance and Intelligent Life Survivorship Variable Universal Life Insurance. Funds earn a current interest rate, but never less than the guaranteed crediting rate stated in the policy contract. This guarantee is backed by the claims-paying ability of TIAA-CREF Life Insurance Company. The TIAA Life Fixed Account has not been analyzed by Morningstar Investment Management LLC.

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**A TIAA Consultant is ready to help**

Now that you’ve built an asset mix attuned to your goals, it’s time to put it in action to help power your variable product’s potential. Reach out to a TIAA Consultant to implement your asset allocation strategy.

Questions? Call **855-200-6529** to speak with a TIAA representative.

If you are working with a non-TIAA financial consultant, please consult him or her before making investment decisions.
## Investment management firms

Once you’ve completed the five steps, learn how these firms—including in our portfolios—can help support your investment needs.

### About the firm

<table>
<thead>
<tr>
<th>Over 40 years in business</th>
<th>Over 25 years in business</th>
<th>Over 150 years in business</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Calamos Investments" /></td>
<td><img src="image" alt="Columbia Threadneedle Investments" /></td>
<td><img src="image" alt="Credit Suisse" /></td>
</tr>
<tr>
<td>▪ Calamos Investments is a multi-disciplined global investment firm committed to excellence in investment management and client service.</td>
<td>▪ Adherence to the Growth at a Reasonable Price (GARP) style has caused the firm to correctly react to valuation extremes in the market.</td>
<td>▪ Credit Suisse Asset Management is a multi-specialist boutique manager operating within a leading global financial institution. Our multi-specialist boutique approach is combined with the institutional quality governance, stability and opportunity of Credit Suisse’s worldwide franchise. This allows us to deliver distinct product expertise through active and passive solutions in both traditional and alternative investments.</td>
</tr>
<tr>
<td>▪ Team of teams investment platform, specialized by investment discipline, integrated through Co-CIO-led investment committee.</td>
<td>▪ Experienced team of professionals dedicated to robust fundamental research focused on small and mid-cap stocks.</td>
<td>▪ By leveraging the oversight, infrastructure, insights and talent of our parent organization, we ensure that our multi-specialist boutiques remain nimble, performance— and client-focused. Similarly, we focus on our distinct strengths and form partnerships with experienced managers to unearth hard to source alpha opportunities on behalf of our clients.</td>
</tr>
<tr>
<td>▪ Serving the needs of institutional and individual investors for over 40 years.</td>
<td>▪ Consistent investment process since inception of Columbia Acorn Fund in 1970</td>
<td>▪ Our globally diverse client base includes governments, central banks, corporations, pension and endowment funds, sovereign wealth funds, family offices and private individuals.</td>
</tr>
<tr>
<td>▪ Offering innovative investment strategies to work within a client’s asset allocation framework.</td>
<td>▪ The Advisor is a registered investment advisor and wholly owned subsidiary of Ameriprise Financial.</td>
<td>▪ $500 billion assets under management as of 12/31/20</td>
</tr>
<tr>
<td>– Equity</td>
<td>$547 billion assets under management as of 12/31/20</td>
<td></td>
</tr>
<tr>
<td>– Fixed income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Convertibles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Alternatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Multi-asset</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Privately held, employee-owned business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ 309 employees, 74 investment professionals</td>
<td>$32.3 billion assets under management as of 12/31/20</td>
<td></td>
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<tr>
<td></td>
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<td></td>
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</tbody>
</table>

### Investment account

<table>
<thead>
<tr>
<th><img src="image" alt="Calamos Investments" /></th>
<th><img src="image" alt="Columbia Threadneedle Investments" /></th>
<th><img src="image" alt="Credit Suisse" /></th>
</tr>
</thead>
</table>
| ▪ Calamos Growth & Income Portfolio | ▪ Wanger International  
▪ Wanger Select  
▪ Wanger USA | ▪ Credit Suisse Trust-Commodity Return Strategy Portfolio |
| | | |
### About the firm

**Over 80 years in business**
- Macquarie Investment Management (MIM) is a global asset manager with offices in the US, Europe, Asia, and Australia. In the US, retail investors recognize Delaware Funds® by Macquarie as one of the longest-standing mutual fund families, with more than 80 years in existence. As active managers we prioritize autonomy and accountability at the investment team level in pursuit of opportunities that matter for clients. Our conviction based, long-term approach guides us in managing assets on behalf of investors worldwide, across fixed income, equities, listed real estate, listed infrastructure, hedge funds, and multi-asset solutions.

**$268.1 billion assets under management as of 12/31/20**

**Over 35 years in business**
- Dimensional Fund Advisors is a leading global investment firm that has been translating academic research into practical investment solutions since 1981. Guided by a strong belief in markets, Dimensional helps investors pursue higher expected returns using a dynamic investment process that integrates research, portfolio design, portfolio management, and trading. An enduring philosophy, strong client commitment, and deep connections with the academic community underpin the firm’s approach.

**$601 billion assets under management as of 12/31/20**

**Over 70 years in business**
- From large institutions to individual investors, clients want the same thing—to achieve their financial goals. And for more than 70 years, Franklin Templeton has helped them do exactly that. Everything we do at Franklin Templeton is focused on delivering clients better outcomes. And that’s why clients in more than 160 countries have entrusted their investments to Franklin Templeton, making us one of the world’s largest asset managers with approximately $1.5 trillion in assets under management and $135.8 billion in U.S. retirement accounts.

**$1.5 trillion assets under management as of 12/31/20**

---

### Investment account

| Delaware VIP International Series—Standard Class | DFA VA Equity Allocation Portfolio | Franklin Income VIP Fund |
| Delaware VIP Small-Cap Value Series—Standard Class | DFA VA Global Bond Portfolio | Franklin Mutual Shares VIP Fund |
| | DFA VA Global Moderate Allocation Portfolio | Franklin Small-Mid Cap Growth VIP Fund |
| | DFA VA International Small Portfolio | Templeton Developing Markets VIP Fund |
| | DFA VA International Value Portfolio | ClearBridge Variable Aggressive Growth Portfolio—Class I |
| | DFA VA Short-Term Fixed Portfolio | ClearBridge Variable Small Cap Growth Portfolio—Class I |
| | DFA VA US Large Value Portfolio | Western Asset Variable Global High Yield Bond Portfolio—Class I |
| | DFA VA US Targeted Value Portfolio | | |
| | DFA VIP Inflation-Protected Securities Portfolio* | | |
| | DFA VIP Income Portfolio | | |

*Not available with the Intelligent Variable Annuity (IVA).
About the firm

Over 40 years in business
Janus Henderson Investors is a global asset manager offering a full suite of actively managed investment products across asset classes. Established through the merger of Janus Capital and Henderson in 2017, our rich history as independent investment managers stretches back to 1934. From our origins in bottom-up, analysis-based strategies with a strong research-based approach to security selection, Janus Henderson today offers active management across equities, fixed income, alternatives and multi-asset strategies. We believe the notion of “connecting” is powerful—it has shaped our evolution and our world today.

At Janus Henderson, we seek to benefit clients through the connections we make. Connections enable strong relationships based on trust and insight as well as the flow of ideas among our investment teams and our engagement with companies. These connections are central to our values, to what active management stands for and to the long-term out performance we seek to deliver. Janus Henderson has more than 345 investment professionals, expertise across all major asset classes and clients spanning the globe, entrusting us with more than $401.6 billion.

Why Janus Henderson Investors?
- Active because active matters: We selectively invest in what we believe are the most compelling opportunities. Our investment teams are free to form their own views and seek to actively position portfolios to connect clients with their financial goals.
- Global strength to deliver local solutions: We offer true global reach with a presence in all major markets, combined with the responsiveness, tailored solutions and personal touch you would expect from a local partner.
- Empowering clients through knowledge shared: We connect our clients with insights and knowledge that empower them to make better investment and business decisions.

$401.6 billion assets under management as of 12/31/20

50 years in business
- Conviction: Founded in 1969, Jennison Associates remains true to its founding principles as an active manager. We believe that sustainable alpha generation is possible through a combination of deep fundamental research, specialized investment teams, bottom-up portfolio construction, and high-conviction investing.
- Focus: Investment management is Jennison’s only business; our goal is to generate superior long-term investment outperformance. Our investment approach is based on rigorous fundamental research and results in conviction-based investing.
- Culture: Jennison is made up of deeply resourced, dedicated investment teams in which individual success is measured as collective investment outperformance on behalf of clients. Jennison equity portfolio managers average 30 years of industry experience and 17 years at the firm. Jennison equity research analysts average 20 years of industry experience and 11 years at the firm. Each investment capability is managed by dedicated portfolio managers who follow their own independent philosophy and process. Research ideas are collaboratively shared across teams and portfolios for the benefit of our clients.
- We believe a short-term focus often underestimates the potential magnitude and sustainability of company growth over the long term. Our fundamental research examines company and industry prospects over short and long terms, projecting how industries and businesses will change over time.
- Stability: Our investment culture and stable business model mean that we are completely focused on creating outperformance for clients; this has resulted in client relationships that span decades.

$224.3 billion assets under management as of 12/31/20

Over 150 years in business
- John Hancock Investment Management is a premier asset manager representing one of America’s most trusted brands, with a heritage of financial stewardship dating back to 1862. Helping our shareholders pursue their financial goals is at the core of everything we do. It’s why we support the role of professional financial advice and operate with the highest standards of conduct and integrity.
- We serve investors globally through a unique multimanager approach: We search the world to find proven portfolio teams with specialized expertise for every strategy we offer, then we apply robust investment oversight to ensure they continue to meet our uncompromising standards and serve the best interests of our shareholders.
- Our unique approach to asset management enables us to provide a diverse set of investments backed by some of the world’s best managers, along with strong risk-adjusted returns across asset classes.

$162 billion assets under management as of 12/31/20

Investment account

- Janus Henderson Forty Portfolio
- Janus Henderson Mid Cap Value Portfolio
- Janus Henderson Overseas Portfolio
- PSF PGIM Jennison Focused Blend Portfolio—Class II
- PSF Natural Resources Portfolio—Class II
- PSF PGIM Jennison Value Portfolio—Class II
- John Hancock Emerging Markets Value Trust
About the firm

Lincoln Financial Group provides retirement, insurance and wealth protection products to more than 17 million customers. With leading market positions, broad distribution capabilities and a strong financial foundation, we have been helping our customers take charge of their futures for more than a century.

Lincoln Financial Group provides advice and solutions that empower people to approach their financial lives with confidence and optimism. Our core business areas—life insurance, annuities, retirement plan services and group protection—focus on supporting, preserving and enhancing people’s lifestyles, financial goals and retirement outcomes.

$303 billion assets under management as of 12/31/20

Over 25 years in business
- Established in 1991, as Matrix Asset Allocation, Inc. Matson Money’s unique approach to investing is firmly grounded in Nobel Prize winning financial and economic principles. Matson Money brings academic concepts used by institutional investors to Main Street, helping investors understand their investment approach, bring discipline to the investing process and build investor confidence.
- Over the last 25 plus years, Matson Money has brought investing education and coaching programs to thousands of financial professionals and investors nationwide. These programs focus on sharing the concepts of free markets, diversification, discipline and rebalancing to create a long-term approach to life-long endeavor.
- As of December 31, 2020, Matson Money manages $8.4 billion for thousands of investors in America through independent financial professionals. Through education and strong investment solutions, Matson Money helps individuals create the wealth they need to have the life they want.
- To that end, we are pleased to offer in partnership with TIAA, true no-load variable products that also provide the investor with the diversification, discipline and solid economic theory that sets Matson Money apart from other investment firms.

$8.4 billion assets under management as of 12/31/20

Over 95 years in business
- In 1924, MFS launched the first open-end mutual fund in the United States, opening the door to the markets for millions of everyday investors. Today, as a full-service global investment manager serving financial advisors, intermediaries and institutional clients, MFS still serves a single purpose: to create long-term value for clients by allocating capital responsibly. That takes
- Collective expertise—teams of diverse thinkers who actively debate ideas within a culture of shared values and collaboration
- Risk management—the potential to recognize material risks and opportunities while managing long-term performance for clients
- Long-term discipline—conviction over longer time horizons to broaden opportunities and performance incentives aligned with client outcomes

$610.2 billion assets under management as of 12/31/20

Investment account

- LVIP Delaware Diversified Income Fund—Standard Class
- Matson Money Fixed Income VI Portfolio
- Matson Money International Equity VI Portfolio
- Matson Money U.S. Equity VI Portfolio
- MFS Global Equity Series—Initial Class
- MFS Growth Series—Initial Class
- MFS Massachusetts Investors Growth Stock Portfolio—Initial Class
- MFS Utilities Series—Initial Class

Asset allocation guide 17
About the firm

Over 80 years in business
- Neuberger Berman, founded in 1939, is a private, independent, employee-owned investment manager. The firm manages a range of strategies—including equity, fixed income, quantitative and multi-asset class, private equity, real estate and hedge funds—on behalf of institutions, advisors and individual investors globally. With offices in 24 countries, Neuberger Berman’s diverse team has 2,300 professionals.
- For seven consecutive years, the company has been named first or second in Pensions & Investments Best Places to Work in Money Management survey (among those with 1,000 employees or more). In 2020, the PRI named Neuberger Berman a Leader, a designation awarded to fewer than 1% of investment firms for excellence in environmental, social and governance (ESG) practices. The PRI also awarded Neuberger Berman an A+ in every eligible category for our approach to ESG integration across asset classes.
- $405 billion assets under management as of 12/31/20

Over 100 years in business
- Nuveen, the investment manager of TIAA, offers a comprehensive range of outcome-focused investment solutions designed to secure the long-term financial goals of institutional and individual investors. Nuveen has $1.2 trillion in assets under management as of December 31, 2020, and operations in 27 countries. Its investment specialists offer deep expertise across a comprehensive range of traditional and alternative investments through a wide array of vehicles and customized strategies.
- $1.2 trillion assets under management as of 12/31/20

Over 45 years in business
- PIMCO is one of the world’s premier fixed-income investment managers.
- With our launch in 1971 in Newport Beach, California, PIMCO introduced investors to a total return approach to fixed-income investing. In the 45+ years since, we have continued to bring innovation and expertise to our partnership with clients seeking the best investment solutions. Today, we have offices across the globe and 2,875 professionals united by a single purpose: creating opportunities for investors in every environment.
- PIMCO partners with a wide range of institutions, including corporations, central banks, universities, endowments and foundations, and public and private pension and retirement plans. In addition we work with financial advisors and millions of individual investors pursuing personal financial goals, from preparing for retirement to funding higher education. Investing our clients’ assets is a tremendous responsibility, and for that reason there can be no shortcuts. We work relentlessly to help these investors reach their goals.
- Prepared. PIMCO believes that performance starts with preparation. We conduct exhaustive research and analysis to continuously evaluate the world’s changing risks and opportunities, from broad economic trends to individual securities. Our aim is to deliver forward-looking solutions that maximize the possibilities for our clients.
- Tested. There is no substitute for experience. Our distinctive top-down, bottom-up investment process has been tested in every market environment. That process is more than any one person—it is fundamental to our firm and will guide our efforts on behalf of our clients.
- Invested. PIMCO believes there is nothing more important than the partnership with our clients. Markets don’t stand still and neither do we, innovating to build solutions to meet investors’ evolving needs. We are invested in helping our clients achieve what they set out to accomplish.
- $2.2 trillion assets under management as of 12/31/20

Investment account

- Neuberger Berman AMT Sustainable Equity Portfolio—I Class
- Neuberger Berman AMT Mid Cap Intrinsic Value Portfolio—I Class

- TIAA-CREF Life Balanced Fund
- TIAA-CREF Life Core Bond Fund
- TIAA-CREF Life Growth Equity Fund
- TIAA-CREF Life Growth & Income Fund
- TIAA-CREF Life International Equity Fund
- TIAA-CREF Life Large-Cap Value Fund
- TIAA-CREF Life Money Market Fund
- TIAA-CREF Life Real Estate Securities Fund
- TIAA-CREF Life Small-Cap Equity Fund
- TIAA-CREF Life Social Choice Equity Fund
- TIAA-CREF Life Stock Index Fund

- PIMCO VIT All Asset Portfolio—Institutional Class
- PIMCO VIT Commodity Real Return Strategy Portfolio—Institutional Class
- PIMCO VIT Emerging Markets Bond Portfolio—Institutional Class
- PIMCO VIT Global Bond Opportunities Portfolio (Unhedged)—Institutional Class
- PIMCO VIT Real Return Portfolio—Institutional Class
- PIMCO VIT Total Return Portfolio—Institutional Class
### About the firm

**Over 75 years in business**

- Principal Global Investors is a diversified asset management organization and a member of the Principal Financial Group®.
- We are a leading global asset manager helping people, companies, and institutions around the world build, protect, and advance their financial well-being. We bring a focused perspective and offer expertise across a host of asset classes: fixed income, equities, real estate, asset allocation, target-date and target-risk, stable value, and other structured investment strategies. Principal, which was founded in 1879 and began managing retirement assets in 1941, delivers investment solutions for public and private pension funds, foundations, and endowments, central banks, insurance companies, sub-advisory arrangements, sovereign wealth funds, and individual portfolios.
- Ranked the 27th largest manager of worldwide institutional assets, out of 505 managers profiled.  

**$544.9 billion assets under management as of 12/31/20**

Principal Global Investors leads global asset management at Principal® and includes the asset management operations of the following members of Principal®: Principal Global Investors, LLC; Principal Real Estate Investors, LLC; Principal Real Estate Europe Limited and its affiliates; Spectrum Asset Management, Inc.; Post Advisory Group, LLC; Columbus Circle Investors; Finisterre Capital, LLP; Origin Asset Management, LLP; Claritas Investimentos; Principal Global Investors (Europe) Limited; Principal Global Investors (Singapore) Ltd.; Principal Global Investors (Australia) Ltd.; Principal Global Investors (Japan) Ltd.; Principal Global Investors (Hong Kong) Ltd., and includes assets where we provide model portfolios. Marketing assets under management include certain assets that are managed by Principal International and Retirement and Income Solutions divisions of Principal.


**Over 75 years in business**

- In 1937, Thomas Rowe Price, Jr. founded our company based on a very simple business principle: What is good for the client is also good for the firm. To this day, T. Rowe Price adheres to the same principle.
- T. Rowe Price is an independent investment management firm helping institutional and individual investors worldwide reach their long-term goals.
- Building on a solid foundation: Organizational stability and a long-term orientation contribute to a proven business approach designed to produce strong performance.
- Disciplined by design: Fundamental, bottom-up research defines our investment approach and drives investment management excellence.
- Informed by multiple perspectives: Integrating the individual perspectives of talented, diverse professionals contributes to effective idea generation for client portfolios.
- 7,635 employees in 16 offices across the world.

**$1.5 trillion assets under management as of 12/31/20**

**Over 40 years in business**

- Royce Investment Partners, investment adviser to The Royce Funds, is a small-cap specialist offering distinct investment strategies with different risk/return profiles designed to meet a variety of investors’ needs.
- Small-cap investing is our primary business. This distinguishes us from most other asset managers. We specialize in actively managed strategies that invest in the broad and diverse small-cap universe with unparalleled knowledge and experience gained through more than four decades of investing.
- Our ongoing commitment to this asset class has allowed us to identify certain persistent historical tendencies for small-caps’ long-term performance that are often overlooked by many other investors.
- Our team of 19 portfolio managers have significant personal investments in the strategies they manage.

**$14.5 billion assets under management as of 12/31/20**

### Investment account

<table>
<thead>
<tr>
<th>Principal Global Investors</th>
<th>T. Rowe Price</th>
<th>Royce Investment Partners</th>
</tr>
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<tbody>
<tr>
<td>PVC Equity Income Account—Class I</td>
<td>T. Rowe Price Health Sciences Portfolio I</td>
<td>Royce Capital Fund Micro-Cap Portfolio—Investment Class</td>
</tr>
<tr>
<td>PVC MidCap Account—Class I</td>
<td>T. Rowe Price Limited-Term Bond Portfolio</td>
<td>Royce Capital Fund Small-Cap Portfolio—Investment Class</td>
</tr>
</tbody>
</table>

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About the firm

Over 40 years in business

- From its start in 1975, Vanguard has stood out as a very different kind of investment firm. Vanguard was founded on a simple but revolutionary idea—that a mutual fund company should be managed in the sole interest of its investors. Vanguard is owned by the Vanguard funds, which, in turn, are owned by their investors.
- This unique ownership structure and client-first philosophy have driven many distinctive business decisions that set us apart and enabled a track record of exceptional value: outstanding performance and service at low costs.
- Vanguard has grown to become one of the world’s largest investment management companies and is widely recognized as a steadfast advocate for the interests of all investors.
- Locations in the United States, Australia, the United Kingdom, Europe, Asia and the Americas.

$7.1 trillion assets under management as of 12/31/20

Investment account

- Vanguard VIF Balanced Portfolio
- Vanguard VIF Capital Growth Portfolio
- Vanguard VIF Conservative Allocation Portfolio
- Vanguard VIF Equity Index Portfolio
- Vanguard VIF Global Bond Index Portfolio
- Vanguard VIF High Yield Bond Portfolio
- Vanguard VIF International Portfolio
- Vanguard VIF Mid-Cap Index Portfolio
- Vanguard VIF Moderate Allocation Portfolio
- Vanguard VIF Real Estate Index Portfolio
- Vanguard VIF Small Company Growth Portfolio
- Vanguard VIF Total Bond Market Index Portfolio
- Vanguard VIF Total International Stock Market Index Portfolio
- Vanguard VIF Total Stock Market Index Portfolio

Over 40 years in business

- Voya Investment Management (Voya IM) is the asset management business of Voya Financial, a Fortune 500 company with over 6,000 employees seeking to help clients plan, invest and protect their savings. Voya IM manages approximately $255 billion in assets across Fixed Income, Senior Loans, Equities, Multi-Asset Strategies & Solutions, Private Equity, and Real Assets. Drawing on over 40 years of experience and the expertise of 250+ investment professionals, Voya IM’s capabilities span traditional products and solutions as well as those that cannot be easily replicated by an index.
- Voya IM’s award-winning culture is deeply rooted in a client-centric approach to helping investors meet their goals—from insurance companies, corporate and public pension funds, sovereign wealth funds, endowments and foundations, and consultants to intermediaries, and individual investors. Reliability is why our clients hire us and is why they trust us to navigate the path ahead.
- Voya Financial, Inc. (NYSE: VOYA), has been named to Fortune’s 2020 list of the World’s Most Admired Companies. Voya was ranked as one of the most admired companies on the magazine’s list of securities and asset management companies. Additional honors that Voya has earned from esteemed organizations include:
  - 2021 Corporate Equality Index for the 16th consecutive year;
  - 2020 Best Place to Work by Pensions & Investments for the sixth consecutive year;
  - Bloomberg Gender-Equality Index for the fifth consecutive year;
  - Newsweek’s list of America’s Most Responsible Companies, which was established last year; and
  - 2020 Caregiving Organization of the Year Award from Caregiving.com.

$255 billion assets under management as of 12/31/20

- VY Clarion Global Real Estate Portfolio—Class I
- Voya Russell Large Cap Growth Index Portfolio
Why TIAA Life?

We make it easy for you
We’ll help you find the right way to address your needs.

High ratings for financial strength\textsuperscript{20}
We’re one of only three insurance groups in the United States to hold the highest rating available to U.S. insurers from three of the four leading independent insurance company rating agencies.
For its stability, claims-paying ability and overall financial strength, TIAA-CREF Life Insurance Company is a member of one of only three insurance groups in the United States to hold the highest rating available to U.S. insurers from three of the four leading independent insurance company rating agencies. TIAA-CREF Life Insurance Company (TIAA Life) is a wholly owned subsidiary of Teachers Insurance and Annuity Association of America (TIAA). TIAA Life holds the following ratings as a result of its relationship with TIAA: A.M. Best (A++ as of 7/21), Fitch (AAA as of 11/20) and Standard & Poor’s (AA+ as of 8/20), and the second highest possible rating from Moody’s Investors Service (Aa1 as of 5/21). There is no guarantee that current ratings will be maintained. The financial strength ratings represent a company’s ability to meet policyholders’ obligations and claims and do not apply to variable annuities or any other product or service not fully backed by TIAA Life’s claims-paying ability. The ratings also do not apply to the safety or the performance of the variable accounts, which will fluctuate in value.

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Please keep in mind that there are inherent risks associated with investing in securities. Investment products are not FDIC insured, may lose value and are not bank guaranteed. As with all securities, your accumulations can increase or decrease depending on how well the underlying investments perform over time. We do not guarantee the performance of the underlying investments. Please also note the following:

- You could lose money by investing in the TIAA-CREF Life Money Market 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 support to the Fund, and you should not expect that the sponsor will provide financial support to the Fund at any time.

- As a result of regulatory changes, the TIAA-CREF Life Money Market Fund converted to a “government money market fund” on October 14, 2016. The account invests at least 99.5% of its total assets in cash, government securities, and/or repurchase agreements that are collateralized fully by cash or government securities. Review the Fund’s prospectus for more information.

- Funds that invest in foreign securities are subject to special risks, including currency fluctuation and political and economic instability.

- Investing in noninvestment-grade securities presents special risks, including significantly higher interest rate and credit risks.

- Funds that invest in fixed-income securities are not guaranteed and are subject to interest rate, inflation and credit risks.

- Small-cap and mid-cap stocks may have limited marketability and may be subject to more abrupt or erratic market movements than large-cap stocks.

- Real estate securities are subject to various risks, including fluctuations in property values, higher expenses or lower income than expected, and potential environmental problems and liability.

Intelligent Life Variable Universal Life (VUL) and Intelligent Life Survivorship Variable Universal Life (SVUL) are flexible premium variable universal life insurance policies. The policies offer a choice of investments and an opportunity for the cash value and death benefit to grow based on the investment results of the investment options. The policy value and the death benefit may go up or down on any given day. Due to various charges associated with life insurance contracts, the policies are not suitable as short-term investments.

The Intelligent Variable Annuity is a variable deferred annuity. The annuity offers a choice of investments and the ability to accumulate funds tax deferred and then distributes funds as lifetime income or through other payment options.

Investment, insurance, and annuity products are not FDIC insured, are not bank guaranteed, are not deposits, are not insured by any federal government agency, are not a condition to any banking service or activity, and may lose value.

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