Investor questionnaire

Answer the questions on the following pages with one specific financial goal in mind, such as retirement. Don’t use this questionnaire for goals that require you to spend all your money for the goal within the next two years. Savings for short-term objectives should be invested in more stable investments—primarily short-term reserves.

To determine your investment approach for other goals, fill out the questionnaire as many times as you like, with a different goal in mind each time.

Terms and conditions of use for Vanguard’s Investor questionnaire

This questionnaire is designed to help you decide how to allocate your assets among different asset classes (stocks, bonds, and short-term reserves). You are under no obligation to accept the suggested allocations provided by this questionnaire.

The suggestions provided are based on generally accepted investment principles. There is no guarantee, however, that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of retirement income. All investing is subject to risk, and fluctuations in the financial markets and other factors may cause the value of your plan account to decline. Investments in bond funds are subject to interest rate, credit, and inflation risk.

You should carefully consider all your options before investing.

This investment-planning tool is provided to you at no charge by Vanguard. You should read the Assumptions and Limitations found at the end of the tool before use. It does not provide comprehensive investment or financial advice. In applying the suggestions to your particular situation, you should consider your other assets and investments. As your financial circumstances or goals change, it may help to complete the Investor questionnaire again to see if your suggested asset allocation has changed. By using this investment-planning tool, you acknowledge that you have read and understood the information above and that you agree to these terms and conditions.

1. I plan to begin taking money from my investments in ...
   - A. Less than 1 year
   - B. 1–2 years
   - C. 3–5 years
   - D. 6–10 years
   - E. 11–15 years
   - F. More than 15 years

2. As I withdraw money from these investments, I plan to spend it over a period of ...
   - A. 2 years or less
   - B. 3–5 years
   - C. 6–10 years
   - D. 11–15 years
   - E. More than 15 years

3. When making a long-term investment, I plan to keep the money invested for ...
   - A. 1–2 years
   - B. 3–4 years
   - C. 5–6 years
   - D. 7–8 years
   - E. More than 8 years
4. From September 2008 through November 2008, stocks lost more than 31% of their value. If I owned a stock investment that lost about 31% of its value in three months, I would ... (If you owned stocks during this period, please select the answer that matches your actions at that time.)
   ○ A. Sell all the remaining investment
   ○ B. Sell some of the remaining investment
   ○ C. Hold on to the investment and sell nothing
   ○ D. Buy more of the investment

5. Generally, I prefer an investment with little or no ups or downs in value, and I am willing to accept the lower returns these investments may make.
   ○ A. I strongly disagree
   ○ B. I disagree
   ○ C. I somewhat agree
   ○ D. I agree
   ○ E. I strongly agree

6. When the market goes down, I tend to sell some of my riskier investments and put the money in safer investments.
   ○ A. I strongly disagree
   ○ B. I disagree
   ○ C. I somewhat agree
   ○ D. I agree
   ○ E. I strongly agree

7. Based only on a brief conversation with a friend, coworker, or relative, I would invest in a mutual fund.
   ○ A. I strongly disagree
   ○ B. I disagree
   ○ C. I somewhat agree
   ○ D. I agree
   ○ E. I strongly agree

8. From September 2008 through October 2008, bonds lost nearly 4% of their value. If I owned a bond investment that lost almost 4% of its value in two months, I would ... (If you owned bonds during this period, please select the answer that matches your actions at that time.)
   ○ A. Sell all the remaining investment
   ○ B. Sell some of the remaining investment
   ○ C. Hold on to the investment and sell nothing
   ○ D. Buy more of the investment

9. The chart to the right shows the highest one-year loss and the highest one-year gain on three different hypothetical investments of $10,000.* Given the potential gain or loss in any one year, I would invest my money in ...
   ○ A. Investment A
   ○ B. Investment B
   ○ C. Investment C

10. My current and future income sources (such as salary, Social Security, pension) are ...
    ○ A. Very unstable
    ○ B. Unstable
    ○ C. Somewhat stable
    ○ D. Stable
    ○ E. Very stable

11. When it comes to investing in stock or bond mutual funds (or individual stocks or bonds), I would describe myself as ...
    ○ A. Very inexperienced
    ○ B. Somewhat inexperienced
    ○ C. Somewhat experienced
    ○ D. Experienced
    ○ E. Very experienced

*The maximum gain or loss on an investment is impossible to predict. The ranges shown in the chart are hypothetical and are designed solely to gauge an investor’s risk tolerance.
Answer key
Use the following answer key to score your questionnaire. For example, if you answered “C” to question 1, give yourself 4 points. Use your score to find your suggested mix to the right.

<table>
<thead>
<tr>
<th>Overall score</th>
<th>Suggested mix</th>
<th>Asset allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7–22 points</td>
<td><img src="image1" alt="Graph" /></td>
<td>• 100% bonds</td>
</tr>
<tr>
<td>23–28</td>
<td><img src="image2" alt="Graph" /></td>
<td>• 20% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 80% bonds</td>
</tr>
<tr>
<td>29–35</td>
<td><img src="image3" alt="Graph" /></td>
<td>• 30% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 70% bonds</td>
</tr>
<tr>
<td>36–41</td>
<td><img src="image4" alt="Graph" /></td>
<td>• 40% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 60% bonds</td>
</tr>
<tr>
<td>42–48</td>
<td><img src="image5" alt="Graph" /></td>
<td>• 50% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 50% bonds</td>
</tr>
<tr>
<td>49–54</td>
<td><img src="image6" alt="Graph" /></td>
<td>• 60% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 40% bonds</td>
</tr>
<tr>
<td>55–61</td>
<td><img src="image7" alt="Graph" /></td>
<td>• 70% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 30% bonds</td>
</tr>
<tr>
<td>62–68</td>
<td><img src="image8" alt="Graph" /></td>
<td>• 80% stocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 20% bonds</td>
</tr>
<tr>
<td>69–75</td>
<td><img src="image9" alt="Graph" /></td>
<td>• 100% stocks</td>
</tr>
</tbody>
</table>

A B C D E F
1. 0 1 4 7 12 17
2. 0 1 3 5 8 –
3. 0 1 3 5 7 –
4. 1 3 5 6 –
5. 6 5 3 1 0 –
6. 5 4 3 2 1 –
7. 5 4 3 2 1 –
8. 1 3 5 6 –
9. 1 3 5 –
10. 1 2 3 4 5 –
11. 1 2 3 4 5 –

Add up your score and enter the total here:
Assumptions

Investment returns for the asset allocations are based on the following benchmark indexes:

<table>
<thead>
<tr>
<th>Asset class</th>
<th>Benchmark index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term reserves</td>
<td>Citigroup 3-Month U.S. Treasury Bill Index*</td>
</tr>
<tr>
<td>Bonds</td>
<td>Bloomberg Barclays U.S. Aggregate Bond Index**</td>
</tr>
<tr>
<td>Stocks</td>
<td>MSCI US Broad Market Index***</td>
</tr>
</tbody>
</table>

Source: The Vanguard Group.

* For U.S. cash reserve returns, we use the Ibbotson U.S. 30-Day Treasury Bill Index from 1926 to 1977, and the Citigroup 3-Month Treasury Bill Index thereafter.

** For U.S. bond market returns, we use the Standard & Poor's High Grade Corporate Index from 1926 to 1968; the Citigroup High Grade Index from 1969 to 1972; the Lehman U.S. Long Credit Aa Index from 1973 to 1975; the Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; and the Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.

*** For U.S. stock market returns, we use the Standard & Poor’s 90 Index from 1926 to March 3, 1957; the Standard & Poor’s 500 Index from March 4, 1957, to 1974; the Wilshire 5000 Index from 1975 to April 22, 2005; and the MSCI US Broad Market Index thereafter.

Annual returns and inflation for a given asset allocation are based on historical data from 1926 through the last calendar year. Past performance is not a guarantee or a prediction of future results.

When determining which index to use and for what period, we selected the index that we deemed to fairly represent the characteristics of the referenced market, given the available choices.

Limitations

As you use the questionnaire, keep the following limitations in mind:

- The suggested asset allocations within the questionnaire depend on subjective factors such as your risk tolerance and financial situation. For this reason, you should view them only as broad guidelines for how you might consider investing your savings. It’s important to review historical returns of short-term investments, bonds, and stocks carefully over various holding periods to see if you can accept the level of risk in a given investment mix.

- The asset allocations are limited to three broad classes of investments: short-term reserves (such as money market accounts and certificates of deposit), bonds, and stocks. They don’t include other assets, such as real estate, personal property, or precious metals.

- The investment returns represented in the questionnaire are based on historical index returns from 1926 through the last calendar year, and are not intended to indicate future performance.

- Any modifications to your current mix of investments should be made gradually to lessen the impact of significant market changes and potential tax effects.

- The Investor questionnaire is intended to provide guidelines to help you design a savings and investment program. It doesn’t provide comprehensive investment advice, such as advice on buying a specific stock or bond, and shouldn’t be considered the sole or primary basis on which you make investment decisions. You may wish to consult a professional investment advisor, accountant, attorney, or broker before making an investment.

- Your financial projections greatly depend on your assumptions, especially for inflation rate, investment expenses, taxes, and investment return. It’s difficult to forecast such rates and returns accurately, especially over long periods. Therefore, it’s critical that you update your projections periodically to accommodate any changes in your assumptions.

- The longer your time horizon, the more likely any change in your assumptions will have a significant impact on your results. Even small changes can lead to substantial variations in results over time. A 1% change in your investment return can have a significant impact on your ability to meet your retirement goals over the long term.

- Financial projections aren’t mistake-proof and can’t ensure specific future results. Changes in tax or benefit laws, investment markets, or your own financial situation can cause actual results to deviate substantially from your projection. To address this uncertainty, you should create several scenarios, with various sets of assumptions, to evaluate a wide range of possible outcomes.