Building a Brilliant Retirement.

Your Guide to Retirement Plan Investing Basics

City of Memphis Retirement Plans

What's your strategy?

Saving for retirement might be the most important thing you ever do with your money. When saving for retirement, you'll make some decisions that over time may have an impact on the amount you accumulate for retirement.

- When you start saving
- How much you save each year
- Your choice of investments

Building an investment strategy for your retirement plan account doesn’t have to be overwhelming.

Like all long-term financial planning, it’s best to develop your own strategy to help reach your retirement savings goals. A strategy makes it easier to choose the investments in your retirement account.

Keep in mind that your strategy should take into account any other sources of retirement income you may have, including Individual Retirement Accounts (IRAs), pensions, personal savings and Social Security.

Types of investments

Your retirement plan offers a variety of investment choices. There are three broad categories of investments from which to choose. These broad categories are called asset classes.

STOCKS

BONDS

SHORT-TERM INVESTMENTS

Stocks

Stocks represent part ownership in a business and are meant to provide long-term growth by increasing in value. Historically, stocks have out-performed other types of investments over the long-term. However, stocks fluctuate in value more than other types of investments — like money market or bonds — and when sold may be worth more or less than their original cost.

Bonds

Bonds represent “loans” investors make to corporations, governments or agencies. They’re designed to provide stability, income and some appreciation in value with a fixed date of maturity. If held to maturity, bonds offer a fixed rate of return and a fixed principal value. Bonds generally offer a potentially higher rate of return than money market funds and a lower return than stocks. The value of bonds usually fluctuates less than stocks and the return of principal is not guaranteed if sold before maturity.

Short-term investments

Short-term investments like Money Market and Stable Value investments are designed to provide a steady rate of return, greater investment stability, and a relatively low level of risk. Over time, these investments have provided lower returns than stocks and bonds.

Developing your investment strategy

There are three steps to developing your strategy and choosing among the investments in your company-sponsored retirement plan.

1. Determine your investing style

2. Select your asset mix

3. Diversify your assets

STEP 1

Determine your investing style

Important questions to consider as you determine your investing style:

- What are your retirement savings goals?
- What is your time horizon?
- How do you feel about risk?

Creating your investor profile

Your investing strategy should reflect the kind of investor you are—your personal investor profile. The following quiz will help you create a profile and then match it to a risk-based investment mix provided as a guide.

No matter what type of investor you are, you should select the appropriate mix of assets that best suits your investing style, risk tolerance, and your complete financial situation.

What type of investor are you?

This short, self-scoring investor profile and risk quiz is designed to suggest an investment strategy that may be right for your retirement savings based on your personal risk tolerance and situation.

Check the answer that best matches your needs.

My time horizon:

1 | My current age is:

- ○ Under 40 5
- ○ 40–54 3
- ○ 55+ 1

2 | I expect to retire:

- ○ Not for at least 20 years 5
- ○ In 5 to 20 years .3
- ○ Within 5 years 1

My risk tolerance:

3 | For this portfolio, my goal is:

- ○ To grow my assets aggressively 5
- ○ To grow my assets with caution. 3
- ○ To avoid losing money 1

4 | Over time I would expect:

- ○ To generally keep pace with the stock market and make a decent profit 5
- ○ To make a modest profit but trail the stock market. 3
- ○ To have a high degree of stability and maintain the value of my assets . . 1

5 | **Which of these statements would best describe your attitude about the performance of this portfolio over the next three years?**

- ○ I can live if I lose money 5
- ○ I need to at least break even 3
- ○ I must make at least a small profit 1

6 | **Which of these statements would best describe your attitude about the performance of this portfolio over the next three months?**

- ○ Who cares about one quarter? 5
- ○ I'd be concerned about a loss of more than 10% 3
- ○ I would worry about short-term losses 1

My financial situation:

7 | **If I lost my job tomorrow, I would:**

- ○ Have other sources of income to last more than six months 5
- ○ Have enough cash on hand to last three to six months. 3
- ○ Need to tap into my retirement investment savings within 30 days 1

8 | **Upon retirement, my investment portfolio will represent:**

- ○ A minor part (less than 25%) of my retirement income. 5
- ○ An important part (25% — 75%) of my retirement income. 3
- ○ The vast majority (more than 75%) of my retirement income 1

9 | **Once in retirement, how many years would you anticipate you will need retirement income?**

- ○ More than 15 years 5
- ○ Between 5 and 15 years 3
- ○ Less than 5 years 1

Scoring your profile quiz:

Add up your points from all nine questions to determine your score. Then compare this number to determine which investment strategy may be best for you.

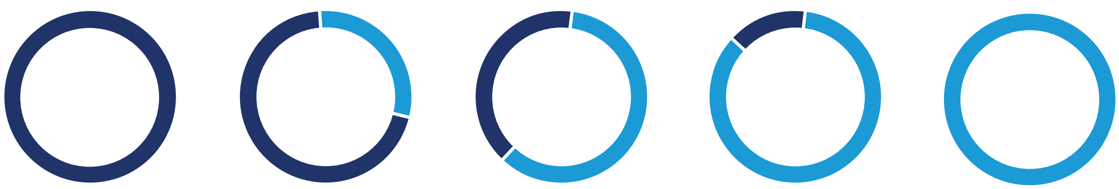
My Point Total

Please consider an investment option's objectives, risks, fees and expenses carefully before investing. This and other information can be found in the applicable prospectuses or summary prospectuses (if available) or investment profiles (fact sheets) for the investment options listed, which are available from your plan sponsor, on the participant web site at **www.retiresmart.com** or by contacting our Participant Information Center at **1-800-743-5274** between 8:00 a.m. and 8:00 p.m. ET, Monday through Friday. Please read them carefully before investing.

Understanding your score

Use your quiz point total as a general guideline to determine a sample investment strategy below. Diversifying among the asset classes (otherwise known as asset allocation) allows you to increase your return potential and reduce the overall risk to your portfolio. Now that you have determined what type of investor you are based on your personal tolerance for risk, you can put your strategy to work. Diversification does not assure a profit and does not protect against loss in a declining market.

Total Points	Short-Term 0 — 8	Conservative 9 — 17	Moderate 18 — 27	Aggressive 28 — 35	Ultra Aggressive 36 — 45
Cash/Bonds	100%	70%	40%	15%	0%
Stocks	0%	30%	60%	85%	100%



In applying particular asset allocation models to your individual selection, you should consider your other assets, income and investments (e.g. equity in a home, Social Security benefits, individual retirement plan investments, savings accounts, and interests in other qualified and non-qualified plans) in addition to your interests in this plan.

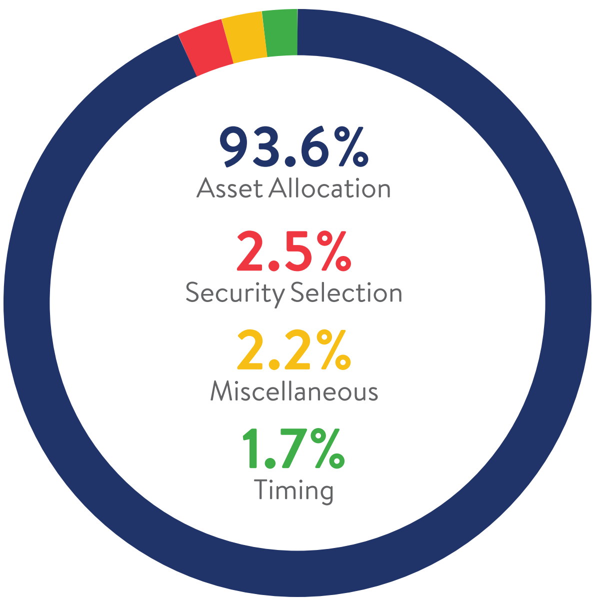
The above investment charts were designed by MassMutual and do not represent a recommendation or endorsement of any particular investment or investment style. Past performance does not guarantee future results.

STEP 2

Select your asset mix

Asset allocation

Your investments in various asset classes will likely react to changing market trends in different ways. For example, while one investment may decline due to market fluctuations, another investment may increase in value at the same time and offset that decline.



Asset allocation is the process of assigning a percentage of your money among the three main asset classes: stocks, bonds, and short-term investments to help spread out your investment risk. The mix of assets you hold is critical, because it determines both the level and types of risk your money is exposed to, as well as the potential returns you can earn on your money.

By taking into consideration your goals, time horizon and tolerance for risk, asset allocation is a technique that can help you pursue your goals throughout different market cycles. How money is allocated among asset classes can be more significant to performance than the selection of individual investments within an asset class.

Asset allocation choices are responsible for over 90% of a portfolio's performance.

Source: Determinants of Portfolio Performance," by Brinson, Hood and Beebower. Updated in Financial Analysts Journal, May/June 1991.

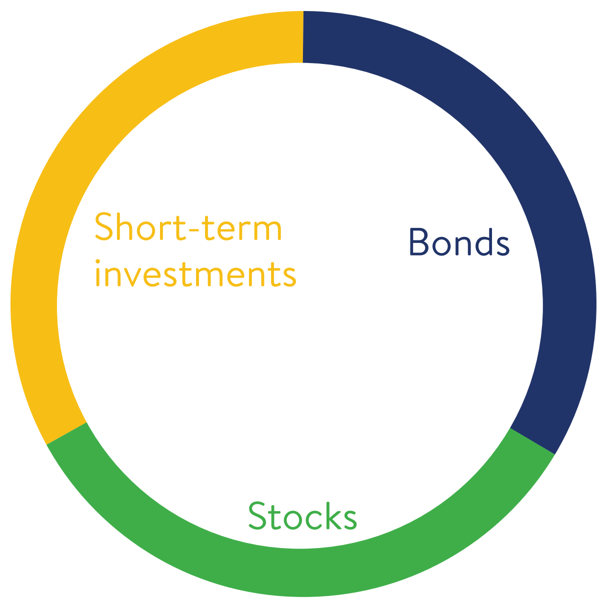
STEP 3

Diversifying your assets

Diversification takes asset allocation a step further by then deciding what funds to choose within each asset class. When you diversify your assets, you're trying to keep your risk to a minimum by investing in different categories within the broader asset classes.

You may choose among several categories within each of the broad asset classes of stocks, bonds and short-term investments. For instance, "stocks" is a broad asset class, but within your retirement plan, you may be able to choose among different types of stocks, such as international stocks, or large-, mid- and small-cap stocks within your plan. When you invest in multiple categories within an asset class, you can further diversify your account or portfolio.

Categories within asset classes:



- CDs
  Treasury bills
  Cash and cash equivalents Commercial paper
- Corporate bonds
  Government bonds
  High-yield bonds
  Other fixed-income securities
- Equity securities of different companies, sizes, countries or industries

Basic investing techniques

As you work to continue investing over the long-term, consider how your investments are working. Check your investing strategy regularly and also consider techniques that may play a role in your investing strategy, such as dollar-cost averaging and rebalancing.

Dollar–cost averaging may buy you more for less.

Dollar-cost averaging means investing the same amount of money at regular intervals, no matter how the market is doing. This approach is built in to your retirement plan — each pay period you automatically invest the same contribution amount, whether the market is up, down or flat.

When prices are low, you end up buying more units. When prices are high, you buy fewer units with the same amount. Over time, what you pay for each unit is typically lower than the average market price. Keep in mind that dollar-cost averaging does not ensure a profit or protect against loss in declining markets.

By investing consistently in fluctuating markets, you may benefit in three ways:

- You generally get more units for less money.
- You may reduce your long-term risk.
- You're less tempted to make emotional investment choices.

Contributing to your retirement plan account consistently means you're using this investing technique.

Rebalancing your portfolio

A long-term investment strategy does not mean an "invest-and-forget" approach. Once your asset allocation is set, you should periodically review it. Your portfolio will need rebalancing over time to stay in line with your current portfolio preferences.

That's why it makes sense to consider periodically rebalancing your portfolio to maintain your desired allocation.

By buying and selling investments that have changed values, you can get the investments in your portfolio back in balance with each other. Your plan may offer the opportunity to automatically rebalance on a regular basis.

No matter what your age, spreading your money among different investments may be a good approach. It's always a good idea to consult a financial advisor about your own situation.

If you have questions or would like to speak with a representative, call the Participant Information Center at **1-800-743-5274**. Representatives are available Monday through Friday, 8 a.m. to 8 p.m., ET or access your account via **www.massmutual.com/cityofmemphis**.

The examples are illustrations to help you choose an investing approach that is most appropriate for you. Allocations may vary. These are only samples for long-term, total return-oriented investors without considering tax consequences.

The use of an asset allocation and/or diversification approach does not guarantee a profit or protect against a loss in declining markets. You should discuss your individual situation with your financial professional to find the right balance between risk and potential reward.

Past performance is no guarantee of future results. The information provided is not written or intended as specific investment, legal or tax advice. MassMutual, its subsidiaries, employees and representatives are not authorized to give advice. Individuals are encouraged to seek advice from their own financial advisor, tax consultant or legal counsel.

Please consider an investment option's objectives, risks, charges and expenses carefully before investing. This and other information about the investment options can be found in the applicable prospectuses or fact sheets for the investment options in your plan. This information is available from your plan sponsor, on the participant website or by contacting our Participant Information Center. Please read this investment information carefully before investing.

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