

Asset Allocation

A ROADMAP TO INVESTING



Aging and
Retirement



Introduction

People need to save some of their income for their future expenditure needs. And once they have saved, they must decide how to invest their savings—what to buy to transform today’s savings into future resources. They need to invest their savings in assets that preserve or grow savings over time.

The first step on the roadmap to investing is to consider the character of your income from employment and other sources. If your income is uncertain or likely to be volatile, then, everything else being equal, a portfolio with lower risk might be appropriate. On the other hand, if there is adequate and secure income, with some built-in inflation protection, then, everything else being equal, a riskier portfolio might be appropriate. Savvy investors think of the risk of their ‘human capital’ in concert with the risk in their ‘financial capital’. In retirement, everything else being equal, you will have higher risk capacity for your investments the more inflation protected lifetime income you have from non-portfolio sources.

The second step on the roadmap to investing is to consider your risk tolerance, which in the investing world means your comfort with volatility of investment returns. Even with a perfectly allocated portfolio, there will be some years when the portfolio goes up and some when it goes down. In general, and over the long-term, the more risk taken in the portfolio, the more volatile the returns will be from year to year and the higher the chance—though not guaranteed—of higher returns in the future.

The first two steps on the roadmap of investing address character of income and risk capacity—in other words, your ability to bear risk. This third step addresses your tolerance for risk. You may have a large capacity for risk but choose to have a conservative investment strategy. If you have a low capacity for risk and a high-risk tolerance, you will have to make some careful decisions to balance your need to stay financially safe and personal preference for risk-taking.

Thus, before making any decisions about how to invest, a savvy investor first takes time to consider how much is available for investing, how the character of income might influence investment decisions, and how one’s comfort level with investment risk will influence investment decisions. Taking time to consider these important personal circumstances makes it more likely that you will develop an investment strategy in which you have confidence and which you will be able to comfortably implement and maintain.

The fourth step in the roadmap to investing is to consider the allocation of your funds across broad asset classes, e.g., stocks vs. bonds. In the financial world, a central measure of portfolio risk is the proportion of the portfolio that is invested in stocks versus bonds. The higher the exposure to the stock market, the higher the portfolio risk.

Within the general asset class of stocks and bonds are more specific asset classes, e.g., international vs. domestic investments, high credit quality bonds vs. more junk-like bonds, and stocks of small companies vs. stocks of larger companies.

The term “asset allocation” simply means how much (e.g., what percentage or dollar amount) of your financial assets is placed in each asset class. Savvy investors make their asset allocation decision, i.e., the broad percentage allocation to specific asset classes, before even thinking about specific investments. Asset allocation is one of the most important investment decisions.

The fifth step in the roadmap to investing is deciding how to implement your asset allocation decision, e.g., whether to use a pre-packaged solution or to use a customized or self-directed solution, or to use some combination of these approaches. Regardless of which approach you choose, you may elect to make asset allocation decisions on your own or engage the services of a trusted financial advisor.

The next section dives into the all-important asset allocation decision by detailing the key useful concepts and principles and providing details on the available choices for implementing asset allocation decisions.

Asset Allocation Methods

Broadly, you can choose between two asset allocation methods:

- **Pre-packaged approaches.** Some mutual funds and ETFs provide complete asset allocation options. You can select one of these funds to hold all your investments and the fund manager decides which investments to include. Two sub-categories offer distinct routes:
 - Balanced mutual funds and ETFs provide a single, fixed, asset allocation—usually a percentage of stocks and bonds. The most common allocation is 60% stocks and 40% bonds. If you know which allocation you want, these funds offer a no-fuss solution.
 - Target-date or lifecycle mutual funds change their asset allocations over time to meet the needs of “average” savers and investors with the same expected retirement year. Many 401(k) and 403(b) plans offer funds like these to their participants and may even provide them as the default investment if participants do not elect any investments. IRAs and non-retirement accounts can also be invested in target-date funds.
- **Customized or self-directed approach.** You can create your own asset allocation strategy, choosing among mutual funds, ETFs, bonds, Government Treasury bonds and notes, real estate, or even individual securities to assemble a portfolio that aligns with your personal situation and preferences.

Mutual Funds and Exchange

Traded Funds (ETFs)

are both pooled assets of different investors that invest in a diversified basket of stocks, bonds, and other assets. Both are actively managed by a professional fund manager and investors buy shares of the funds. However, ETFs trade throughout the day with varying prices where Mutual Fund trades are only executed at the end of the trading day. Mutual funds may have a transaction fee and ETFs may have commission fees.

Both approaches rely on the same basic principles. Regardless of which approach you select, understanding these principles is essential to building confidence in your asset allocation.

In addition, the two approaches can be combined, or you may alternate them if your situation changes or if you recognize the need to personalize your choices.

Key Useful Asset Allocation Concepts and Principles

Asset Classes

Asset classes are the building blocks of asset allocation.

Three basic asset classes—stocks, bonds, and cash—represent most investable assets.

Asset Class	Primary Risks
Cash	Inflation
Bonds	Interest Rate Fluctuations, Issuer-specific risks
Stocks	Stock market volatility, Company-specific risks

- **Cash**, or currency, is the simplest financial asset. Physical currency, bank deposits and money market funds all are part of this asset class. All three have fixed prices. In the United States, bank deposits and money market funds enjoy some government guarantees of their value.

These guarantees make cash a safe investment in most situations. The largest risk to cash is *inflation* that creates a decline in its purchasing power due to rising prices. However, because cash can be readily accessed in an emergency, the general rule of thumb is to keep at least several months' worth of cash available.

- **Bonds** are loans. In effect “you” (the investor) are the lender when you buy a bond. Treasury bonds and notes are loans to the U.S. Treasury. Corporate bonds are loans to companies. Municipal bonds are loans to state and local governments and government entities. Treasuries and Municipal bonds often have lower income tax implications if held outside of your retirement plan. The issuers (the borrowers) promise to pay interest and return principal on time. Corporate bond issuers who do not keep their promises face significant penalties. They must file for bankruptcy and let a court decide how they will settle their debts. These promises and the rules governing them make bonds relatively

Many people think of **Residential Real Estate** as an asset class.

It can be useful to think of owning your home as “pre-paid rent”—you have a place to live for the rest of your life. This can be a significant advantage—you are insulated from changes in housing prices. As an investment, however, additional residential real estate (beyond your home) may carry certain risk: because it is concentrated, not diversified (similar to a large egg, all in one basket)

safe assets. However, bond owners still face the risk of borrower default. Even if borrowers must settle their debts, they may end up repaying less than the amount they owe.

- **Stocks** represent ownership of a fraction of a public company. Units of stock are called “shares” which entitles the owner to a proportion of the corporation’s assets and profits equal to how much stock they own. Company management can decide whether to share the profits with shareholders or retain the profits and invest them in the company. Profit distributions as dividends will be distributed to shareholders in proportion to each shareholder’s number of shares. If the company decides to shut down, management must sell its assets, pay off its debts, and distribute what is left to shareholders, again in proportion to each shareholder’s number of shares.

Investment Risks

Investing carries risk. That is, it’s impossible to know how today’s assets will translate into tomorrow’s purchasing power. While it is possible to distinguish many **investment risks**, they can be grouped into a relatively small number of categories:

- **Inflation** is a decline in a currency’s purchasing power. Inflation can happen slowly or rapidly, and it can rise or fall unpredictably. Inflation affects cash most directly, but it also affects the purchasing power of bonds (except U.S. Treasury TIPS and Series I Savings Bonds—also called I Bonds—see table above). For an example, if inflation is 5% for a year, it will cost \$1.05 at the end of the year to buy an item that cost \$1.00 at the beginning of the year.
- **Interest Rate Fluctuations** result in associated bond price changes. When interest rates rise, bond prices fall (see table above). Interest rates change in response to changes in worldwide economic conditions. When economies are strong, investors can hold out for the most attractive investment opportunities which offer the highest returns, and interest rates tend to be higher. At other times, savings are high, attractive investment opportunities are relatively scarce, and interest rates tend to be lower. Interest rate changes influence the prices of all bonds.

Treasury Inflation Protected Securities (TIPS) are U.S.

Treasury bonds whose face amount adjusts for inflation. If the price level doubles over the 10 years after you buy a \$1,000 10-year TIPS, your TIPS will mature at \$2,000 – protecting your purchasing power. I Bonds pay a “real” or inflation-protected interest rate plus the inflation rate, also protecting your purchasing power. I Bonds are an inflation-protected savings account substitute.

See www.treasurydirect.gov for information

Central banks also modify interest rates as they attempt to respond to economic changes and manage inflation and unemployment, but their ability to do so is limited.

- **Bond Issuer-Specific Risks** influence the issuer's bond prices. The biggest such risk is default—the failure of the issuer to keep its promise to pay interest on time and to pay back principle when due at the bond's maturity date. If it appears that an issuer is more likely to default, its bond prices will fall. Other issuers' bond prices are likely to be unaffected. Even if an issuer defaults, its bonds may still have some value—bond holders may be able to recover some of their principle.
- **Stock Market Volatility** affects the prices of all stocks, which tend to move up and down together. In particular, well-diversified stock mutual funds, including index funds, will move up and down with the market. Stock market movements reflect investors' collective assessment of the future profit prospects of public companies. If investors foresee good economic times, the stock market will tend to rise. If they foresee challenging economic times, the stock market will tend to fall.
- **Individual Company-Specific Risks** influence an individual company's stock price. Especially good news about a company will tend to be associated with its stock price rising faster than the market, and especially bad news with a declining stock price. If a company goes bankrupt and cannot pay its debts, the company's lenders take it over and the stock price goes to zero—the shareholders are left with no value in the investment.
- **Currency Risks** affect the US dollar value of foreign stock and bond investments. Non-US companies usually transact business in other currencies such as the Euro or the Japanese Yen. Currencies fluctuate in value relative to each other.

Bond Prices and Interest Rate Changes

Why do bond prices fall when interest rates rise? Suppose you buy a \$1,000 bond when interest rates are 5%. It pays \$50 per year in interest.

If interest rates rise to 10%, and \$1,000 bonds pay \$100 per year in interest, you may want a bond that pays \$100 per year, too. But no buyer will pay \$1,000 for your bond that pays \$50 per year in interest; they'll insist on paying less. The interest rate rose, and your bond's price went down.

Diversification

Diversification is one of the most powerful ideas to emerge from scientific study of investments in the last century. A diversified portfolio spreads investment across many individual securities, averaging out the individual risks—company-specific in the case of stocks and issuer-specific in the case of bonds—so that only market-wide risks (stock market volatility and interest rate fluctuations) remain. Mutual funds and ETFs are examples of diversified investments.

Diversification among stocks and among bonds reduces individual security risks. In addition, because stocks and bonds tend not to move in the same direction, holding both stocks and bonds in your portfolio can reduce the amount of risk you are bearing. However, diversification does not eliminate market-wide risks. If the stock market drops, a diversified stock portfolio will most likely drop, too.

Holding individual securities in your employer's stock, perhaps in your defined contribution retirement plan or because you receive it as part of your compensation, can create additional risk. If the company does poorly, the stock's value may decline, and your income may be reduced. Savvy investors consider this risk when constructing their portfolios.

Another type of diversification concerns the taxation of assets. Tax diversification is a strategy that considers the various tax treatments of different investment accounts and the asset classes to provide a more efficient tax strategy for withdrawing assets in retirement. Tax policies and diversification are beyond the scope of this brief. You may want to seek tax advice for your specific tax situation.

Choosing Your Own Asset Allocation

Each person's saving and investment decisions, including asset allocation, should respond to their unique needs and circumstances. It is helpful to recall that investment decisions are about funding future spending from saved and invested resources—an assessment and summary of the future spending you want your investments to fund should be considered.

You may plan to do some of that spending relatively soon, perhaps for a down payment for a house. Holding investments in cash or other short-term investments like CDs or money market funds is an appropriate choice for funding near-term spending like this when you need easily accessible funds.

You may plan other spending for the distant future. Retirement spending is a perfect example. One way to fund retirement spending is through income generating instruments. These include Social Security, any employer-provided defined benefit pensions and individual annuities you may have purchased. You can get a forecast of your future Social Security income benefit at www.ssa.gov. An employer should provide you with information about any retirement benefits they provide. Another way to fund retirement spending is through income or withdrawals from retirement investments such as defined contribution plans and personal savings.

As you approach retirement, you may further divide your retirement spending into “must do” and “nice to do” categories. “Must do” might include basic food and shelter, while “nice to do” might include special travel or family gifts.

Your “**risk capacity**” depends on your income and financial resources and whether you have enough time to recover from losses if the market takes a downturn of any significance.

If your planned savings are large relative to the amount of funds you need to cover your “must do” retirement spending, you may have enough risk capacity to afford a higher level of stock risk in your portfolio. That is, you may be able to afford the losses that you might incur with stock exposure. Having more funds in excess of the “must do” level may also allow you to take more stock risk.

On the other hand, if your planned savings are small compared to your “must do” retirement spending, you don’t have much risk capacity. A bad investment outcome would leave you with fewer resources than you need for “must do” spending. If this is your situation, you might increase your savings if you can and provide more margin for error.

You may also have more risk capacity if you are younger and if you have a longer time until retirement. In this situation, you have more working years and time to save more if you experience poor investment results. Your risk capacity can be expected to change as you work toward retirement and your earnings, spending needs and financial assets change over time. Thus, you should periodically reassess your risk capacity.

Your “**risk tolerance**” reflects how comfortable you are with portfolio volatility. For example, the size of loss that you can accept without reacting by reducing or eliminating your stock exposure is related to your risk tolerance. People with higher risk tolerance are willing to accept larger losses.

It is wise to select an asset allocation consistent with both your risk tolerance and your risk capacity. In this way, you position yourself to not over-react to stock market declines but rather to “stay the course” as a good financial decision.

Reacting to Market Movements

There is strong evidence that stock market movements are unpredictable. Nevertheless, many believe they know when the stock market is about to rise or fall. In fact, there is a tendency to believe that the market is going to decline after it has already fallen, or that it is going to rise more after it has already risen. When we act on these beliefs, we tend to buy high and sell low which can guarantee a loss of assets.

Going the Prepackaged Route

In addition to Mutual Fund companies, many employer retirement plans offer “target date” or “life-cycle” mutual funds which adjust their asset allocations over time to meet the needs of an average person of the relevant age. For example, a target date 2065 fund would set its allocation for people planning to retire in 2065. You can also find funds like this at many financial institutions that offer brokerage and IRA accounts.

In the early years of these funds, their stock allocations will be relatively high. As time goes on and the fund approaches the fund’s target date, assets are shifted to investments less subject to volatility and the stock allocations gradually decline. This process of shifting stock allocations will automatically occur without action on your part.

These funds hire professional investment managers. The fund instructs the managers to make asset allocation decisions based on assumptions about the people who own the funds, including that they plan to retire around the “target date.” The managers also attempt to optimize return for any given level of risk. However, funds that offer to gradually change allocations over time are not all alike and may be more or less conservative than your situation requires at a given point of time.

As mentioned before, many mutual fund companies also offer “balanced” funds. Such funds attempt to maintain a single, fixed, asset allocation. The managers make asset changes based on the mutual fund assets and available investment choices in order to assure the fund asset allocation remains within a tolerance of the target asset allocation. Choosing one of these funds can simplify your asset management process if it closely matches your target allocation.

Taking Withdrawals

Your retirement accounts may be or may become large assets. They are tempting targets when you need cash. Unfortunately, they can also be expensive funding sources. Withdrawals from these accounts before you retire can push you into a higher tax bracket. Withdrawals before 59½ may incur a 10% excise tax penalty. Careful cash flow planning can help limit excess tax costs.

Creating Your Own Customized or Self-Directed Allocation

Even though selecting a prepackaged solution is more direct and relatively easy, it may not fully address your financial objectives, reflect your full financial picture, or simply be the right fit for your investment needs. Just as customizing a map allows you to make your trip your own, creating your own asset allocation can weave in important factors about you.

You may decide to create your own asset allocation simply as a matter of preference or because you've explored prepackaged alternatives and found them to be an imperfect fit for you.

If you do decide to create your own asset allocation, you will need to maintain it in two ways:

- If left alone, portfolio allocations tend to drift. If the stock market is rising, your portfolio's stock allocation percentage will tend to rise, and its risk will tend to increase. To keep this from happening, it is prudent to review and "rebalance" your portfolio once a year or so, restoring the stock allocation to your target percentage.
- It is also prudent to review your asset class allocation targets regularly (every 3-5 years or so). As your circumstances change, you should consider changing your asset allocation. Factors that would be consistent with taking more risk include situations where you have gained additional resources beyond that expected. Investment success and higher and more stable income are two such factors. Factors that would suggest reducing your stock allocation might include loss of your job, advancing age, or greater financial responsibility for family members.

A financial plan can provide an excellent framework for *choosing* your asset allocation target. It can quantify the spending you plan to do throughout your life, and help you set savings and investment return targets. It can also help you see the potential impact of investment risks, investment expenses and taxation implications.

Once you have chosen an asset allocation target, you will need to select specific investments for your assets. You may wish to consider the choice between active and passive mutual funds, the impact of investment costs (see box) on your potential returns and taxation implications before selecting specific investments. Investment costs and taxation of earnings are factors that can reduce returns on assets that would otherwise be achieved.

Active vs Passive

Broadly, there are two investment management approaches, active and passive. Active managers attempt to select securities that will perform better than the market average. Passive managers simply select securities in proportion to their importance in the market, comfortable that their portfolios will match the market average performance. Indexed mutual funds or ETFs are an example of passive investments.

The Impact of Investment Costs

Mutual funds and ETFs charge fees to cover the investment manager's costs (summarized in the expense ratio). Given the same risk levels, the funds with lower costs tend to have higher net returns (returns after subtracting costs).

Getting Help

You do not have to go it alone if you decide to go the customized or self-directed approach. You can work with a financial advisor to help you design and implement your personal investment mix. It is beyond the scope of this brief to discuss financial advisors other than to note that advisors have different ways of charging fees (e.g., flat fees, or commissions when an investment product is bought or sold, or an annual percentage of assets under management). It is important to understand how fees are determined and the amount of such fees you will be paying for your financial advisor's services.

Some employer plans offer a managed account as an election option. A managed account is an investment election that offers portfolio management services to help you make investment decisions within your employer's plan and plan fund options. However, these services do not usually extend to funds held beyond the employer's plan.

Some mutual fund investment companies also offer advisors for a fee that will help in selecting funds from the investment company fund options. However, these services do not usually extend to funds held beyond the investment company's funds.

Other Things to Know

You may have heard of investment approaches beyond those discussed above.

- These may include limited partnerships, hedge funds, private equity, and venture funds. Specialized investment managers have designed these vehicles that may appeal to certain investors.
- Another might be "alternative" asset classes (see box).

These specialized investment approaches may offer the potential for higher returns, but they also bring significant risks that less experienced investors may not anticipate. In general, the approaches outlined previously will suffice to allow you to meet your financial goals.

"Alternative" Asset Classes

In addition to the basic asset classes, some investors consider alternatives. There is no agreed list, but we might include commodities (such as oil and gas, cotton, copper, wheat, etc.), precious metals (gold, silver, platinum), real estate, catastrophe bonds, hedge funds, private equity, and cryptocurrencies.

In general, these may be more complex and less suitable for an average investor.

On Your Way

On your way to retirement, it is great to have a roadmap to get you from today to retirement. First identify your destination and figure out the resources you are able and willing to devote to the trip. In financial terms, how large of a nest egg do you need before you retire, and how much are you willing to save to get there?

No matter where you are on your retirement journey, careful consideration of asset allocation can help you reach your destination.

Additional Resources

- Beginners' Guide to Asset Allocation, Diversification, and Rebalancing. *U.S. Securities and Exchange Commission*, Aug. 28, 2009, <https://www.sec.gov/about/reports-publications/investor-publications/investor-pubs-asset-allocation>
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The Society of Actuaries Research Institute would like to acknowledge the work of its Committee on Post-Retirement Needs and Risks in producing this series.

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