

Intro to Investing

Your personal financial goal will be the reason you save money. How you invest will depend on how much money you need to achieve your goal and how soon you will need it.

Claudia had been saving money since she opened her **savings account** three years ago with birthday money. But she never really looked at the monthly statements from her bank. Well, that was going to change, now that she wanted to start saving for a computer. Her statement listed a beginning balance for the month of \$330.00 and an ending balance of \$330.55.

Hold on a minute, Claudia thought. This account was supposed to pay 2% interest. Why had she only earned \$.55 in interest for over \$300? That was certainly a lot less than 2% interest.

At the bank branch, the teller explained that 2% was the amount of interest paid per year. The monthly interest rate was 2% divided by 12 months, or 0.17%—which came to \$.55. Claudia suddenly understood that a savings account has little growth potential over the long term.

To save money, you should stick to the following plan.

- **Financial goal:** Make a financial goal.
- **Available income:** Figure out how much you can save per month.
- **Time horizon:** Determine how long it will take to reach your goal.
- **Avoid spending traps:** Stick to your financial goal by not spending money on items that are quickly gone. Make your financial goal come faster by saving instead.

Reaching your financial goal will teach you the rewards of saving.

Setting Financial Goals

Whether you want to save money for a snowboard or for your first apartment, you will need to set a financial goal. For example, if a snowboard costs \$350 and your main income is \$50 a week from a newspaper delivery route, how long will it take to save up the money? It depends. Of your \$50 income, how much can you realistically save each month? If you have no expenses, then you can save \$350 in seven weeks. But if you're like most people, there are certain items you end up spending money on without thinking too much. Three songs on iTunes, a ringtone, and a fast-food lunch can eat up \$10 in half an hour. By learning to save and invest, you will have the money you want later to buy things that are worth saving for.

Savings Basics

In saving for your financial goal, you want your money to grow. You make money grow by earning interest on it, such as from a **savings account** at a bank. Money market accounts also pay interest, generally at higher **yields** than savings accounts.

Some investments are not interest-based. Stocks and mutual funds, for example, have no guaranteed return. Owning individual stocks is like owning a small share of a company. Owning a mutual fund is like owning parts of many different companies. Saving money by buying mutual funds or stocks is more risky than having a savings account or money market fund.

For example, just because you paid \$23 for a share of stock today does not guarantee you can sell that stock for \$23 tomorrow. Stocks can rise or fall. Stock-based mutual funds are designed to be less risky than open speculation, but even mutual funds rise and fall, and their rate of return is not guaranteed.

FDIC-Insured or Not?

The FDIC is a government agency set up after the stock market crash of 1929. It provides insurance covering bank customers' deposits, and FDIC member institutions pay for this insurance. In return, customers know the FDIC seal on the bank door means their investment is safe.

The FDIC, or Federal Deposit Insurance Corporation, protects individual account holders in banks and savings companies. **FDIC insurance** currently protects each account holder up to \$250,000. This protection means that if a bank fails, the FDIC will pay each account holder the total amount of his or her deposit (up to that \$250,000 limit).

How do banks and savings institutions get this protection? They pay a certain percentage of their total deposits to the FDIC. Stocks and mutual funds are not FDIC-insured; their value can double or go down to zero, and no insurance will step in and protect your original investment.

Inflation and Your Rate of Return

Inflation, or the general rise in the cost of goods, makes the money in your pocket worth less over time. When inflation is high, you need to have a good rate of return just to maintain the same buying power over time.

Imagine there is 3% inflation. You have your money in a savings account earning 5% interest. What is your real rate of return, factoring in the cost of inflation? It is $5\% - 3\%$, or 2%. What if your savings account only paid 2% interest, like Claudia's did at the start of this lesson? Then the actual rate of return would be $2\% - 3\%$, or a -1% return! Even though you are earning 2% interest in the savings account, you actually have 1% less buying power.

Do you still have to account for inflation if your money is invested in stocks or mutual funds? Think about it. Imagine your goal is to buy a car, and you get close to your original financial goal after three years of saving and investing in a stock-based mutual fund. But the car you have been planning on buying now costs 10% more than before. Your buying power was knocked down by inflation.

Is My Money Growing?

If you have investments in a mutual fund or own stocks through a brokerage house (such as Merrill Lynch or E*Trade), you will receive a monthly report. This report will tell what you own and what it is worth. It will also tell what the value was at the last statement for comparison.

If you have a savings account, you may receive a monthly statement telling you your balance and your interest rate. By comparing the current balance on the statement with the last statement balance, you will be able to watch your money grow. If the current balance is less than the last statement balance, your account value has gone down. If the current balance is more than the last statement balance, your account value has grown. Note that in a savings account, your account value should only rise; it should not lose value. If the value is down, check for any withdrawals you might have made. Did the bank charge you a fee of some kind? You should make sure to read your bank statement every month so you know the general amount of your savings account balance.

Calculating Your Rate of Return

In this lesson's computer exercise, you will try out different ways of saving and work out the rate of return after running a simulation. To better prepare you for this activity, in this section you will learn how to calculate your rate of return for different investments.

The rate of return on a savings account is simply the annual interest rate. The annual rate of return on stock is the amount the stock is worth today (including **dividends** for the past 12 months) compared to what it was worth one year ago. Use the following formula.

$$\text{Annual Rate of Return} = \frac{(\text{Sales Price} + \text{Dividends}) - (\text{Purchase Price})}{\text{Purchase Price}} \times 100\%$$

If your sales price plus dividends is less than your purchase price, then you have a negative return for the year.

How Do Commissions Affect Rate of Return?

We calculated the rate of return on stocks as if there were no cost to buy or sell them. In the real world, each transaction, either buying or selling, costs a commission paid to the brokerage house. Commissions vary depending on the brokerage and how many shares are involved, but are generally \$5 to \$15 and up per trade. That fee increases the purchase price, thus reducing the sale price.

What Is a Money Market Account?

You might not have thought of it this way, but banks are in the business of making money. How do they do make money if they pay you money (interest) just for depositing your cash? The answer is that they loan that money out to other people and businesses at a higher interest rate.

Think about the numbers. Bank A pays you 3% per year on a savings account, but it loans that money to your new neighbor in a mortgage for 8% a year. That loan is 5% profit to the bank.

Savings accounts are safe investments, but they do not pay very high interest rates. Banks also have money market accounts. These accounts pay higher interest rates, but sometimes such accounts have minimum balance requirements. So check with your bank.

How do money market accounts generate money for the bank? The bank pays a variable interest rate to you. It earns that interest by loaning the money on a short-term basis to other banks and businesses. These overnight loans keep the economy running. And the higher interest rate paid by money market funds helps attract new deposits.

If you have enough money to open a money market account, you should consider this safe investment option. However, money market accounts are generally not FDIC-insured.

What Are Mutual Funds?

A mutual fund is a pool of stocks, bonds, and other securities managed by an investment company. Individuals can buy shares of the fund and profit from its gains. Stock-based mutual funds own many different stocks. The mutual fund companies pool investors' money and buy a broad range of stocks. These stocks can be based on a published list, such as the Standard & Poor's 500 (S&P 500). Mutual fund companies research different stocks to put together what they consider a strong portfolio. These managed funds may or may not do better than funds that stick to a published list. When you purchase a mutual fund, you own a little bit of all those different stocks, so your risk is lower.

What Are Fund Expenses and Why Are They Important?

How do mutual fund companies make money? There are many fees that mutual fund companies charge their customers. Some mutual funds charge a **front end load**, which is a lump sum of money paid into the fund when first buying. Your rate of return will have to take this load into account, so you have to hold the fund for a long time before your return goes from negative to positive. Other mutual funds charge a **back end load**, which is a lump sum of money paid into the fund when cashing out.

Mutual funds can also charge annual expenses on an account. These expenses are disclosed in the prospectus, or description booklet, of the mutual fund. These fees are given as an **expense ratio**, or percentage of expenses spent from your investment. If a mutual fund has a 2.0% expense ratio, and a similar fund with another company has a 1.5% expense ratio, then the second company has 0.5% more money going into making money for the customer—not for the mutual fund company.

Can I Avoid Mutual Fund Fees?

The best way to avoid mutual fund fees is to know exactly what fees are going to be charged before you invest in the fund. Search for “100% **no-load**” or “true no-load” funds.

Scams to Avoid

The FBI has issued a fraud alert for scams that are easy to avoid once you are aware of them. Here are some examples.

- You are informed you have won a lottery, such as El Gordo or El Mundo, that you did not enter.
- You are instructed to send money as soon as possible to a large U.S. city or some other country, such as Canada, England, or Nigeria.
- You are asked to accept pay or commission for letting money transfers come through your account.
- You are asked to confirm, update, or provide account information over the phone or through email.

All of these are warning signs of a scam, and you should bring them to the attention of the police immediately.

Summary

Saving money is as much a job as earning it in the first place. It helps to have the right incentive, such as something you want to buy later. Then you can resist spending by looking forward to the goal you’re saving for. Savings accounts are a good place to start saving money. Once you’ve saved enough for the minimum requirement, you can get a higher interest rate by moving your savings into a money market account or mutual fund.

Saving money by investing in individual stocks or stock-based mutual funds is a good way to build savings for the long term. Stocks can be purchased from a broker, but the commission fee should be weighed carefully before choosing a brokerage house. Mutual funds can be purchased from the mutual fund companies themselves. Investors should always read the mutual fund prospectus before buying any mutual fund. The prospectus will inform potential investors of front-end loads, back-end loads, expense ratios, and fees that sap money from your investment. No-load funds are often a good way to go for mutual fund investments.

Key Terms

back-end load: Fees paid to the mutual fund company when selling a mutual fund.

dividend: A payout of profits by a company to all shareholders.

expense ratio: For a mutual fund, an annual percentage the fund takes as payment. Expense ratios of different funds can be compared to find the best value.

FDIC-insured: The FDIC (Federal Deposit Insurance Corporation) is a government agency that insures depositors’ money. Banks and savings and loan companies that are FDIC-insured pay a percentage of their deposits to the FDIC to pay for the insurance.

front-end load: Fees paid to the mutual fund company as an entry requirement into certain mutual funds.

inflation: Rise in prices that effectively makes cash have less buying power over time.

no-load fund: A mutual fund that charges no front-end or back-end load fees.

savings account: A safe, low-return investment available from banks. There is generally no minimum deposit for this type of account, making it perfect for kids and teens just starting out.

yield: For a savings account, the percentage of interest earned annually. For a stock, the annual dividend divided by the share price.

Math Examples

The math problems in this curriculum are intended as practice in applying math concepts to the real world. The concepts included are generally those covered through Algebra I.

While this curriculum is not intended as a substitute for standard math courses, several review tools are included.

- Below you will find example questions very similar to those on the math quiz for this lesson. A complete solution is given for each example.
- On your course homepage, a Math Concepts Reference link is included beneath the Tutorial. This reviews key math concepts as well as business and financial formulas.

Example Questions

1. You invested \$2,000 in a stock. Your account now has a value of \$3,215. Your percentage gain on the investment (rounded to the nearest percent) was:

SOLUTION:

$$(3,215 - 2,000) / 2,000 \times 100 = 60.75\%$$

Round to 61%

2. You put \$1,000 in an interest bearing bank account that pays 1% per year but has a fee of \$2 per month. Are you getting ahead?

SOLUTION:

$$\text{Interest per month} = \$1,000 \times 0.01 / 12 = \$0.83/\text{month}$$

No, your monthly fees exceed your monthly interest.