

Fact Sheet 693

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Savings Basics

Saving money provides unmatched security. For retirement, it is essential. Despite these facts, Americans are saving less of their disposable income now than 50 years ago. In recent years, Americans have been on a “fitness kick.” Economists advise that it would be wise to pursue financial fitness as well.

Just as physical fitness is essential for good health, financial fitness is essential for a secure future. Achieving and maintaining financial fitness includes a number of exercises, such as budgeting, managing credit, analyzing risks, and planning for retirement. It also includes saving and investing.

Like exercising for physical fitness, saving money requires discipline and must be done regularly to get results. Also, like exercise, saving is much easier to talk about than do, even though we know the results are rewarding.

Saving and Investing

Saving could be called a type of investing, but there are differences in goals between the two. Savings deposits are defined as interest-paying accounts used to safeguard and accumulate funds to have for emergencies or specific financial goals. People use savings accounts to safely store their money for easy access.

In general, people begin to save long before they begin to consider investing surplus money. The goal of investing is to earn money on the initial investment (called capital) while minimizing the risk of losing it. Investments are riskier than savings accounts, but rates of return on most investments generally are greater than standard

savings accounts. However, a good savings program is necessary to provide the foundation for successful investing.

Setting Goals

How much should you have in a savings account? Experts recommend putting away the equivalent of 3 to 6 months' expenses. Then, you will have an emergency fund in case of a time when income or credit is not available when you need it. Recommendations for regular savings vary from 5 to 20 percent of your take-home income. The amount depends on your goals, family size, financial state, and number of years until you retire.

The first step to becoming a successful saver is to determine your goals. Then you can choose a savings plan that fits your needs. Most people have both short-term and long-term goals.

Short-Term Goals

Short-term goals usually do not extend beyond 1 year. These goals may include payment of real estate taxes, insurance premiums, clothing costs, or your summer vacation. A rainy day or emergency fund that will take care of a crisis should be kept with your short-term-goal funds. Your primary concern is being able to access these savings immediately.

Long-Term Goals

These goals involve looking ahead a few or many years. A primary long-term goal of most people is a secure and comfortable retirement. Other long-term goals could

include purchasing a home, building an addition to your home, or paying for your children's college educations. Because your long-term goals can extend over many years, you can commit your savings for a longer time. Although you risk not having easy access to your money, you gain the opportunity to earn higher interest rates.

Obtaining Goals

To determine how much money you will need to reach your specific goals, you may have to do some estimating based on the current economy and what you expect will happen with the economy. For example, suppose you want to buy furniture in 2 years. If the furniture you want costs \$3,000 and you expect inflation to be 6 percent, you will need to increase the \$3,000 by 6 percent for 2 years. You would need to save about \$3,370.80:

$$\begin{aligned} \$3,000 \times (1 + .06) &= \$3,180 \\ &\text{(needed end of first year)} \end{aligned}$$

$$\begin{aligned} 3,180 \times (1 + .06) &= \$3,370.80 \\ &\text{(needed end of second year)} \end{aligned}$$

Accumulating large amounts of money can seem overwhelming when you think of it as a lump sum. However, when you view your goal month by month, the amount you will need to save can be both possible and manageable. Table 1 shows the monthly amount that you would have to save to meet your goal savings amount at interest rates of 4, 6, and 9 percent in a standard savings account. For example, imagine that your goal is to have \$15,000 in a college fund in 10 years. If the current rate of return (interest rate) is 6 percent on the savings or investment account, then you will need to deposit \$91 each month. Note that you only set

Table 1. Monthly savings needed to reach a financial goal

Savings goal	Years to achieve goal				
	3	5	10	15	20
Monthly savings (\$) needed at a 4 percent rate of return					
5,000	131	75	34	20	14
10,000	261	150	68	41	27
15,000	392	225	102	61	41
20,000	522	301	136	81	55
Monthly savings (\$) needed at a 6 percent rate of return					
5,000	127	72	30	17	11
10,000	253	143	61	34	22
15,000	379	214	91	52	33
20,000	506	285	122	69	43
Monthly savings (\$) needed at a 9 percent rate of return					
5,000	122	68	27	15	9
10,000	245	135	54	29	17
15,000	368	203	82	43	25
20,000	490	270	109	57	34

aside a total of \$11,920 over the 10-year period ($\$91 \times 12 \text{ months} \times 10 \text{ years} = \$10,920$). The rest of the \$15,000 (\$4,080) would be earned interest. The satisfaction of watching your money grow can motivate you to resist spending. Consider your goals—how long and what will it take to fulfill them?

Understanding the Time Value of Money

Virtually every saving opportunity involves three variables: the interest rate, a period of time, and future value. In most cases, information is available on at least two of the variables and it is easy to calculate the third variable with the appropriate tables. The calculation process involves the theory of compound interest.

The topic of compound interest is important when making savings decisions. It enables you to determine how much an account is worth, either now or in the future, and consequently to determine its returns or benefits. It is essential in planning for short-term and long-term goals. Almost all problems pertaining to compound interest can be adequately handled with simple formulas.

Future Value

Future value of \$1 saved once. Assume you place \$100 in a savings account paying 5 percent a year. How much would it be worth at the end of 1 year? Using Table 2 and the future value formula, the answer is \$105.

$$\begin{aligned} \text{Future value} &= \text{Present value} \times (\text{Present value} \\ &+ \text{Interest rate per year}) \\ &= \text{Present value} \times (1 + \text{Interest rate per year}) \\ &= \$100 \times (1 + .05) \\ &= \$100 \times 1.05 \\ &= \$105 \end{aligned}$$

How much would the \$100 be worth at the end of 3 years? More than \$115. The answer is \$115.76, figured as follows:

$$\begin{aligned} \text{Future value} &= \$100 \times (1 + .05) \times (1 + .05) \\ &\times (1 + .05) \\ &= \$100 \times (1.05) \times (1.05) \times (1.05) \\ &= \$115.76 \end{aligned}$$

Table 2. Future value of \$1 saved once^a

Interest rate (%)	Years				
	1	2	3	4	5
4	1.040	1.082	1.125	1.170	1.217
5	1.050	1.102	1.158	1.226	1.276
6	1.060	1.124	1.191	1.262	1.338
7	1.070	1.145	1.225	1.311	1.403
8	1.080	1.166	1.260	1.360	1.469

^a The table is based on \$1 saved once. Multiply this figure by the amount of money you are saving. For example, if you are saving \$100, use \$100 ($\$100 \times \$1 = \$100$) in the formula. If you are saving \$250, use \$250 ($\$250 \times \$1 = \$250$) in the formula.

The extra 76 cents you earn by the end of the third year over and above the 5 percent on the beginning principal of \$100 is the interest earned on interest. This is called compounding. When you do not withdraw your interest, it is necessary to calculate the amount of interest you earn on it. Using Table 2, you can easily calculate the future value of \$100 at 5 percent per year for 5 years.

$$\begin{aligned} \text{Future value} &= \text{Present value} \times \text{Compound} \\ &\text{value interest factor} \\ &= \$100 \times 1.276 \\ &= \$127.60 \end{aligned}$$

If the \$100 were invested for 4 years at 6 percent, the future value would be \$126.20. If the same amount were invested at 8 percent for 5 years the future value would be \$146.90.

Future value of \$1 saved each year. Most people save money on a continual basis. Assume that you will be saving \$100 at the end of each year.

How much money will you have at the end of 3 years if you earn 5 percent interest? Compute by using Table 3.

$$\begin{aligned} \text{Future value} &= \text{Present value} \times \text{Compound} \\ &\text{value interest factor} \\ &= \$100 \times 3.152 \\ &= \$315.20 \end{aligned}$$

Table 3. Future value of \$1 invested yearly

Interest rate (%)	Years				
	1	2	3	4	5
4	1.000	2.040	3.122	4.246	5.416
5	1.000	2.050	3.152	4.310	5.526
6	1.000	2.060	3.184	4.375	5.637
7	1.000	2.070	3.215	4.440	5.751
8	1.000	2.080	3.246	4.506	5.867

If you were to save \$100 each year for 5 years at 8 percent interest you would have \$586.70. The future values of different savings and investments are crucial to many financial decisions. Future values also dramatize the importance of time in reaching your goals.

The rule of 72. This is another tool for calculating future savings. You can find out how fast your savings deposits will double by using this mathematical formula. To use it, divide the number 72 by the percentage of interest you will receive with the savings instrument. The result will be the number of years it will take to double your money. Some examples:

$$72 \div 5.25 = 13.71 \text{ years}$$

$$72 \div 6.00 = 12 \text{ years}$$

$$72 \div 8.00 = 9 \text{ years}$$

Choosing a Financial Institution

Whether you place your savings in a commercial or savings bank, savings and loan association, or credit union, it is important to find an institution where the safety of your funds is guaranteed by the U.S. Government.

Look for a sign that says "Member FDIC." This shows that the institution is a member of the Federal Deposit Insurance Corporation. This insurance covers your money up to \$100,000 per depositor at member banks or at savings and loans. (A joint account with another person would be con-

sidered a separate depositor.) Separate insurance is also available for funds held for retirement purposes (for example, Individual Retirement Accounts).

To meet consumer needs, savings accounts can be set up in a number of different categories: individual, joint with right of survivorship, in-trust-for, nonprofit organization, corporate or partnership, among others. By discussing these categories with your banker, you can choose the one that suits your purpose.

Savings accounts are characterized by a guarantee of return of a specific percentage of interest that you will receive periodically on the money deposited. Read and compare how institutions compute the interest paid to you. Each calculates by its own method, but you can compare accounts by looking for the annual percentage yield (APY). This is the percentage by which an account will grow over a full year, assuming the interest is kept with the savings, not withdrawn.

It is important to shop for the highest APY so that interest earnings are maximized. The Truth in Savings Act passed by Congress has simplified this process. The Truth in Savings Act requires banking institutions to disclose the APY, which is uniformly computed, so you can accurately compare one bank's yield with another's. It also requires these institutions to pay interest on the full balance in your account each day.

The APY tells you how much you would earn if you left your money on deposit for 1 year at that rate. All you need to do is multiply the APY times your principal (the amount of your initial deposit). For example, if the APY is 5 percent, your \$1,000 would grow to \$1,050 after 1 year. The APY is meant to eliminate the confusion caused when banks apply different methods of compounding interest and use varying terms, such as "effective yield" and "interest."

Other costs and requirements that will affect earnings on your savings account are minimum balance requirements, maintenance fees, and penalties. Banks are required to give you a list of some fees, such as for stop-payment orders on checks, bounced checks, and certified checks. But they need

not mention every one, so ask about all fees and penalties before you open an account.

Careful Shopping

In managing savings these days, nothing takes the place of careful shopping. Check out a half-dozen institutions before committing your money.

It is important to get the answer to a number of questions before you open an account. Some questions to ask include the following:

- u What is the minimum deposit?
- u What is the annual percentage yield?
- u Is there a fee or a penalty if the balance falls below a certain level? If so, what is the level and the fee?
- u Are there maintenance fees charged on the account?
- u Is the account subject to any other fees, such as check-writing fees or fees for withdrawing money?
- u Is the account insured by FDIC?

If no one will take the time and trouble to answer your questions, go elsewhere. But be honest, with yourself and the banker, about how much you will be keeping in the account. Consider shifting your banking business to the institution that works the hardest to win it.

Basic Savings Accounts

For meeting short-term saving goals, a basic savings account is suitable. You earn interest on the money and it is still easily available for use.

The time-honored passbook account used the passbook to record transactions. Now it is offered as “regular” or “statement” savings accounts. Instead of using the passbook as your record, you automatically receive a periodic statement detailing your transactions and balances. In general, you can deposit and withdraw money from a statement account whenever you want, which means the account is “highly liquid.”

There is sometimes a minimum required to open an account. Also, many institutions require you to maintain certain minimum balances to receive interest or avoid paying service fees. These minimums vary from \$1 to \$100 or more. Many financial institutions that ordinarily charge fees may offer special

no-fee accounts for senior citizens and minors.

Annual interest rates on statement accounts are traditionally fixed (they do not change), and they usually do not offer the highest return available. Shop around because rates vary among institutions. Some have begun to offer a variable-rate account, generally with a stated minimum and maximum rate guarantee.

With a statement account, you can use the bank’s mail deposit envelopes or go to the banking facility during business hours to make deposits.

You can arrange to have paychecks or Social Security checks deposited directly into the account and regular transfers to or from other accounts. When you make a transaction, you get a receipt. Often you can deposit, withdraw, and transfer funds on an automated teller machine (ATM), or even a home computer.

Other Saving Options

Money market accounts. This type of account offers savings depositors the safety of FDIC insurance, but interest rates vary with changes in market conditions. Some institutions require a rather large minimum balance (sometimes \$1,000 or more) to avoid fees and earn the highest interest rates.

Others require no minimum balance to earn market rates, but they charge service fees. Some institutions will waive their fees if you hold more than one account at their institution. A money market deposit account is a liquid account. You can make in-person transactions, including cash withdrawals from the branch where you opened the account, as often as you wish. There is usually a limit on check writing and other types of transactions.

Because of the similarity in names, it is easy to confuse money market deposit accounts with money market funds, which are frequently advertised by nonbank institutions. The major difference between the two is that the safety of deposits put into money market funds is not insured by the federal government.

Time deposit accounts. The third major category of saving vehicles is time deposit

accounts. These include options in which you commit your money to stay in the account for time periods ranging from 7 days to 5 years or more. Certificates of deposit, or CD's, are the most popular form.

Time deposit accounts usually have a minimum opening deposit of \$500 or more, and you ordinarily get a higher rate of interest than with a regular savings account. Your money is still government-insured. In general, the longer you tie up your money, the higher the rate of interest you will be paid. The tradeoff is that you give up liquidity, for you generally pay a substantial financial penalty for withdrawing funds from these accounts before they have matured (the end of the committed time period). You can choose CD's to put funds into a tax-deferred retirement account. This means that you do not have to pay taxes on the income until you begin withdrawing, usually after retirement. Until that time, your interest has accumulated tax-free. Although you will have to pay tax after withdrawing the funds, your tax bracket is likely to be much lower then.

Take advantage of this type of tax-deferral! For example, if you're in the 28 percent tax bracket and put \$2,000 into a tax-deferred retirement account with a 7 percent yield every January 1st for 20 years, the balance will be \$87,730. The same money put into a similar but taxable account would accrue to only \$69,759, a difference of almost \$18,000. The difference after 30 years would be more than \$60,000.

Savings bonds. There are many bonds and bond funds around, but only one classic: the U.S. Government Series EE Savings Bond. These bonds can be bought in denominations of \$50 to \$10,000, and many employers offer payroll plans to purchase them regularly. The purchase price is one-half the face value.

Bonds earn a market-based rate based on the average yield on Treasury securities. The rates are subject to change twice a year. Bonds held for more than 5 years earn a higher interest rate.

Bonds are as secure as the U.S. Government. Interest paid on them is exempt from state and local income taxes and is federally tax-deferred until the bonds are cashed.

Savings Deposits and Investments: There's a Critical Difference¹

You know your money's safe when it is deposited in a savings account or certificate of deposit at a bank insured by the FDIC.

But the FDIC's protection extends only to checking and saving deposits. If you purchase investment products at a bank, it is the same as purchasing through any other investment broker: There is no federal insurance protection or guarantee you will earn money. In fact, if your investments do poorly you may even lose the money you started with. That is critical when considering how to save and make your money grow.

Two common investments your bank may offer are mutual funds and annuities. They are not insured by the FDIC.

Mutual Funds

Using the combined resources of many investors, the investment professionals who manage mutual funds choose and purchase the types of securities that are in line with the fund's overall goals. Money market mutual funds, for example, often invest in government securities and bank CD's, providing a short-term investment involving minimal risk. Other funds may put most of their money in corporate or municipal stocks and bonds, accepting more risk for the possibility of higher returns. Keep in mind you are not protected against losses due to market fluctuations.

Annuities

When you purchase an annuity, your money is invested with an insurance company. In return, you receive payments according to the terms of the annuity contract.

You have a variety of options. You can begin receiving payments immediately, or defer taxes on annuity income by not collecting until you retire. You can also choose how you want the annuity to pay off—in a lump sum, or with regularly scheduled

¹ This section has been reprinted from "New for Consumers: Highlights of Federal Consumer Publications" (GSA no. 2304).

Financial Institution Comparison Worksheet

Institution

FDIC insured?

Checking Accounts

Noninterest

Minimum balance

Limit on transactions

Transaction charges

Printing charges

Interest

Minimum balance

Printing charges

Limit on transactions

Interest rate (APY)

Savings Accounts

Passbook or statement accounts

Interest rate (APY)

Withdrawal limitations

Certificate of deposit (CD)

Terms of certificates

Interest rate (APY)

Penalties

Investment Services

Mutual fund/annuities

Availability

Range of funds

Minimum investments

Fees for services

installments. As with mutual funds, there's no guarantee against market losses.

Be Aware of Fees

The financial organization that sells you an investment product makes its money by charging fees for its services. Some of the common ones you may encounter:

- u **Front-end loads:** A straight percentage of the amount you invest—up to 8.5 percent.
- u **Back-end loads:** Paid when you cash in your investment. Generally, the fee will be lower the longer you wait.
- u **12b-1 fees:** Fees to cover advertising and marketing costs.
- u **Management fees:** Pay for the fund's investment advisor(s).

Evaluate your goals. Are potentially higher earnings worth the additional risk of some investments, or would you rather stick with something safer, knowing you may earn less? Are you making a short or long-term investment? Do you need income from your investments now, are you saving for your

child's education, or are you looking ahead to retirement?

Ask questions. If you don't understand something, ask. The person selling the investment is required to give you answers about the product, its costs and the risks involved. Review written information about the investment before buying. If it raises more questions, talk to your salesperson. Find out as much as you can about the different investment opportunities available. Ask your investment advisor, accountant, or tax advisor for additional advice.

Shop around. Different banks, brokers, and investment houses offer varying interest rates and contract terms. Spend time comparison shopping to find the deal that is best for you. Use the chart on page 7 to compare financial institutions.

For More Information

Fact Sheet 694 "Investment Basics," available from your county Extension agent, contains more information about investments. Contact your county Extension agent for more information and publications on sav-

Information in this fact sheet was adapted with permission from Cynthia Needles Fletcher's "Money Mechanics: Saving and Investing," Publication no. PM-1462A&B, Cooperative Extension Service, Iowa State University, Ames.

P96/R97