Money Mechanics

Saving and Investing

A CORNERSTONE OF successful money management is spending less than you earn. For many families, that is easier said than done. Saving money so it is available for emergencies and short-term goals is the first step. Investing comes next. This publication can help you get started.

Saving Versus Investing

Saving is quite different from investing. In most savings options, the initial amount of cash remains constant—earning low, guaranteed rates of interest. The "fixed-dollar" feature of savings contrasts with the "variable-dollar" nature of investments. The value of investments can go up or down. Returns are not guaranteed. **Save** for short-term goals. **Invest** to achieve long-term goals.

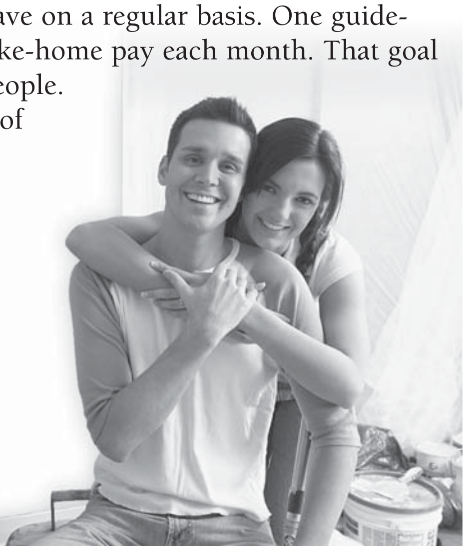
How Much to Save

Think through your reasons for saving and set specific goals. Building an emergency fund for unexpected needs is important. A general rule is to have at least two or three months' take-home pay saved for this purpose.

Other goals may be more specific, such as replacing a car or financing a remodeling project. Calculate how much money needs to be put aside to achieve these goals. The Savings Plan Worksheet on page 4 will help you determine how much to save each month to accumulate the necessary cash by a certain date.

For example, you'll need $10,000 in five years to replace a car. Each month you must put $154.17 in a 4 percent savings account to reach your goal in five years.

To achieve your goals, save on a regular basis. One guideline is to save 10 percent of take-home pay each month. That goal may be unrealistic for some people. Perhaps saving 4 or 5 percent of your income is more feasible. Once savings goals ar met, excess funds can be invested for long-term goals.



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You may need to change your lifestyle to make savings a part of your budget.

Tips for Saving

- **Pay yourself first.** Consider savings as a fixed expense similar to the rent or utility bill. Put away some money before you do anything else with your paycheck. Have funds automatically deducted from your paycheck and put into a savings plan.
- **Save windfall income.** The theory is simple. You got along without the tax refund or gift, so why not save it? A similar tip is to save monthly loan payments after a loan is repaid.
- **Change your lifestyle.** Finding money to save may require some major changes. Moving to less costly housing or making do with one car could free up to hundreds of dollars each month. Cutting back on eating out, entertainment, and daily trips to the vending machine—over time—can yield more savings.
- **Join America Saves.** Sign up for this free program that encourages you to chart your progress toward a savings goal. You'll receive a free newsletter and get free advice by phone or e-mail from financial planners. This national campaign involves more than 1,000 organizations—including Cooperative Extension—and encourages families to save and build wealth. For more information see www.americasaves.org.

Where to Save

Savings options are characterized by low risk on the principal, high liquidity (ease of converting to cash), and a low rate of return.

Once you have decided how much to save, the next question is where. Savings options are characterized by low risk on the principal, high liquidity (ease of converting to cash), and a low rate of return. The following are common savings alternatives.

- **Savings accounts and certificates of deposit** are government-insured savings alternatives offered by banks, savings and loan associations, and credit unions. Minimum deposits, interest rates, checking privileges, and service charges vary on savings accounts. Certificates of deposit (CDs) vary in the requirements for minimum investment, rates of return, and length of maturity. Early withdrawal penalties are assessed if CDs are cashed before maturity.
- **U.S. government securities** offer low-risk savings options. Series EE and I savings bonds, Treasury bills, notes and bonds and federal agency bonds reach maturity within a stated number of months or years. Series EE and I bonds can be purchased at most financial institutions, through payroll savings plans, or online through transfers from a savings or checking account (see www.treasurydirect.gov).
- **Money market mutual funds** invest in money market instruments such as Treasury bills, bank certificates of deposit, and commercial paper. They are managed by private corporations that charge a small annual fee for their services. Deposits are not federally insured. Initial minimum deposits are commonly $250 to $2,500. Most funds offer free check-writing privileges. There often is a minimum check limit of $250.

Table 1

Risk and the Three Major Asset Categories

Business/Industry Risk
Stocks High Can be eliminated through diversification
Bonds High (for corporate bonds) Can be eliminated through diversification
Cash None
Stock Market/Interest Rate Risk
Stocks High Return variation: -26.5% to 52.6%
Bonds High Return variation: -5.1% to 29.1%
Cash None
Inflation Risk
Stocks Low Real average returns: 7.5%
Bonds High Real average return: 1.8%
Cash High Real average return: 0.5%
Liquidity Risk
Stocks Liquid markets but high risk of selling at a loss
Bonds Liquid markets but high risk of selling at a loss
Cash Low: Use to reduce liquidity risk of total portfolio

Note: Returns cover the period 1946-2004.

Source: Investing Basics . . . . and Beyond. American Association of Individual Investors. 2005.

Investment Basics

Investing involves three steps.

1. Identify your long-term financial goals.
2. Learn about investment options.
3. Match your investments with your goals.

Investing is all about returns and risk. In general, the higher the expected return, the greater the risk. There are several sources of risk.

- **Business risk.** Poor management decisions or a down-turn in an industry can lead to lower returns or loss. Stockholders in a company that goes bankrupt may lose all the money invested.
- **Market risk.** A decline in the overall economy may result in a drop in an investment's value. Stock in a chain restaurant might drop in value when there is more unemployment and consumers cut back on eating out.
- **Inflation risk.** Future rates of inflation will affect the purchasing power of an investment. An investment earning no more than the inflation rate is losing value after income tax is paid.
- **Liquidity risk.** This is the risk of not being able to sell an investment at a reasonable price. It may take months or years to sell real estate in a slow market.

Table 1 summarizes risk and the three major categories of financial assets. There are two ways to minimize risk. First, become more knowledgeable about investment alternatives. For example, a wise investor would not purchase an investment that historically had low returns and high risk. Second, diversify your investments.

Diversification

Diversification simply means not putting "all your eggs in one basket." Diversifying reduces your risk. The key involves investing in categories or types of investments that are affected by different kinds of risk.

Seek Advice

The adage "investigate before you invest" is old but not out-of-date.

- The library has extensive information, such as *The Wall Street Journal*, *Money*, and *Kiplinger's Personal Finance Magazine*.
- Three helpful Internet sites are sponsored by the nonprofit Alliance for Investor Education (www.investoreducation.org), the American Association of Individual Investors (www.aaii.com), and ISU Extension (www.extension.iastate.edu/investwisely).
- If an investment opportunity sounds too good to be true, it probably is. The Iowa Securities Bureau of the Iowa Department of Commerce (330 Maple St., Des Moines, IA 50319) provides answers to consumer inquiries and complaints. Call (877) 955-1212 or see www.iid.state.ia.us.

Savings Plan Worksheet[1]

1. Write down your goal, the estimated amount you'll need to reach this goal (in column A), and when you'd like to have this amount (in column B). The example uses $10,000 for a car in five years.
2. Use **table 2** (Compounding Factors) to figure compound interest on your savings. Select the interest rate that your savings will earn. Go down the interest rate column and across the number of years row. The compounding factor number is at the intersection of this column and row. (In the example, at 4 percent interest this number is .185) Enter this number in column C.
3. Multiply the number in column A by the number in column C to get yearly savings. Enter this number in column D.
4. Divide the yearly savings goal in column D by 12. Enter this number in column E. This is the amount you'll need to save each month to reach your goal.
5. Add up the amounts in colume E, the monthly savings for each goal. Incorporate this amount of savings into your monthly spending plan.

Goal	A Amount Needed	B When Needed	C Compounding Factor	D Yearly Savings (A x C)	E Monthly Savings (D ÷ 12)
Car	$10,000	In 5 years	.185	$1,850	$154.17
				Total monthly savings	**$**

Table 2
Compounding Factors (Annual)

Years	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	.498	.495	.493	.490	.488	.485	.483	.481	.478	.476
3	.330	.327	.324	.320	.317	.314	.311	.308	.305	.302
4	.246	.243	.239	.235	.232	.229	.225	.222	.219	.215
5	.196	.192	.188	.185	.181	.177	.174	.170	.167	.164
6	.163	.159	.155	.151	.147	.143	.140	.136	.133	.130
7	.139	.135	.131	.127	.123	.119	.116	.112	.109	.105
8	.121	.117	.112	.109	.105	.101	.097	.094	.091	.087
9	.107	.103	.098	.094	.091	.087	.083	.080	.077	.074
10	.096	.091	.087	.083	.080	.076	.072	.069	.066	.063
15	.062	.058	.054	.050	.046	.043	.040	.037	.034	.031
20	.045	.041	.037	.034	.030	.027	.024	.022	.020	.017
25	.035	.031	.027	.024	.021	.018	.016	.014	.012	.010
30	.029	.025	.021	.018	.015	.013	.011	.009	.007	.006

[1]Worksheet adapted from *Financial Fitness Build Your Savings* by Jeanne M. Hogarth, former associate professor, consumer economics and housing, New York State College of Human Ecology, Cornell University.

For more information, visit **www.extension.iastate.edu/finances** *or* **www.extension.org/personal+finance** *or the Iowa State University Extension office in your county.*

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