Show Me The Money
Lesson 5: SAVINGS AND INVESTMENTS

Overview

Establishing a savings and investment program is an important part of strong financial management. With careful, advanced planning it is possible to achieve financial solvency, secure a savings fund for emergencies, and develop a high-yield investment portfolio that will see you comfortably through the future.

This lesson offers tips for putting money aside to start a savings plan, and information for determining how much to save. Next, it explores some possible savings options, including financial institutions (banks, credit unions, savings and loans) certificates of deposit, savings bonds, U.S. Treasury securities, cash value life insurance, and money market mutual funds.

When you have more income to invest, you will want to explore financial opportunities that provide a higher rate of return. Some common types of investments include stocks, bonds, mutual funds, and real estate. A comprehensive investment plan also should consider a plan for retirement. Some of the common types of retirement plans previewed in the lesson are employer plans, individual retirement accounts, and the Keogh plan for the self-employed.

Finally, the lesson provides some additional factors to consider when determining your savings and investment strategy. These include the effects of taxes and inflation, liquidity, risk, return, and diversification. Given the complex nature of today’s financial marketplace, the lesson also lists resources to consult if you need help making tough financial decisions.

Savings

Setting Goals

Savings and investment goals can be identified as building blocks that range from financial solvency to investment income in long term, high-yield securities. Some savings and investment goals that you may have already achieved, or might want to consider include the following:

Solvency. To have enough money to meet current expenses

Emergency reserve and access to credit to pay unexpected bills. A good reserve amount for an emergency fund is generally between 3 and 6 months take-home pay.

Risk protection. Typically accomplished with the purchase of insurance (see Lesson 4) to guard against financial loss due to illness or disability, death, property damage, or liability.

Home ownership.

Investment plan. To reach specific goals, such as retirement or a child’s education.

Estate plan. To transfer accumulated wealth.
Tips for Beginning a Savings Program

For many families, the problem with beginning a savings program is finding the income to get started. Most savings programs do not begin with a large initial deposit, but rather come from several smaller amounts saved gradually over a longer period of time. Here are some simple relative painless ways to start putting aside money:

- **Saving windfall income.** (e.g., a work bonus, tax refunds, overtime pay, etc.)
- **Trimming excess spending.** (e.g., avoid eating out, set an entertainment budget, limit gift spending, etc.)
- **Avoid credit card use.** Take cards out of your wallet so you will have to pay with cash or postpone buying.
- **Paying yourself first.** Consider savings a fixed expense, much like a bill. Set aside a regular amount from your take-home pay before you do anything else with your paycheck. If an automatic payroll deduction is available to you, consider having a set amount automatically deducted and deposited to a savings account. Saving in regular, smaller amounts usually is more successful than putting aside large amounts sporadically.
- **Continuing installment payments once a loan is paid off.** Deposit the money you previously budgeted for installment payments (a car or appliance loan) into your savings account—even after the item is paid off.
- **Collect loose change.** Have a savings jar handy for change, and periodically deposit the balance into savings.
- **Break a habit.** Give up vending machine items and pay yourself the money you would have spent. If you give up other habits, such as smoking, pay that amount to your savings plan.
- **Take your lunch.** Taking your lunch instead of eating out can save up to $50 or more per week.

How Much To Save

In Lesson 1 you completed “Your Financial Action Plan Worksheet,” which identified your family’s financial goals. Now you need to determine how much money you will need to reach those goals.

Table 1 will help you determine how much to save each month to accumulate the amount needed to reach your goal. The rate of return indicates the income earned from an investment. The years to achieve goal sets time for accumulating the money.

For example, if you’ll need $5,000 in 5 years for a down payment on a new car, you must save $71.31 each month at a 6 percent rate of return to reach your goal. If you want to have $10,000 accumulated in a college fund 10 years from now, you must save $51.29 monthly at a 9 percent rate of return. Note if the rate of return (interest rate) changes, so will the time to reach your financial goal.

Table 1. Long-term savings plan.

<table>
<thead>
<tr>
<th>Total dollars needed</th>
<th>Years to achieve goal</th>
<th>Monthly amount at 6% rate of return</th>
<th>Monthly amount at 9% rate of return</th>
<th>Monthly amount at 12% rate of return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>$ 5,000</td>
<td>$71.31</td>
<td>$30.36</td>
<td>$17.11</td>
<td>$10.77</td>
</tr>
<tr>
<td>$10,000</td>
<td>142.61</td>
<td>60.72</td>
<td>34.21</td>
<td>21.54</td>
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<tr>
<td>$15,000</td>
<td>213.92</td>
<td>91.08</td>
<td>51.32</td>
<td>32.30</td>
</tr>
<tr>
<td>$20,000</td>
<td>285.23</td>
<td>121.43</td>
<td>68.43</td>
<td>43.07</td>
</tr>
</tbody>
</table>
Savings Options

Once you have decided how much to save, the next question is where to invest your money. Many financial institutions (banks, credit unions, savings and loans) offer various types of savings alternatives, usually at a lower rate of return than higher risk investments. (Risk is the uncertainty that you will get the return expected.) Also, financial institution investments are usually more liquid—meaning they can quickly and easily be converted into cash.

Interest-bearing checking and savings accounts are offered by banks, credit unions, and savings and loans. Shop for the best rates because interest rates, compounding frequencies, and services vary widely among financial institutions. Before deciding on an institution, determine the effective yield that takes into consideration the effect of compounding frequencies. If the financial institution where you have a checking or savings account is insured by a fund of the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA), a single account is insured up to $100,000 by the federal government.

Certificates of deposit, often referred to as CDs, are purchased for specific amounts of money at a fixed rate of interest for a specific amount of time. Some CDs may be purchased for $500, but most require a $1,000; $5,000; or $10,000 investment. You can buy a CD for as short as 7 days or for as long as several years. The longer time usually carries a higher interest rate. If you cash in the CD before the specified time, you will pay interest penalties. The FDIC insures CDs, if the financial institution where you purchase the CD is a member of the FDIC.

U.S. Savings Bonds come in three varieties Series EE, Series I, and Series HH. You can cash a savings bond before it matures but bonds cashed before five years of ownership are penalized with an interest rate that is lower than the market rate.

- Available at most banks and/or through payroll deduction, EE bonds are purchased for half of their face value, which is the amount the bond is worth when it matures. For example, you might purchase a $50 savings bond for $25 that matures in 8 to 12 years. The interest rate is keyed to variable interest rate based on market interest rates. EE Bonds may be purchased in denominations from $25 to $10,000 with a maximum purchase limit of $15,000 annually per individual.
- The new I-Bond or Treasury Inflation Protection Securities (TIPS) is a variation of the Series EE Bond. The interest rate on the TIPS is tied to the Consumer Price Index. The interest will equal the inflation rate plus a fixed rate of return. Interest is paid to the bondholder semi-annually. The investor can elect to defer receipt and tax on the interest until the bond reaches maturity.
- HH bonds are purchased from a Federal Reserve Bank or through the Treasury at face value. You cannot buy HH bonds with cash. They can be acquired by trading a minimum of $500 worth of EE bonds or by reinvesting a Series HH Bond that has matured. Series HH bonds mature in 10 years with interest paid semi-annually (via check or an electronic funds transfer) to the bondholder’s bank account.

There are no sales charges for these bonds. Interest income earned is exempt from state and local taxes and can be deferred from federal income tax until the money is actually received. Some parents purchase EE bonds to save for their children’s education. For taxpayers within certain income limits, EE Bond income is exempt from federal taxation when used to meet college expenses. Other types of bonds are discussed further in investment portion to this lesson.

U.S. Treasury securities include Treasury bills (T-bills), notes, and bonds. These can be purchased through financial institutions for a fee or at a branch of the Federal Reserve Bank with no added cost. They usually are sold in multiples of $1,000, $5,000, or $10,000.

Cash value life insurance includes a forced savings element that adds to the cost of life insurance. The build-up of cash is tax deferred and can be borrowed from the policy. Keep in mind that the primary purpose of insurance, however, is protection against risk of loss rather than the accumulation of savings. Even so, insurance policies often are sold as savings vehicles, but may have high front-end commissions and low cash value in the early years, which dilutes both the risk protection and the savings performance of the money invested.

Money market mutual funds generally provide competitive rates of return and liquidity. These are mutual funds (discussed further in the investment portion of this lesson) that are invested in money market instruments such as Treasury bills, bank certificates of deposit, and commercial paper. The funds are managed by private corporations that charge a small annual fee for their services. There generally is no commission charge (referred to as “no load”) for making deposits. Initial minimum deposits are commonly $1,000 to $2,500. Interest is compounded daily.

July 2001
The rate of return varies daily, depending on the earnings from the fund’s investments. Deposits are not federally insured, although the investments are considered to be quite safe. To the extent that the money is held in U.S. securities, there is little risk of loss. Most funds offer a free check-writing privilege with restrictions. There is often a minimum check limit of $500.

**Investments**

The line between “savings” and investments” isn’t always clear. Generally, when you invest, you seek a higher rate of return than when you save. To obtain this higher return, you usually must sacrifice some liquidity or security of funds. Use the factors described at the beginning of the lesson to evaluate investments according to your goals.

**Common Types of Investments**

Common types of investments include stocks, corporate and municipal bonds, mutual funds, real estate, collectibles, and futures contracts. The decision about which investment to choose is influenced by factors such as yield, risk and liquidity.

Investments that provide payments of interest, dividends, or rent are known as “current income.” Growth (or appreciation in investments) in the value of an investment is known as “capital gains.”

**Investment choices for current income include:**
- Corporate and municipal bonds
- High-quality corporate stock with a history of steady earnings
- Telephone, gas, or electrical utility stocks
- Mutual funds that focus on investments producing current income

**Investment choices for capital growth include:**
- Common stocks in growth-oriented companies
- New or small companies that have good future potential
- Mutual funds that focus on capital growth
- Real estate in growth areas

**Common and preferred stock.** When you own shares of stock you become part owner of a company. If the company does well, the value of your stock should go up over time. If the company does not do well, the value of your investment will decrease. Companies distribute a portion of their profits to shareholders as dividends. Companies issue two type of stock, common and preferred. Common stock is the basic form of ownership in a company. People who hold common stock have a claim to assets of a firm, after preferred stockholders’ and bondholders’ claims are paid.

Preferred stock is ownership in a company that has a claim to the assets and earnings of a firm before common stockholders, but after bondholders. The safety of the principal of preferred stock is somewhat greater than that of common stock.

Selecting individual stocks requires time, effort, and knowledge. The objective when buying is to choose those stocks that will increase in value over time. The common advice “buy low and sell high” is easier said than done. Selecting stocks is both an art and a science.

**Bonds.** When you own a bond, you have loaned money to a company or a governmental unit. In return, the borrower will repay the amount borrowed plus interest. Corporate bonds are issued by publicly owned companies, while municipal bonds are issued by state or local governments.

The price of a bond will fluctuate as interest rates go up or down. If you hold the bond to maturity you will receive an amount stated on the bond known as the “face value.” For example, if you buy five corporate bonds at $1,000 each and the bonds mature in 10 years, even if the value of the bond changes over the period of time you hold it, the bonds will be worth a total of $5,000 at the time of maturity. In addition, the borrower may promise to pay you an interest payment twice a year for 10 years. The declared interest of the bond is called the “coupon rate.”
Municipal bonds are interest-bearing, long-term bonds issued by state and local governments. They are used to finance schools, roads, hospitals, and libraries. Investors receive a lower rate of return in exchange for having the income exempt from federal income tax.

“Junk bonds” is a slang term for speculative, high-risk, high-interest-rate corporate or municipal bonds. The default rate is much higher on junk bonds than on higher quality bonds. Junk bonds may be used by companies of little financial strength.

The risk in purchasing corporate bonds is that the corporation may not be able to pay interest or return you principal at maturity.

**Mutual funds.** A mutual fund invests the pooled money of its shareholders in various types of investments. It is managed by a funds manager who buys and sells securities for the shareholders. Mutual funds are not risk free. Their values rise and fall along with the securities in the fund.

Benefits of mutual funds for the beginning investor can include:

- Diversification of investment
- Professional management
- Relatively low-cost shares
- Liquidity and convenience (easy to buy and sell shares)

Each mutual fund has a fund objective that determines the types of securities it contains. This objective stated clearly in the prospectus, which is the legal document describing the fund.

For example, a fund objective may be “growth and capital preservation.” This fund might own high quality stocks in large well-known companies. Here are other fund objectives and corresponding investments:

<table>
<thead>
<tr>
<th>Fund objective</th>
<th>Likely investment holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Bonds and/or preferred stock</td>
</tr>
<tr>
<td>Income and safety</td>
<td>Government bonds or preferred stock</td>
</tr>
<tr>
<td>Moderate growth</td>
<td>Preferred and common stock</td>
</tr>
<tr>
<td>Aggressive growth</td>
<td>Stock in small growth companies</td>
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More than 3,400 different mutual funds are available. The investor should learn the objective of the fund, which securities the fund owns, the level of risk, and the earning record as compared to similar funds.

Mutual funds have annual management fees. Some funds have additional fees when shares are bought and sold. The two types of funds are **no-load funds** purchased directly form the fund and do not charge a purchase fee, and **load** funds purchased through brokers or directly from the investment company with an up-front or back-end fee of 2 to 8 percent depending on the fund.

Also a redemption fee is levied when share are sold. The fund prospectus must disclose all fees and costs related to the funds. The 1-year, 5-year, and 10-year earnings record, after fees, must also be revealed.

Shares in a mutual fund are priced by dividing the value of the fund by the number of shares owned. As the value of the securities in the funds goes up or down, the value of the shares changes accordingly.

Many mutual funds are part of a family of funds. A financial service company may offer several funds with different objectives, and investor may switch from one fund to another within the same family at little or no expense. For example, if you own a bond fund and you believe stocks are going to do well, you could switch your shares into the stock funds within the same family of funds.

**Real Estate**

Real estate is property consisting of land and all permanently attached structures with any rights and privileges. These include mineral rights as well as crops. Real estate carries special tax provisions that often increase after-tax income. The best return from real estate is commercial properties. Real estate is generally low to moderate risk and return rate is roughly equal to the inflation rate. Other benefits are positive cash flows, price appreciation and leverage. Disadvantages include cost and liquidity.

**Retirement Plans**

One very common and important financial goal is saving for retirement. A variety of savings plans are designed specifically to help you prepare for your retirement years.
Employer Plans

Your employer may be contributing toward your retirement with an employer plan. In some cases, the employer covers the full cost of the plan; in others, you are required to make additional payments or have the option to do so. Employer plans vary widely in their benefits and requirements. The 1974 Employee Retirement Income Security Act requires retirement plan administrators to provide you with a summary of your plan upon request.

Study the details of your plan and verify the amount of your contributions on a regular basis. Make sure you understand your vesting rights—the legal claim to your retirement benefits—in case you change employers, are fired, or quit. A retirement fund is money saved for you. You need to stay well informed so that you will receive all of the benefits for which you are eligible.

Individual Retirement Accounts (IRAs)

Current law allows individuals with adjusted gross incomes (AGI) of less than $30,000 a year to contribute $2,000 or 100 percent of their earned income (whichever is less) to a tax-deductible Individual Retirement Account. Married couples who have an adjusted gross earned income of less than $50,000, and who file a joint federal income tax return, may contribute up to $4,000 to an IRA.

If you fall into these income categories, the amount you contribute to an IRA is deductible on your federal income tax return. You may take a partial deduction if your AGI ranges within $10,000 of those amounts. The amount you invest, plus the interest it earns, is not subject to federal income tax until you withdraw it. However, there are regulations that govern withdrawal of funds. Seek a financial counselor for other information on the law related to tax shelters.

You can build an IRA with one of these four methods: (1) contribute to a specially designated IRA savings plan; (2) turn over funds to a trust administrator in a bank or other approved institution who will, for a fee, invest on your behalf; (3) buy an annuity or other retirement income policy from an insurance company; or (4) buy mutual fund shares from securities brokers or fund sponsors.

The ROTH IRA created by Tax Law in 1997 currently allows non tax-deductible contributions of up to $2,000 for individuals with earned income under $95,000 for a single taxpayer and $150,000 for joint filers. The beauty of the ROTH IRA is that earnings accumulate tax free if the ROTH IRA is held 5 or more years. Penalties may be assessed for early withdrawals of all IRAs.

Keogh Plan

If you are self-employed, you can set aside up to $30,000 or 25 percent of your net earned income (whichever is less) each year under the provisions of the Keogh plan.

The amount you contribute to your Keogh plan is deductible on your federal income tax return. Taxes are not paid until you withdraw funds from the plan. There are, however, regulations that govern the withdrawal of funds.

You may design your own Keogh plan, subject to the approval of the Internal Revenue Service, or you may participate in one of the three established plans. They include (1) set up a trust with a bank or other qualified institution, (2) buy annuities or retirement contracts from an insurance company, or (3) begin a custodial account in a bank that can transfer your money into either mutual fund shares, annuities, savings deposits, or life insurance contracts.

Most large financial institutions have prototype Keogh plans already approved by the IRS. With most of these plans, you have the choice of contributing a specified amount annually or basing your contributions on your profits. When you own a business and establish a Keogh plan for yourself, you must also start a plan for employees who meet certain requirements. More detail is available in a Pension Planning book or manual.

Determine Your Savings and Investment Strategy

A major enemy of a secure future is the loss of purchasing power from savings and investments due to both taxes and inflation. It is not difficult to figure your needed rate of return if you first establish your tax bracket rate. This rate is found in your income tax instruction book and is based on your taxable, not total, income. Once you know your tax rate, take the inflation rate and divide it by “100 minus your tax rate.” For example if the inflation rate is 5 percent and your tax bracket is 15 percent, then:
5 (Inflation rate) = 5 = 5.88%

100 – 15 (Tax rate) = 85

You would need to earn 5.88% on your investment to maintain purchasing power. If you invest at a higher rate, you will increase your earnings and show a profit. Additional factors to consider when developing a savings and investments strategy include liquidity, risk and stage in the life cycle, return, inflation, and diversification.

**Liquidity**

How quickly will you need your money? Keep in mind that liquidity is the speed and ease with which an asset can be converted into cash. Savings held in bank accounts and money market funds are appropriate for short-term needs (a year or less) because they are liquid. Investments such as stocks and bonds are suitable for longer-term goals because they are less liquid. It is true that they can be sold at any time, but if you are forced to sell when the market is down, you can lose some of the original money you invested. Certificates of deposit are not liquid either, since they cannot be converted into cash prior to the maturity date without a penalty.

**Risk**

As a general rule, the greater the promised return, the greater the risk. Risk tolerance is a person’s ability to ride out the ups and downs of the market. It varies from person to person and can change with different stages in the life cycle. Young adults with growing income potential may take greater investment risks than people who are approaching retirement. How much should a person expect to earn on a typical investment? The average investment return over time has been the inflation rate plus 3 percent. For example, if the current inflation rate is 5 percent, an investor might expect an average return on an investment of about 8 percent. Some investments will yield less, others more.

If you are promise a return on an investment that is greater than 3 percent over the inflation rate, be alert to the possibility of high risk or even fraud. The return may be too good to be true. A scam artist may promise an unrealistically high return just to get your money.

People who don’t sleep well at night when principal value of their investment goes down should select savings and investments with less risk. On the other hand, investments that insure the safety of principal may not maintain purchasing power in time of high inflation.

Those who are more comfortable with ups and downs can put their money in investments that pay a higher rate of return. These investments may maintain purchasing power over time but can fluctuate wildly in the short term. There are six major types of investment risk:

- **Interest rate risk** is the risk that the value of an investment will decrease due to a rise in interest rates.
- **Business failure risk** is the risk that a business will fail and the investment will be worthless, or that a business will be less profitable than expected.
- **Market price risk** is the risk that the price of an investment will go down.
- **Inflation risk** is the risk that the financial return on an investment will lose purchasing power due to a general rise in prices of goods and services.
- **Political risk** is the risk that government actions, such as trade restrictions or increased taxes, will negatively affect business profits and investment returns.
- **Fraud risk** is the risk that the investment is designed to deceive and misrepresent the facts.

**Return**

The basic idea of investing is to commit money today with the expectation of a financial gain in the future. The return can come from earnings and from growth.

Earnings on your investment can be in the form of interest, dividends, or rent payments. You will recall that interest is the payment received in exchange for the loan of money. A dividend is payment to stockholders from the earnings of a corporation. Rent is payment received for the use of property.

Growth comes from price appreciation on an investment. If you sell an item for more than you bought it for, you will realize growth or capital gain. If you have to sell for less than you paid, it is called a capital loss.
The following example demonstrates both investment earnings and growth. If you buy 100 shares of a no-load mutual fund stock at $20 a share, your total cost is $2000. If during the year the fund pays dividends totaling 10 cents a share, your earnings from the investment would be $10. If you sold the shares at the end of the year for $22 a share, you would have a profit of $2 a share, or $200. Your return of earnings plus appreciation would be $210 (10.5%), a very good year (keep in mind that this example ignored commissions and fees you would have to pay to invest).

**Inflation**

Inflation is an important factor for investors to consider because it reduces the purchasing power of your money. The value of money is measured in the amount of goods and services it will purchase, and inflation is a general rise in the price of goods and services.

In inflationary time, financial return on investments may not keep pace with the rate of inflation and purchasing power is lost. For example, if you have $1,000 in a bank savings account earning 5 percent interest ($50 a year) and the inflation rate is 6 percent, you will have lost $10 in purchasing power by investing at this rate. That is because it now costs you $1,060 to buy the same products you bought for $1,000 when you made the investment.

Historically, corporate stocks and real estate have been good investments in inflationary times, while bonds and other fixed return investments have lagged behind.

The desire to have investments keep up with the rate of inflation should be balanced against the potential loss of principal due a high-yielding but risky investment. As suggested earlier, the guidelines to seek investment return of the inflation rate plus 3 percent. Promised returns above this amount usually carry high and even dangerous risk.

**Diversification**

The process of reducing risk by spreading money among various types of investments is known as diversification. Because some investments perform better than others in certain economic conditions, an investor can spread the risk by following the advice, “Don’t put all of your eggs in one basket.”

**Seek Advice, Resources**

The financial marketplace becomes more complex every day. As a saver/investor you face more choices than ever before, which means that you need more information before making a decision. These sources can help you:

**Selected Books and other Publications**

- An Investors Guide to Reading the Mutual Fund Prospectus, 40¢, and What is a Mutual Fund? 8 Fundamentals, 25¢, Investment Company Institute, 1401 H Street N.W., 12 the Floor, Washing, DC 20005
- Standard and Poor’s Manual (at brokers’ offices and some libraries)
- Moody’s Manual (at brokers’ offices, banks, and some libraries)
- Morningstar Mutual Funds newsletter with data on more than 1,500 mutual funds (available at some libraries)
- Value Line Investment Survey review of more than 1,700 stocks (available at some libraries)
- “Wall Street Week”, a TV program on PBS
Summary of Suggested Activities for Savings and Investments

- Determine your savings goals and the amount of money you can save each month to reach your goals.
- Use the formula from “Determine Your Savings and investment Strategy” section to evaluate the interest rate of return you need to stay even with your investments.
- When savings goals have been set, and adequate risks protection is provided, explore investment possibilities.