## Four Criteria for Guiding Financial Investment Decisions

Liquidity: How easily an investment can be turned into cash.
Risk: The chance an investor might lose some or all of the money invested.

Return: The earnings from an investment.
Tax Treatment: The extent to which the earnings from an investment are taxed.

## Financial Investment Options

To make wise financial investments, it is important to understand the various investment options.

Regular (Passbook) Savings Accounts: These accounts are very safe because depositors are currently insured up to $\$ 250,000$ by the Federal Deposit Insurance Corporation (FDIC). The maximum amount of deposit insurance is sometimes changed, so customers should always check with their banks to determine the current insurance limit. The interest rate on
 savings accounts is lower than for other investments, but accounts can be opened with very little money and people can usually withdraw funds whenever they like. Money market deposit accounts are like regular savings accounts and typically pay a rate of interest similar to that of money market mutual funds. But there is a larger minimum deposit, and if the balance falls below that amount, there may be a fee. People can write checks on a money market deposit account, but to avoid fees, the total number of checks and/or withdrawals is limited to no more than three per month.

Certificates of Deposit (CD): These are special types of savings accounts that must be left in the bank for a set period of time. The longer the time period, the higher the interest rate. During the time period, depositors receive a fixed rate of interest, which is usually higher than for a savings account. A depositor must forgo some of the interest earned on a CD if it is cashed out prior to maturity. As with savings deposits, depositors are currently FDIC-insured up to $\$ 250,000$ of their total deposits in a bank.

Stocks: Stocks represent shares of ownership in a company and are issued to finance business operations. Stocks are first issued by using an IPO - an initial public offering. After that, stocks are traded on various stock exchanges (secondary markets), such as the New York Stock Exchange (NYSE) and the NASDAQ (National Association of
 Securities Dealers Automated Quotation system). Stock owners hope that the value of their shares will increase as a company grows and prospers. Stock owners may also receive dividends, although some stocks (such as growth stocks) seldom or never pay dividends. Growth stocks usually represent smaller, fastergrowing companies that reinvest all their profits into the company. Income stocks, on the other hand, pay dividends regularly and represent larger, more established companies.

Another term used to describe some stocks is value stock. A value stock represents a company that is believed by analysts to be underpriced relative to the stock's fundamentals (earnings, dividends, sales, etc.), usually because of underlying problems or limited growth prospects. A penny stock generally refers to a low-priced (under \$5), speculative security of a very small company. Penny stocks are, of course, very risky.

To summarize, stocks can be risky, but they have the potential for significant long-term gain.

Bonds: Companies and various levels of government often raise money by issuing bonds. After they are initially issued, bonds, like stocks, can be traded on exchanges. A bond is basically an IOU certificate. The most common type of bond is a coupon bond, in which the borrower promises to pay the bondholder a fixed rate of interest (coupon rate) on the face value (principal) of the bond over a fixed time period (term to maturity). At the end of the time period (maturity date), the borrower receives back the entire face value of the bond. The figure below illustrates how a coupon bond works. ${ }^{5}$

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## Coupon Bonds



> A 3-year coupon bond with a coupon rate of $6.0 \%$ and a face (par) value of $\$ 1,000$

With a zero coupon bond, the purchaser buys the bond at a discount. At the end of a fixed time period, the borrower receives back an even numbered payment, such as $\$ 1,000$ or $\$ 5,000$. Thus, the actual interest a borrower receives is implied by the difference between the price received at maturity and the purchase price paid at initial issuance. For any given time period, the lower the discounted price, the more interest the borrower receives. (See figure below.)

## Zero-Coupon Bonds

Accumulated interest
plus principal paid at maturity

Buy bond at discounted price

No interest payments

Maturity date 3 years

Zero-coupon bonds are sold at a discount and mature at an even amount such as \$1,000, \$5,000, or $\$ 10,000$. This figure simplifies the process.

Bonds have traditionally been thought of as a rather safe investment. However, bonds can lose value quickly if market interest rates rise. For example, suppose Jarrod bought a newly issued $\$ 1,00020$-year corporate bond with a coupon rate of $4 \%$. Each year, assuming the company stays in business, he will get $\$ 40$ in interest payments. But suppose a year later, interest rates in the economy have risen significantly and new corporate bonds are now being offered with an $8 \%$ coupon rate. If Kristy purchases one of these new bonds, she will receive $\$ 80$ a year in interest payments. If you were in the market to purchase a bond, whose bond would you rather purchase? Right Kristy's! The only way you would purchase Jarrod's is if the bond price were low enough so that the interest payments resulted in a return of $8 \%$. In our example, the price of Jarrod's bond would have to fall to $\$ 500$ to equal an interest rate of $8 \%$ - and that's a big loss for Jarrod, if he sold it. Of course, he could wait 19 years and it would be worth $\$ 1,000$ again, but that's a long time, and he is still experiencing an opportunity cost - the lost opportunity to sell the bond at the price he paid for it. Bonds can also be risky if the issuer is not creditworthy. Remember, there is always the risk that the company (or other entity) issuing the bond will go out of business.

There are other types of bonds besides corporate bonds. Municipal bonds are issued by state and local governments or their agencies. Municipal bonds are called "tax exempts" because the interest paid is usually exempt from federal, state, and local income taxes. U.S. Treasury bills, notes, and bonds are considered very safe investments because the principal and interest is backed by the full faith, credit, and taxing authority of the U.S. government. Savings bonds are also U.S. Treasury securities which are issued at a set, non-negotiable price. Savings bonds are not as liquid as many other securities since they aren't traded in an organized secondary market after they have been issued. In addition, savings bonds that are cashed out too early often incur an interest penalty. They can be attractive to many small investors because of the ease with which they can be purchased and the small denominations in which they are issued.

Third-party sources such as Moody's Investors Service or Standard \& Poor's rate bonds according to credit worthiness and are very helpful when people make bond purchases. The Moody's ratings are below.

## Moody’s Investor Service Bond-Rating Codes

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Aaa Highest quality
Aa High quality
A Upper-medium quality
Baa Medium grade
Ba Somewhat speculative
B Low grade, speculative
Caa Low grade, default possible
Ca Low grade, partial recovery possible
C Default, recovery unlikely
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Mutual Funds: A mutual fund is a diversified, professionally managed portfolio of securities invested on behalf of a group of investors. Individual investors own a percentage of the value of the fund represented by the number of units they purchased and thus, they share in any gains or losses of the fund. In general, the riskiness of the fund is determined by the riskiness of the securities managed by the fund. Thus, a mutual fund that invests in high-risk small cap stocks is obviously more risky than a fund that invests in short-term U.S. government securities. Owning shares in a mutual fund is less risky than owning one particular security since the diversified mutual fund portfolio spreads the risk over many securities/companies.

Real Estate: Real estate is basically property consisting of houses and land. Most investors in real estate buy the house they live in, although some people purchase properties and rent them to others as investments. Houses can increase in value, but housing prices can also fall, sometimes significantly, as they did in 2008-09. It also can be costly to maintain a piece of property. Real estate is not as liquid as a stock or bond since it is usually more difficult to find a buyer and finalize the sale. Real estate can be a good investment, especially since a person receives the benefit of living in the home. The interest paid on the mortgage loan that finances a home purchase may also be tax deductible. Real estate investment typically affords protection from inflation. Real estate has many advantages, but it is not necessarily a "sure thing."

Commodities, Precious Metals, and Collectibles: Some people invest in commodities, precious metals, and other collectibles, such as rare coins, stamps, and art. These investments are often purchased as a hedge against inflation. All of them carry a significant amount of risk, and this should be taken into account when adding them to a portfolio.


## What About Risk?

There is risk associated with any financial investment; no investments are "risk-free." However, not all risk is the same. There are various kinds of risk associated with different investments. ${ }^{6}$

Financial Risk: This is the risk that a business or government will not be able to return someone's money, much less pay interest or dividends. While governments don't usually go "bankrupt" since they can print money, it is not uncommon for a business to do so, leaving investments in the business worthless.

[^1]Market Price Risk: This is the risk that the price of an investment will go down. While this rarely happens to money in savings accounts or money market funds, it happens routinely with other types of investments.

Liquidity Risk: Some investments, such as savings accounts, stocks, and bonds, are very liquid. Others, such as real estate, collectibles, and precious metals are much less so. The Internet is making it easier to buy and sell investments, but there is no guarantee that buyers and sellers can get together and agree on a transaction price and other terms of sale.

Inflation Risk: There is a real risk that inflation will reduce the value of an investment, especially that of savings accounts and bonds. When figuring the real return on an investment, the rate of inflation must be factored in. For example, if someone earns $4 \%$ on a 12 month certificate of deposit, but the annual inflation rate is $3 \%$, the real (inflation-adjusted) return is actually only $1 \%$.

Fraud Risk: Unfortunately, people are sometimes defrauded when purchasing investments. Fancy brochures and slick promotions may actually promote scams with imaginary or misrepresented investments. As a rule of thumb, it is always wise to "investigate before you invest." The best place is often a state's securities regulator.

## Watch Out For Investment Scams! ${ }^{7}$

1. Remember that investing involves risk: There's no such thing as a completely safe investment.
2. Investigate before you invest.
3. Call your state's securities regulator.
4. Don't be pressured into a quick investment decision.
5. Be cautious when investing your money in response to unsolicited offers.
6. Beware of fantastic promises of easy profits.
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## Building a Balanced Portfolio

As a practical matter, how much risk should a person incur when making investment choices? Not surprisingly, this varies from person to person. Some people are naturally more risk averse than others. They usually avoid riskier investments, even conservative stocks and stock mutual funds. Other people are comfortable with risk, and their
 portfolios reflect this. Remember that people may be willing to take on more or less risk depending on their stage of life. As people approach retirement, they tend to become more risk averse in order to protect their retirement savings. A younger person has more time to ride out the ups and downs of riskier investments. But also remember, all investments involve some form of risk. For example, even "safe" investments, such as savings accounts and government bonds, are susceptible to inflation risk.

To manage investment risk, advisors recommend that people diversify their portfolios, and not put "all their eggs in one basket." The financial pyramid below ranks investments according to risks and rewards. ${ }^{8}$ In moving up the pyramid, there is a greater risk, but also more chance for investment reward. At the bottom of the pyramid, there is generally less risk, but investment returns are lower. In other words, people are trading off income security to get more reward, and vice versa.

[^3]
[^0]:    5. From Learning, Earning, and Investing ${ }^{\circledR}$, Council for Economic Education, 2004, p.76.
[^1]:    6. From Financial Fitness for Life: Bringing Home the Gold Student Workouts, Council for Economic Education, 2001, pages 58-59.
[^2]:    7. From the Financial Literacy Posters, Indiana Council for Economic Education, revised 2009, www.kidseconposters.com.
[^3]:    8. Adapted from Financial Fitness for Life: Bringing Home the Gold Student Workouts, Council for Economic Education, 2001, page 61.
