

smaller the mortgage and, all things being equal, the lower the monthly payments. An example of a thirty-year mortgage is shown in Figure 9.9 "Down Payment and Monthly Payment".

Figure 9.9 Down Payment and Monthly Payment

Purchase Price	% Down	Mortgage	Mortgage Rate	Mortgage Payment
250,000	5.00%	237,500	5.00%	1,274.95
250,000	10.00%	225,000	5.00%	1,207.85
250,000	20.00%	200,000	5.00%	1,073.64
250,000	30.00%	175,000	5.00%	939.44
250,000	40.00%	150,000	5.00%	805.23
250,000	50.00%	125,000	5.00%	671.03

Usually, if the down payment is less than 20 percent of the property's sale price, the borrower has to pay for **private mortgage insurance**, which insures the lender against the costs of default. A larger down payment eliminates this expense for the borrower.

The down payment can offset the annual cost of the financing, but it creates opportunity cost and decreases your liquidity as you take money out of savings. Cash will also be needed for the **closing costs** or transaction costs of this purchase or for any immediate renovations or repairs. Those needs will have to be weighed against your available cash to determine the amount of your down payment.

Monthly Payment

The monthly payment is the ongoing cash flow obligation of the loan. If you don't pay this payment, you are in default on the loan and may eventually lose the house with no compensation for the money you have already put into it. Your ability to make the monthly payment determines your ability to keep the house.

The interest rate and the maturity (lifetime of the mortgage) determine the monthly payment amount. With a **fixed-rate mortgage**, the interest rate remains the same over the entire maturity of the mortgage, and so does the monthly payment. Conventional mortgages are fixed-rate mortgages for thirty, twenty, or fifteen years.

The longer the maturity, the greater the interest rate, because the lender faces more risk the longer it takes for the loan to be repaid.

A fixed-rate mortgage is structured as an annuity: regular periodic payments of equal amounts. Some of the payment is repayment of the principal and some is for the interest expense. As you make a payment, your balance gets smaller, and so the interest portion of your next payment is smaller, and the principal payment is larger. In other words, as you continue making payments, you are paying off the balance of the loan faster and faster and paying less and less interest.

An example of a **mortgage amortization**, or a schedule of interest and principal payments over the life of the loan, is shown in Figure 9.10 "A Mortgage Amortization: Year One of a Thirty-Year, Fixed-Rate 6.5 Percent Mortgage". The mortgage is a thirty-year, fixed-rate mortgage. Only year one is shown, but the spreadsheet extends to show the amortization over the term of the mortgage.

Figure 9.10 A Mortgage Amortization: Year One of a Thirty-Year, Fixed-Rate 6.5 Percent Mortgage

End of Month	Payment	Interest Expense	Principle Paid	Balance
				200,000.00
1	1,264.14	1,083.33	180.80	199,819.20
2	1,264.14	1,082.35	181.78	199,637.42
3	1,264.14	1,081.37	182.77	199,454.65
4	1,264.14	1,080.38	183.76	199,270.89
5	1,264.14	1,079.38	184.75	199,086.14
6	1,264.14	1,078.38	185.75	198,900.39
7	1,264.14	1,077.38	186.76	198,713.63
8	1,264.14	1,076.37	187.77	198,525.86
9	1,264.14	1,075.35	188.79	198,337.07
10	1,264.14	1,074.33	189.81	198,147.26
11	1,264.14	1,073.30	190.84	197,956.42
12	1,264.14	1,072.26	191.87	197,764.55

In the early years of the mortgage, your payments are mostly interest, while in the last years they are mostly principal. It is important to distinguish between them because the mortgage interest is tax deductible. That tax benefit is greater in the earlier years of the mortgage, when the interest expense is larger.

Monthly mortgage payments can be estimated using the **mortgage factor**. The mortgage factor is a calculation of the payment per \$1,000 of the mortgage loan, given the interest rate and the maturity of the mortgage. Mortgage factors for thirty-, twenty-, and fifteen-year mortgages are shown in Figure 9.11 "Mortgage Factors for Various Mortgage Rates".

Figure 9.11 Mortgage Factors for Various Mortgage Rates

Mortgage Factor		30-Year	20-Year	15-Year
Mortgage Amount	Mortgage Rate			
1,000	4.00%	4.77	6.06	7.40
1,000	4.50%	5.07	6.33	7.65
1,000	5.00%	5.37	6.60	7.91
1,000	5.50%	5.68	6.88	8.17
1,000	6.00%	6.00	7.16	8.44
1,000	6.50%	6.32	7.46	8.71
1,000	7.00%	6.65	7.75	8.99
1,000	7.50%	6.99	8.06	9.27
1,000	8.00%	7.34	8.36	9.56
1,000	8.50%	7.69	8.68	9.85
1,000	9.00%	8.05	9.00	10.14
1,000	9.50%	8.41	9.32	10.44
1,000	10.00%	8.78	9.65	10.75
1,000	10.50%	9.15	9.98	11.05
1,000	11.00%	9.52	10.32	11.37
1,000	11.50%	9.90	10.66	11.68
1,000	12.00%	10.29	11.01	12.00

The monthly payment can be calculated as

$$\text{mortgage factor} \times \text{principal} \div 1,000.$$

So, if you were considering purchasing a house for \$250,000 with a \$50,000 down payment and financing the remaining \$200,000 with a thirty-year, 6.5 percent mortgage, then your monthly mortgage payment would be $6.32 \times \$200,000 \div 1,000 = \$1,264$. If you used a fifteen-year mortgage, your monthly payment would be $8.71 \times \$200,000 \div 1,000 = \$1,742$. If you got the thirty-year mortgage but at a rate of 6 percent, your monthly payment would be \$1,200.

Potential lenders and many Web sites provide mortgage calculators to do these calculations, so you can estimate your monthly payments for a fixed-rate mortgage if you know the mortgage rate, the term to maturity, and the principal borrowed.

Mortgage Designs

So far, the discussion has focused on fixed-rate mortgages, that is, mortgages with fixed or constant interest rates, and therefore payments, until maturity. With an **adjustable-rate mortgage (ARM)**, the interest rate—and the monthly payment—can change. If interest rates rise, the monthly payment will increase, and if they fall, it will decrease. By federal law, increases in ARM interest rates cannot rise more than 2 percent at a time, but even with this **rate cap**, homeowners with ARMs are at risk of seeing their monthly payment increase. Borrowers can limit this interest rate risk with a payment cap, which, however, introduces another risk.

A **payment cap** limits the amount by which the payment can increase or decrease. That sounds like it would protect the borrower, but if the payment is capped and the interest rate rises, more of the payment pays for the interest expense and less for the principal payment, so the balance is paid down more slowly. If interest rates are high enough, the payment may be too small to pay all the interest expense, and any interest not paid will add to the principal balance of the mortgage.

In other words, instead of paying off the mortgage, your payments may actually increase your debt, and you could end up owing more money than you borrowed, even though you make all your required payments on time. This is called negative amortization. You should make sure you know if your ARM mortgage is this type of loan. You can voluntarily increase your monthly payment amount to avoid the negative effects of a payment cap.

Adjustable-rate mortgages are risky for borrowers. ARMs are usually offered at lower rates than fixed-rate mortgages, however, and may be more affordable. Borrowers who expect an increase in their disposable incomes, which would offset the risk of a higher payment, or who expect a decrease in interest rates, may prefer an adjustable-rate mortgage, which can have a maturity of up to forty years. Otherwise, a fixed-rate mortgage is better.

There are mortgages that combine fixed and variable rates—for example, offering a fixed rate for a specified period of time, and then an adjustable rate. Another type of mortgage is a **balloon mortgage** that offers fixed monthly payments for a specified period, usually three, five, or seven years, and then a final, large repayment of the principal. There are option ARMs, where you pay either interest only or principal only for the first few years of the loan, which makes it more affordable. While you are paying interest only, however, you are not accumulating equity in your investment.

As an asset, a house may be used to secure other types of loans. A **home equity loan** or a second mortgage allows a homeowner to borrow against any equity in the home. A home improvement loan is a type of home equity loan. A **home equity line of credit (HELOC)** allows the homeowner to secure a line of credit, or a loan that is borrowed and paid down as needed, with interest paid only on the outstanding balance. A **reverse mortgage** is designed to provide homeowners with high equity a monthly income in the form of a loan. A reverse mortgage essentially is a loan against your home that you do not have to pay back for as long as you live there. To be eligible for most reverse mortgages, you must own your home and be sixty-two years of age or older. You or your estate repays the loan when you sell the house or die.

Points

Points are another kind of financing cost. One point is one percent of the mortgage. Points are paid to the lender as a form of prepaid interest when the mortgage originates and are used to decrease the mortgage rate. In other words, paying points is a way of buying a lower mortgage rate.

In deciding whether or not it is worth it to pay points, you need to think about the difference that the lower mortgage rate will make to your monthly payment and how long you will be paying this mortgage. How long will it take for the points to pay for themselves in reduced monthly payments? For example, suppose you have the following choices for a thirty-year, fixed rate, \$200,000 mortgage: a mortgage rate of 6.5 percent with no points or a rate of 6 percent with 2 points.

First, you can calculate the difference in your monthly payments for the two different situations. Using the mortgage factor for a thirty-year mortgage, the monthly payments in each case would be the mortgage factor \times \$200,000 \div 1,000 or

Points	Mortgage rate	Mortgage factor	Monthly payment
0	6.50%	6.32	1,264
2	6.00%	6.00	1,200

Paying the two points buys you a lower monthly payment and saves you \$64 dollars per month. The two points cost \$4,000 (2 percent of \$200,000). At the rate of \$64 per month, it will take 62.5 months ($\$4,000 \div 64$) or a little over five years for those points to pay for themselves. If you do not plan on having this mortgage for that long, then paying the points is not worth it. Paying points has liquidity and opportunity costs up front that must be weighed against its benefit. Points are part of the closing costs, but borrowers do not have to pay them if they are willing to pay a higher interest rate instead.

Closing Costs

Other costs of a house purchase are transaction costs, that is, costs of making the transaction happen that are not direct costs of either the home or the financing. These are referred to as closing costs, as they are paid at the closing, the meeting between buyer and seller where the ownership and loan documents are signed and the property is actually transferred. The buyer pays these closing costs, including the appraisal fee, title insurance, and filing fee for the deed.

The lender will have required an independent **appraisal** of the home's value to make sure that the amount of the mortgage is reasonable given the value of the house that secures it. The lender will also require a **title search** and contract for **title insurance**. The title company will research any claims or liens on the deed; the purchase cannot go forward if the deed may not be freely transferred. Over the term of the mortgage, the title insurance protects against flaws not found in the title and any claims that may result. The buyer also pays a fee to file the property deed with the township, municipality, or county. Some states may also have a **property transfer tax** that is the responsibility of the buyer.

Closings may take place in the office of the title company handling the transaction or at the registry of deeds. Closings also may take place in the lender's offices, such as a bank, or an attorney's office and usually are mediated between the buyer and the seller

through their attorneys. Lawyers who specialize in real estate ensure that all legal requirements are met and all filings of legal documents are completed. For example, before signing, home buyers have a right to review a U.S. Housing and Urban Development (HUD) Settlement Statement twenty-four hours prior to the closing. This document, along with a truth-in-lending disclosure statement, sets out and explains all the terms of the transaction, all the costs of buying the house, and all closing costs. Both the buyer and the seller must sign the HUD document and are legally bound by it.

KEY TAKEAWAYS

- The percentage of the purchase price paid upfront as the down payment will determine the amount that is borrowed. That principal balance on the mortgage, in turn, determines the monthly mortgage payment.
- A larger down payment may make the monthly payment smaller but creates the opportunity cost of losing liquidity.
- A fixed-rate mortgage is structured as an annuity; the monthly mortgage payment can be calculated from the mortgage rate, the maturity, and the principal balance on the mortgage.
- A fixed-rate mortgage has a fixed mortgage rate and fixed monthly payments.
- An adjustable-rate mortgage may have an adjustable mortgage rate and/or adjustable payments.
- A rate cap or a payment cap may be used to offset the effects of an adjustable-rate mortgage on monthly payments.
- Points are borrowing costs paid upfront (rather than over the maturity of the mortgage).
- Closing costs are transaction costs such as an appraisal fee, title search and title insurance, filing fees for legal documents, transfer taxes, and sometimes realtors' commissions.

EXERCISES

1. You are considering purchasing an existing single family house for \$200,000 with a 20 percent down payment and a thirty-year fixed-rate mortgage at 5.5 percent.
 - a. What would be your monthly mortgage payment?
 - b. If you decided to buy two points for a rate of 5 percent, how much would you save in monthly payments? Would it be worth it to buy the points? Why, or why not?
 - c. When should you consider an adjustable-rate mortgage?

Review the explanation of adjustable-rate mortgages on the consumer guide site of the U.S.

Federal Reserve (the Fed) at http://www.federalreserve.gov/pubs/arms/arms_english.htm.

According to the Fed, why should you be cautious about adjustable-rate mortgages? Download the “Mortgage Shopping Worksheet” at this Web site as a guide to comparing features of ARMs with lenders.

Do you presently rent or own your home or apartment? What are your housing costs? What percent of your income is taken up in housing costs? If your housing is costing you more than a third of your income, what could you do to reduce that cost? Record your alternatives in your personal finance journal.

As a prospective homeowner, what would be your estimated PITI? Would a bank consider that you qualify for a mortgage loan at this time? Why or why not? What criteria do lenders use to determine your eligibility for a home mortgage?

Can you afford a mortgage now? How much of a mortgage could you afford? Answer these questions using online mortgage affordability calculators, found, for example, at <http://cgi.money.cnn.com/tools/houseafford/houseafford.html>, <http://www.bankrate.com/calculators/mortgages/new-house-calculator.aspx>, and <http://articles.moneycentral.msn.com/Banking/Loan/HomeAffordabilityCalculator.aspx>. If you cannot afford a mortgage now, how would your personal situation and/or your budget need to change to make that possible? Establish home affordability as a goal in your financial planning. Write in My Notes or your personal finance journal how and when you expect you will reach that goal.

Read about the closing process

at http://mortgage.lovetoknow.com/The_Closing_Process_When_Buying_a_House. According to Love to Know, who attends the closing? What legal documents are processed at the closing?

Re-review local real estate, condo, or apartment listings in the price range you have now determined is truly affordable for you. For learning purposes, choose a home you would like to own and clip the ad with photo to put in your personal finance journal. Record the purchase price, the down payment you would make, the mortgage amount you would seek, the current interest rates on a mortgage loan for fixed- and adjustable-rate mortgages for various periods or maturities, the type of mortgage you would prefer, the rate and maturity you would seek, the

points you would buy (if any), the amount of monthly mortgage payments you would expect to make, and the names of lenders you would consider approaching first.

9.3 Purchasing and Owning Your Home

LEARNING OBJECTIVES

1. Identify the components of a purchase and sale agreement.
2. Explain the importance of a capital budget in determining capital spending priorities.
3. Identify the financing events you may encounter during the maturity of a mortgage.
4. Define the borrower's and the lender's responsibilities to the mortgage.
5. Explain the consequences of default and foreclosure.

The Purchase Process

Now that you've chosen your home and figured out the financing, all that's left to do is sign the papers, right?

Once you have found a house, you will make an offer to the seller, who will then accept or reject your offer. If the offer is rejected, you may try to negotiate with the seller or you may decide to forgo this purchase. If your offer is accepted, you and the seller will sign a formal agreement called a **purchase and sale agreement**, specifying the terms of the sale. You will be required to pay a nonrefundable deposit, or **earnest money**, when the purchase and sale agreement is signed. That money will be held in **escrow** or in a restricted account and then applied toward the closing costs at settlement.

The purchase and sale agreement will include the following terms and conditions:

- A legal description of the property, including boundaries, with a site survey contingency
- The sale price and deposit amount
- A mortgage contingency, stating that the sale is contingent on the final approval of your financing
- The closing date and location, mutually agreed upon by buyer and seller
- **Conveyances** or any agreements made as part of the offer—for example, an agreement as to whether the kitchen appliances are sold with the house
- A home inspection contingency specifying the consequences of a home inspection and any problems that it may find, if not already completed and included in the price negotiation

- Possession date, usually the closing date
- A description of the property insurance policy that will cover the home until the closing date

Property disclosures of any problems with the property that must be legally disclosed, which vary by state, except that lead-paint disclosure is a federal mandate for any housing built before 1978.

After the purchase and sale agreement is signed, any conditions that it specified must be fulfilled before the closing date. If those conditions are the seller's responsibility, you will want to be sure that they have been fulfilled before closing. Read all the documents before you sign them and get copies of everything you sign. Do not hesitate to ask questions. You will live with your mortgage, and your house, for a long time.

Capital Expenditures

A house and property need care; even a new home will have repair and maintenance costs. These costs are now a part of your living expenses or operating budget.

If you have purchased a home that requires renovation or repair, you will decide how much of the work you can do immediately and how much can be done on an annual basis. A capital budget is helpful to project these capital expenditures and plan the income or savings to finance them. You can prioritize these costs by their urgency and by how they will be done.

For example, Sally and Chris just closed on an older home and are planning renovations. During the home inspection, they learned that the old stone foundation would need some work. They would like to install more energy-efficient windows and paint the walls and strip and refinish the old, wood floors.

Their first priority should be the foundation on which the house rests. The windows should be the next on the list, as they will not only provide comfort but also reduce the heating and cooling expenses. Cosmetic repairs such as painting and refinishing can be done later. The walls should be done first (in case any paint drips on the floors) and then the floors.

Renovations should increase the resale value of your home. It is tempting to customize renovations to suit your tastes and needs, but too much customization will make it more difficult to realize the value of those renovations when it comes time to sell. You will have a better chance of selling at a higher price if there is more demand for it, if it appeals to as many potential buyers as possible. The more customized or "quirky" it is, the less broad its appeal may be.

Early Payment

Two financing decisions may come up during the life of a mortgage: **early payment** and **refinancing**. Some mortgages have an **early payment penalty** that fines the borrower for repaying the loan before it is due, but most do not. If your mortgage does not, you may be able to pay it off early (before maturity) either with a lump sum or by paying more than your required monthly payment and having the excess payment applied to your principal balance.

If you are thinking of paying off your mortgage with a lump sum, then you are weighing the value of your liquidity, the opportunity cost of giving up cash, against the cost of the remaining interest payments. The cost of giving up your cash is the loss of any investment return you may otherwise have from it. You would compare that to the cost of your mortgage, or your mortgage rate, less the tax benefit that it provides.

For example, suppose you can invest cash in a money market mutual fund (MMMF) that earns 7 percent. Your mortgage rate is 6 percent, and your tax rate is 25 percent. Your mortgage costs you 6 percent per year but saves you 25 percent of that in taxes, so your mortgage really only costs you 4.5 percent, or 75 percent of 6 percent. After taxes, your MMMF earns 5.25 percent, or 75 percent of 7 percent. Since your cash is worth more to you as a money market investment where it nets 5.25 percent than it costs you in mortgage interest (4.5 percent), you should leave it in the mutual fund and pay your mortgage incrementally as planned.

On the other hand, if your money market mutual fund earns 5 percent, but your mortgage rate is 8 percent and you are in the 25 percent tax bracket, then the real cost of your mortgage is 6 percent, which is more than your cash can earn. You would be better off using the cash to pay off your mortgage and eliminating that 6 percent interest cost.

You also need to weigh the use of your cash to pay off the mortgage versus other uses of that cash. For example, suppose you have some money saved. It is earning less than your after-tax mortgage interest, so you are thinking of paying down the mortgage. However, you also know that you will need a new car in two years. If you use that money to pay down the mortgage now, you won't have it to pay for the car two years from now. You could get a car loan to buy the car, but the interest rate on that loan will be higher than the rate on your mortgage, and the interest on the car loan is not tax deductible. If paying off your mortgage debt forces you to use more expensive debt, then it is not worth it.

One way to pay down a mortgage early without sacrificing too much liquidity is by making a larger monthly payment. The excess over the required amount will be applied to your principal balance, which then decreases faster. Since you pay interest on the principal balance, reducing it more quickly would save you some interest expense. If you have had an increase in income, you may be able to do this fairly "painlessly," but then again, there may be a better use for your increased income.

Over a mortgage as long as thirty years, that interest expense can be substantial—more than the original balance on the mortgage. However, that choice must be made in the context of the value of your alternatives.

Refinancing

You may think about refinancing your mortgage if better mortgage rates are available. Refinancing means borrowing a new debt or getting a new mortgage and repaying the old one. It involves closing costs: the lender will want an updated appraisal, a title search, and title insurance. It is valuable to refinance if the mortgage rate will be so much lower that your monthly payment will be substantially reduced. That in turn depends on the size of your mortgage balance.

If interest rates are low enough and your home has appreciated so that your equity has increased, you may be able to refinance and increase the principal balance on the new mortgage without increasing the monthly payment over your old monthly payment. If you do that, you are withdrawing equity from your house, but you are not allowing it to perform as an investment, that is to store your wealth.

If you would rather take gains from the house and invest them differently, that may be a good choice. But if you want to take gains from the house and use those for consumption, then you are reducing the investment returns on your home. You are also using nonrecurring income to finance recurring expenses, which is not sustainable. There is also a danger that property value will decrease and you will be left with a mortgage worth more than your home.

Default, Foreclosure, and Fraud

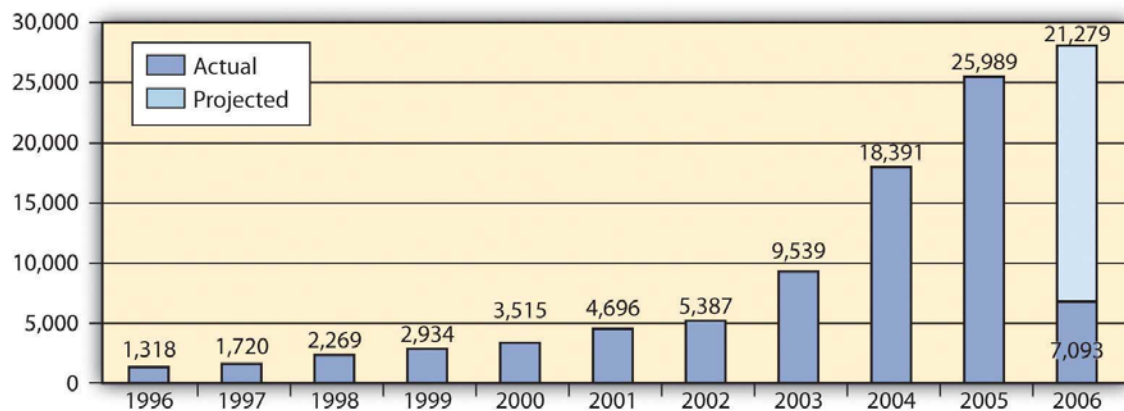
If you have a change of circumstances—for example, you lose your job in an economic downturn, or you have unexpected health care costs in your family—you may find that you are unable to meet your mortgage obligations as planned: to make the payments. A mortgage is secured by the property it financed. If you miss payments and default on your mortgage, the lender has recourse to foreclose on your property, to evict you and take possession of your home, and then to sell it or lease it to recover its investment. Under normal circumstances, lenders incur a cost in repossessing a home, and usually lose money in its resale. It may be possible to renegotiate terms of your mortgage to forestall foreclosure. You may want to consult with a legal representative, or to contact federal and/or state agencies for assistance.

You may believe you are having trouble meeting your mortgage obligations because they are not what you thought they would be. Lenders profit by lending. When you are borrowing, it is important to understand the terms of your loan. If those terms will adjust under certain conditions, you must understand what could happen to your payments and to the value of your home. It is your responsibility to understand these conditions. However, the lender has a responsibility to disclose the lending arrangement and all its costs, according to federal and state laws (which vary by state). If you believe that all conditions and terms of your mortgage were not fairly disclosed, you should contact your state banking regulator or the U.S Department of Housing and Urban Development (HUD). There are also consumer advocacy groups that will help clarify the laws and explore any legal recourse you may have.

Just as your lender has a legal obligation to be forthcoming and clear with you, you have an obligation to be truthful. If you have misrepresented or omitted facts on your mortgage application, you can be held liable for mortgage fraud. For example, if you have overstated your income, misled the lender about your employment or your intention to live in the house, or have understated your debts, you may be prosecuted for mortgage fraud. Intentional misrepresentation or omission of facts perpetrated by a borrower in the process of obtaining mortgage financing. Other forms of mortgage fraud are more elaborate, such as inflating the appraisal amount in order to borrow more.

Mortgage fraud can be perpetrated by the borrower, appraiser, or loan officer who originates the loan. Figure 9.15 "Mortgage Loan Fraud in the United States" shows mortgage fraud in the United States through 2006—had the graph continued, you would see even more fraud in 2007, just before the recent housing bubble burst.

Figure 9.15 Mortgage Loan Fraud in the United States[1]



During the recent housing bubble, mortgage fraud was aggravated by low interest rates that encouraged more borrowing and lending, often when it was less than prudent to do so.

KEY TAKEAWAYS

- The purchase and sale agreement details the conditions of the sale.
- Conditions of the purchase and sale agreement must be met before the closing.
- A capital budget can help you prioritize and budget for capital expenditures.
- Early payment is the trade-off of interest expense versus the opportunity cost of losing liquidity.
- Refinancing is the trade-off between lower monthly payments and closing costs.
- Both borrowers and lenders have a responsibility to understand the terms of the mortgage.

- Buyers, sellers, lenders, and brokers must be alert to predatory lending, real estate scams, and possible cases of mortgage fraud.
- Default may result in the lender foreclosing on the property and evicting the former homeowner.

EXERCISES

1. Read about home purchase agreements at <http://real-estate.lawyers.com/Home-Purchase-Agreements.html>, and view the standard purchase and sale agreement form at <http://www.jaresources.com/std3.doc>. For comparison, find a sample purchase and sale agreement for your state.
2. According to this chapter, what information is included in a purchase and sale agreement?
3. Use the mortgage refinancing calculator at Bankrate.com (<http://www.bankrate.com/calculators/mortgages/refinance-calculator.aspx>) to find out if you would save money by refinancing your real or hypothetical mortgage at this time. What factors should you take into consideration when deciding to refinance?
4. Sample consumer advocacy groups online at <http://homeownersconsumercenter.com/>. What kinds of help can you get through such organizations?
5. What constitutes mortgage fraud? Find out at http://homebuying.about.com/od/financingadvice/qt/120407_mrgfraud.htm. According to the IRS Web site (<http://www.irs.gov/newsroom/article/0,,id=118224,00.html>), what are three common forms of real estate fraud? Discuss with others taking this course the common ways that homebuyers can become involved both directly and indirectly in mortgage or real estate fraud.
6. Survey the Department of Housing and Urban Development Web site on how to avoid foreclosure at http://portal.hud.gov/portal/page/portal/HUD/topics/avoiding_foreclosure. Inferring from information on this site, what are ten steps people should take to avoid foreclosure?

[1] Financial Crimes Enforcement Network, “Mortgage Loan Fraud: An Industry Assessment based upon Suspicious Activity Report Analysis,” November 2006, http://www.fincen.gov/news_room/rp/reports/pdf/MortgageLoanFraud.pdf (accessed December 2, 2009).

Chapter 10 Personal Risk Management: Insurance

Introduction

Life is full of risks. You can try to avoid them or reduce their likelihood and consequences, but you cannot eliminate them. You can, however, pay someone to share them. That is the idea behind insurance.

There are **speculative risks**, that is, risks that offer a chance of loss or gain, such as developing a “killer app” that may or may not sell or investing in a corporate stock that may or may not provide good returns. Such risks can be avoided simply by not participating. They are almost always uninsurable.

There are **pure risks** accidental or unintentional events, such as a car accident or an illness. Pure risks are insurable because their probabilities can be calculated precisely enough for the risk to be quantified, which means it can be priced, bought, and sold.

Risk shifting is the process of selling risk to someone who then assumes the risk and its consequences. Why would someone buy your risk? Because in a large enough market, your risk can be diversified, which minimizes its cost.

Insurance can be purchased for your property and your home, your health, your employment, and your life. In each case, you weigh the cost of the consequence of a risk that may never actually happen against the cost of insuring against it. Deciding what and how to insure is really a process of deciding what the costs of loss would be and how willing you are to pay to get rid of those risks.

The costs of insurance can also be lowered through risk avoidance or reduction strategies. For example, installing an alarm system in your home may reduce homeowners’ insurance premiums because that reduces the risk of theft. Of course, installing an alarm system has a cost too. Risk management is the strategic trade-off of the costs of reducing, assuming, and shifting risks.

10.1 Insuring Your Property

LEARNING OBJECTIVES

1. Describe the purpose of property insurance.
2. Identify the causes of property damage.
3. Compare the kinds of homeowner’s insurance coverage and benefits.
4. Analyze the costs of homeowner’s insurance.

5. Compare the kinds of auto insurance to cover bodily injury and property damage.
6. Explain the factors that determine auto insurance costs.
7. Analyze the factors used in determining the risks of the driver, the car, and the driving region.

Property insurance is ownership insurance: it insures that the rights of ownership conferred upon you when you purchased your property will remain intact. Typically, property insurance covers loss of use from either damage or theft; loss of value, or the cost of replacement; and liability for any use of the property that causes damage to others or others' property. For most people, insurable property risks are covered by insuring two kinds of property: car and home.

Loss of use and value can occur from hazards such as fire or weather disasters and from deliberate destruction such as vandalism or theft. When replacement or repair is needed to restore usefulness and value, that cost is the cost of your risk. For example, if your laptop's hard drive crashes, you not only have the cost of replacing or repairing it, but also the cost of being without your laptop for however long that takes. Insuring your laptop shares that risk (and those costs) with the insurer.

Liability is the risk that your use of your property will injure someone or something else. Ownership implies control of, and therefore responsibility for, property use.

For example, you are liable for your dog's attack on a pedestrian and for your fallen tree's damage to a neighbor's fence. You also are liable for damage a friend causes while driving your car with your permission and for injury to your invited guests who trip over your lawn ornament, fall off your deck, or leave your party drunk.

Legal responsibility can be from

- **negligence**, or the failure to take usual precautions;
- **strict liability**, or responsibility for intentional or unintentional events;
- **vicarious liability**, or responsibility for someone else's use of your possessions or someone else's activity for which you are responsible.

Home Insurance Coverage

Homeowner's insurance insures both the structure and the personal possessions that make the house your home. Renter's insurance protects your possessions even if you are not the owner of your dwelling. You may not think you need insurance until you are the homeowner, but even when you don't need to insure against possible damage or liability for your dwelling, you can still insure your possessions. Even if your furniture came from your aunt's house or a yard sale, it could cost a lot to replace.

If you have especially valuable possessions such as jewelry or fine musical instruments, you may want to insure them separately to get enough coverage for them. Such items are

typically referred to as **listed property** and are insured as **endorsements** added on to a homeowners' or renter's policy. Items should be appraised by a certified appraiser to determine their replacement or insured value.

A good precaution is to have an up-to-date inventory of your possessions such as furniture, clothing, electronics, and appliances, along with photographs or video showing these items in your home. That inventory should be kept somewhere else, such as a safe deposit box. If the house suffered damage, you would then have the inventory to help you document your losses.

A homeowners' policy covers damage to the structure itself as well as any outbuildings on the property and, in some cases, even the landscaping or infrastructure on the grounds, such as a driveway.

A homeowners' policy does not cover

- animals;
- property of renters, or property kept in an apartment regularly rented;
- business property, even if the business is conducted on the residential premises.

According to information from the Insurances Services Office (<http://www.iso.com>), an insurance industry data and research company, hazards covered by the homeowner's policy include

- fire or lightning;
- windstorm or hail;
- explosion;
- riot or civil commotion;
- damage caused by aircraft;
- damage caused by vehicles;
- smoke;
- vandalism or malicious mischief;
- theft;
- volcanic eruption;
- falling objects;
- weight of ice, snow, or sleet;
- accidental discharge or overflow of water or steam from within a plumbing, heating, air conditioning, or automatic fire-protective sprinkler system, or from a household appliance;
- sudden and accidental tearing apart, cracking, burning, or bulging of a steam or hot water heating, air conditioning, or automatic fire-protective system;
- freezing of a plumbing, heating, air conditioning, or automatic fire-protective sprinkler system, or of a household appliance;
- sudden and accidental damage from artificially generated electrical current (does not include loss to a tube, transistor, or similar electronic component).

Note that floods and earthquakes are not covered. A homeowner in a flood- or earthquake-prone area may buy special coverage, either from a private insurer or from a federal or state program.

Homeowners' insurance covers the less direct costs of hazards as well. For example, the costs of removing damaged goods or temporary repairs are covered. The cost of temporary housing and extra living expenses while repairs are made is covered, although usually for a limited time or amount.

Homeowners' policies cover liability for injuries on the property and for injuries that the homeowner may accidentally inflict. You may also want to add an **umbrella policy** that covers personal liabilities such as slander, libel, and defamation of character. An umbrella policy may also extend over other assets, such as vehicles or rentals covered by other insurance carriers. If you participate in activities where you are assuming responsibilities for others—you are taking the Cub Scout pack out for a hike, for example, or volunteering at your local recycling center—you may want such extended liability coverage available through your homeowners' policy (also available separately).

Home Insurance Coverage: The Benefit

Home insurance policies automatically cover your possessions for up to 40 percent of the house's insured value. You can buy more coverage if you think they are worth more. The benefits are specified as either **actual cash value** or **replacement cost**. Actual cash value tries to estimate the actual market value of the item at the time of loss, so it accounts for the original cost less any depreciation that has occurred. Replacement cost is the cost of replacing the item. For most items, the actual cash value is less.

For example, say your policy insures items at actual cash value. You are claiming the loss of a ten-year-old washer and dryer that were ruined when a pipe burst and your basement flooded. Your coverage could mean a benefit of \$100 (based on the market price of ten-year-old appliances). However, to replace your appliances with comparable new ones could cost \$1,000 or more.

The actual cash value is almost always less than the replacement value, because prices generally rise over time and because items generally depreciate (rather than appreciate) in value. A policy that specifies benefits as replacement costs offers more actual coverage. **Guaranteed replacement costs** are the full cost of replacing your items, while **extended replacement costs** are capped at some percentage—for example, 125 percent of actual cash value.

Home Insurance Coverage: The Cost

You buy home insurance by paying a premium to the insurance company. The insurance purchase is arranged through a broker, who may represent more than one insurance company. The broker should be knowledgeable about various policies, coverage, and premiums offered by different insurers.

The amount of the premium is determined by the insurer's risk—the more risk, the higher the premium. Risk is determined by

- the insured (the person buying the policy),
- the property insured,
- the amount of coverage.

To gauge the risk of the insured, the insurer needs information about your personal circumstances and history, the nature of the property, and the amount of coverage desired for protection. This information is summarized in Figure 10.4 "Factors that Determine Insurance Premiums".

Figure 10.4 Factors that Determine Insurance Premiums

Insured	Property	Coverage
<ul style="list-style-type: none">• Employment• Marital status• Criminal record• Credit history• Insurance claim history	<ul style="list-style-type: none">• Age• Size• Location• Proximity to fire/police services• Building materials• Number of occupants• Heating system	<ul style="list-style-type: none">• Actual cash value• Replacement cost• Endorsements for listed property• Umbrella for personal liability

Insurers may offer discounts for enhancements that lower risks, such as alarm systems or upgraded electrical systems. (Smoke detectors are required by law in every state.) You also may be offered a discount for being a loyal customer, for example, by insuring both your car and home with the same company. Be sure to ask your insurance broker about available discounts for the following:

- Multiple policies (with the same insurer)
- Fire extinguishers
- Sprinkler systems
- Burglar and fire alarms
- Deadbolt locks and fire-safe window grates
- Longtime policyholder
- Upgrades to plumbing, heating, and electrical systems

The average premium for homeowners insurance in 2006 in the United States was \$804 a year, and for renters insurance was \$189 a year. That year, Arizona homeowners paid an average of \$640 for insurance that cost \$1,409 in Texas.[1]

Premiums can vary, even for the same levels of coverage for the same insured. You should compare policies offered by different insurers to shop around for the best premium for the coverage you want.

Insuring Your Car

If you own and drive a car, you must have car insurance. Your car accident may affect not only you and your car, but also the health and property of others. A car accident often involves a second party, and so legal and financial responsibility must be assigned and covered by both parties. In the United States, financial responsibility laws in each state mandate minimal car insurance, although what's "minimal" varies by state.

Conventionally, a victim or plaintiff in an accident is reimbursed by the driver at fault or by his or her insurer. Fault has to be established, and the amount of the claim agreed to. In practice, this has often been done only through extensive litigation.

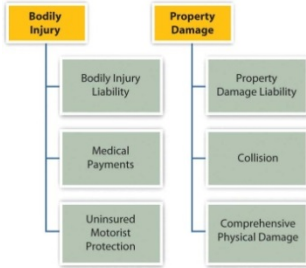
Some states in the United States and provinces in Canada have adopted some form of **no-fault insurance**, in which, regardless of fault, an injured's own insurance covers his or her damages and injuries, and a victim's ability to sue the driver at fault is limited. The idea is to lower the incidence of court cases and speed up compensation for victims. The states with compulsory no-fault auto insurance, in which personal injury protection (PIP) is required, include Florida, Hawaii, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Dakota, Pennsylvania, Utah, and Puerto Rico. Eleven other states use no-fault as add-on or optional insurance.[2]

The remaining states in the United States use the conventional tort system (suing for damages in court). Understanding the laws of the state where you drive will help you to make better insurance decisions.

Auto Insurance Coverage

Auto insurance policies cover two types of consequences: bodily injury and property damage. Each covers three types of financial losses. Figure 10.5 "Automobile Insurance Coverage" shows these different kinds of coverage.

Figure 10.5 Automobile Insurance Coverage



Bodily injury liability refers to the financial losses of people in the other car that are injured in an accident you cause, including their medical expenses, loss of income, and your legal fees. Injuries to people in your car or to yourself are covered by **medical payments coverage**. **Uninsured motorist protection** covers your injuries if the accident is caused by someone with insufficient insurance or by an unidentified driver.

Property damage liability covers the costs to other people's property from damage that you cause, while **collision** covers the costs of damage to your own property. Collision coverage is limited to the market value of the car at the time, usually defined by the National Automobile Dealers Association's (NADA) *Official Used Car Guide* or "blue book" (<http://www.nada.org>). To reduce their risk, the lenders financing your car loan will require that you carry adequate collision coverage.

Comprehensive physical damage covers your losses from anything other than a collision, such as theft, weather damage, acts of nature, or hitting an animal.

Auto insurance coverage is limited, depending on the policy. The limits are typically stated in numbers representing thousands of dollars. For example, 100/300/50 means that \$100,000 is the limit on the payment to one person in an accident; \$300,000 is the limit on the amount paid in total (for all people) per accident; and \$50,000 is the limit on the amount of property damage liability that can be paid out.

Here's an example of how it all works. Kit is driving home one night from a late shift at the convenience store where he works. Sleepy, he drifts into the other lane of the two-lane road and hits an oncoming car driven by Ray. Both Kit and Ray are injured, and both cars are damaged. Figure 10.6 "Auto Insurance Coverage Example" shows how Kit's insurance will cover the costs.

Figure 10.6 Auto Insurance Coverage Example

Type of Insurance	Costs Covered
Bodily Injury Liability	Ray's medical bills and lost wages
Medical Payments Coverage	Kit's medical bills
Property Damage Liability	Repairs to Ray's car
Collision	Repairs to Kit's car

Auto Insurance Costs

As with any insurance, the cost of having an insurer assume risk is related to the cost of that risk. The cost of auto insurance is related to three factors that create risk: the car, the driver, and the driving environment—the region or rating territory.

The model, style, and age of the car determine how costly it may be to repair or replace, and therefore the potential cost of damage or collision. The higher that cost is, the higher the cost of insuring the car. For example, a 2009 luxury car will cost more to insure than a 2002 sedan. Also, different models have different safety features that may lower the potential cost of injury to passengers, and those features may lower the cost of insurance. Different models may come with different security devices or be more or less attractive to thieves, affecting the risk of theft.

The driver is an obvious source of risk as the operator of the car. Insurers use various demographic factors such as age, education level, marital status, gender, and driving habits to determine which kinds of drivers present more risk. Not surprisingly, young drivers (ages sixteen to twenty-four) of both sexes and elderly drivers (over seventy) are the riskiest. Twice as many males as females die in auto accidents, but more females suffer injuries. Nationally, in any year your chances of being injured in a car accident are about one in a thousand.[3]

Your driving history and especially your accident claim history can affect your premiums, as well as your criminal record and credit score. In some states, an accident claim can double your cost of insurance over a number of years. Your driving habits—whether or not you use the car to commute to work, for example—can affect your costs as well. Some states offer credits or points that reduce your premium if you have a safe driving record, are a member of the American Automobile Association (AAA), or have passed a driver education course.

Where you live and drive also matters. Insurers use police statistics to determine rates of traffic accidents, auto theft, and vandalism, for example. If you are in an accident-

prone area or higher crime region, you may be able to offset those costs by installing safety and security features to your car.

Premium rates vary, so you should always shop around. You can shop through a broker or directly. Online discount auto insurers have become increasingly popular in recent years. Their rates may be lower, but the same cautions apply as for other high-stakes transactions conducted online.

Also, premiums are not the only cost of auto insurance. You should also consider the insurer's reliability in addressing a claim. Chances are you rely on your car to get to school, to work, or for your daily errands or recreational activities. Your car is also a substantial investment, and you may still be paying off debt from financing your car. Losing your car to repairs and perhaps being injured yourself is no small inconvenience and can seriously disrupt your life. You want to be working with an insurer who will cooperate in trying to get you and your car back on the road as soon as possible. You can check your insurer's reputation by the record of complaints against it, filed with your state's agency of banking and insurance, or with your state's attorney general's office.

KEY TAKEAWAYS

- Property insurance is to insure the rights of ownership and to protect against its liabilities.
 - Property damage can be caused by hazards or by deliberate destruction, such as vandalism or theft.
 - Homeowner's policies insure structures and possessions for actual cash value or replacement cost; an umbrella policy covers personal liability.
 - The cost of homeowner's insurance is determined by the insured, the property insured, and the extent of the coverage and benefits.
- Auto insurance coverage insures bodily injury through
 - bodily injury liability,
 - medical payments coverage,
 - uninsured motorist protection.
- Auto insurance coverage insures property damage through
 - property damage liability,
 - collision,
 - comprehensive physical damage.
- Auto insurance costs are determined by the driver, the car, and the driving region.

- The risk of the driver is determined by demographics, credit history, employment history, and driving record.
- The risk of the car is determined by its cost; safety and security features may lower insurance costs.
- The risk of the driving region is determined by statistical incident histories of accidents or thefts.

EXERCISES

1. In your personal finance journal or My Notes, record or chart all the insurances you own privately or through a financial institution and/or are entitled to through your employer. In each case, what is insured, who is the insurer, what is the term, what are the benefits, and what is your premium or deduction? Research online to find the details. Then analyze your insurance in relation to your financial situation. How does each type of insurance shift or reduce your risk or otherwise help protect you and your assets or wealth?
2. Conduct and record a complete inventory of all your personal property. State the current market value or replacement cost of each item. Then identify the specific items that would cause you the greatest difficulty and expense if they were lost, damaged, or stolen.
3. How would a renter's insurance policy help protect your property? What do such policies cover? See <http://www.insure.com/articles/homeinsurance/renters.html>, for example, and <http://personalinsure.about.com/library/weekly/aaMMDDYYa.htm>. How much would it cost you to insure against the loss of just your laptop or desktop computer (see, for example, <http://www.nssi.com>)?
4. How do auto insurance rates in your state compare with rates in other states? Rates are based partly on the rates of accidents, injuries, and deaths in your state. Look at your state statistics concerning highway fatalities from the National Highway Traffic Safety Administration at <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/USA%20WEB%20REPORT.HTM>. What minimum auto insurance must you carry by law in your state? You will find state-by-state minimum car insurance data at <http://personalinsure.about.com/cs/vehicleratings/a/blautominimum.htm>. What optional insurance do you carry over the minimum, and why? What do you pay for car insurance, and how can you reduce your premium?

5. What does the National Association of Insurance Commissioners (http://www.naic.org/index_about.htm) do to protect consumers of insurance products? How would you contact your state's insurance department office, and what could you learn there (see <http://www.usa.gov/directory/stateconsumer/index.shtml>)?

[1] Insurance Information Institute, <http://www.iii.org/media/facts/statsbyissue/homeowners> (accessed May 3, 2009).

[2] Insurance Information Institute, <http://www.iii.org/media/hottopics/insurance/nofault> (accessed May 3, 2009).

[3] U.S. Census Bureau, The Disaster Center, <http://www.disastercenter.com/traffic> (accessed May 3, 2009).

10.2 Insuring Your Health

LEARNING OBJECTIVES

1. Define basic health care coverage and major medical insurance.
2. Identify the insured's responsibility for costs.
3. Describe the structure of health maintenance organizations.
4. Distinguish the different accounts for private health care financing.
5. Distinguish the different programs for public health care financing.
6. Explain the purpose of long-term care insurance.

Melissa is a medical transcriptionist who runs a cleaning service on the side. She usually clears about \$24,000 per year from the cleaning service and has come to rely on that money. One day, Melissa slips on a wet floor. She is taken by ambulance to the local hospital, where she is treated for a badly broken wrist and released the next day. Melissa can't clean for about eight weeks, losing close to \$6,000 in earnings.

Soon, medical bills start to arrive. Melissa is not concerned, because she has health insurance through her job as a medical transcriptionist. She is surprised to find out, however, that some of the costs of this accident are not covered, that she has a significant deductible, and that she'll also have to pay the difference between what the doctors billed and what the insurance will pay. Not only did she lose substantial cleaning earnings, but her out-of-pocket costs are mounting as well. This accident is beginning to be very costly.

Melissa is discovering that health insurance is a complicated business. The time to understand your health coverage is before you need it. When you are recovering from an accident or illness, you should not be concerned with your medical bills, yet you may have to be.

According to the National Coalition on Health Care (<http://www.nchc.org>), “Since 1999, employment-based health insurance premiums have increased 120 percent, compared to cumulative inflation of 44 percent and cumulative wage growth of 29 percent during the same period.” [1]

Even where employers “provide” health insurance as an employee benefit, in other words, workers are paying an increasing share of the premium. In 2008, that share averaged 27 percent. [2]

A 2005 “study found that 50 percent of all bankruptcy filings were partly the result of medical expenses. Every 30 seconds in the United States someone files for bankruptcy in the aftermath of a serious health problem.” [3]

Even if you think those numbers are exaggerated, it’s still sobering, because no matter how much you try to take care of yourself and to be careful, no one can evade the pure risk of injury or illness. All you can do is try to shift that risk in a way that makes sense for your financial health.

Because of the increasing costs of health care and the increasing complexities of paying for them, the distribution and financing of health care is much discussed and debated in the United States, especially the roles of the federal government and insurance providers. Regardless of the outcome of this debate, momentum is building for change. You should be aware of changes as they occur so that you can incorporate those changes into your budget and financial plans.

Health Insurance Coverage

There are many different kinds of coverage and plans for health insurance. You may have group health insurance offered as an employee benefit or as a member of a professional association. Group plans have lower costs, because the group has some bargaining power with the insurer and can generally secure lower rates for its members. But group plans are not necessarily comprehensive, so you may want to supplement the group coverage with an individual health insurance policy, available to individuals and families.

Sufficient coverage should include **basic insurance** and major medical insurance. A basic insurance policy will cover physician expense, surgical expense, and hospital expense.

- Physician expenses include nonsurgical treatments and lab tests.
- Surgical expenses include surgeons’ fees.
- Hospital expenses include room and board and other hospital charges.

Frequently, these coverages are capped or limited. For example, hospital expense coverage is typically limited to a certain amount per day or a certain number of days per incident. Surgeon's fees are often capped.

The three basic coverages are usually combined under one policy. In addition, health insurance is completed by **major medical insurance**, which covers the costs of a serious injury or illness. Depending on the extent and the nature of your illness or injury, medical bills can quickly exceed your basic coverage limits, so major medical can act as an extension to those limits, saving you from potential financial distress.

Dental insurance also supplements your basic insurance, usually providing reimbursement for preventative treatments and some partial payment of dental services such as fillings, root canals, crowns, extractions, bridgework, and dentures. Vision insurance provides for eye care, including exams and treatment for eye diseases, as well as for corrective lenses. Depending on your basic coverage limits, dental and vision care could be important for you.

Another feature of basic coverage is a prescription drug plan. Prescriptions may be covered entirely or with a co-pay, or only if the generic version of the drug is available. Your insurer should provide a **formulary** or a list of drugs that are covered. Depending on your plan, prescription coverage may be available only as a supplement to your basic coverage.

Health Insurance Costs

As health care costs and insurance premiums rise, insurers add cost offsets to make their policies more affordable. Those offsets may include the following:

- **Deductibles**—an amount payable by the insured before any expenses are assumed by the insurer.
- **Co-pays**—partial payment for certain costs—for example, for physician's visits or prescriptions.
- **Coinsurance**—shared payments of expenses by insured and insurer.

Each of these payment features represents responsibilities of the insured, that is, your out-of-pocket costs. The more costs you shoulder, the less risk to the insurer, and so the less you pay for the insurance policy. Making you responsible for initial costs also discourages you from seeking health care more than is necessary or from submitting frivolous health care claims.

Costs vary with coverage, coverage limits, and offsets, and they vary widely between insurers. You should be well informed as to the specifics of your coverage, and you should compare rates before you buy. An insurance broker can help you to do this, and there are Web sites designed to help you explore the available options. See, for example, the health insurance consumer guide and resource links from the U.S. Department of Health and Human Services at <http://www.ahrq.gov/consumer/insuranceqa/>.

Health Insurance and Health Care

Health insurance is sold through private insurers, nonprofit service plans, and managed care organizations. Private insurers sell most of their plans to employers as group plans. Individuals are far more likely to purchase insurance through a service plan or managed care.

Private (for-profit) plans in most states are underwritten based on your age, weight, smoking status, and health history and are generally more expensive than other types of plans. You may have to take a medical exam, and specific preexisting conditions—such as asthma, heart disease, anxiety, or diabetes—could be excluded from coverage or used as grounds for increasing the cost of your premium, based on your higher risk. Nevertheless, federal and state laws protect you from being denied health care coverage because of any preexisting condition.

A service plan such as Blue Cross/Blue Shield, for example, consists of regional and state-based nonprofit agencies that sell both group and individual policies. More than half of the health insurance companies in the United States are nonprofits, including, for example, Health Care Service Corporation and Harvard Pilgrim Health Care as among the largest (<http://www.nonprofithealthcare.org/resources/BasicFactsAndFigures-NonprofitHealthPlans9.9.08.pdf>).

Managed care organizations became popular in the last thirty years or so with the idea that providing preventative care would lower health care costs. Managed care takes the following forms:

- Health maintenance organizations
- Preferred provider organizations
- Exclusive provider organizations
- Point-of-service plans
- Traditional indemnity plans

The two most familiar kinds of managed care are health maintenance organizations (HMOs) and preferred provider organizations (PPOs). A

health maintenance organization directly hires physicians to provide preventative, basic, and supplemental care. Preventative care should include routine exams and screening tests and immunizations. Basic care should include inpatient and outpatient treatments, emergency care, maternity care, and mental health and substance abuse services. As with any plan, the details for what defines “basic care” will vary, and you should check the fine print to make sure that services are provided. For example, the plan may cover inpatient hospitalizations for a limited number of days in case of a physical illness, but inpatient hospitalization for a more limited number of days for a mental illness.

Supplemental care typically includes the cost of vision and hearing care, prescriptions, prosthetics devices, or home health care. Some or all of this coverage may be limited, or

may be available for an added premium. The premium paid to the HMO is a fixed, monthly fee, and you must seek care only within the HMO's network of care providers.

The most serious constraint of HMOs is the limited choice of doctors and the need to get a referral from your primary care physician (PCP) to obtain the services of any specialist. Depending on where you live and the availability of medical practitioners, this may or may not be an issue for you, but before joining an HMO, you should consider the accessibility and convenience of the care that you are allowed, as well as the limitations of the coverage. For example, if you are diagnosed with a serious disease or need a specific surgical technique, is there an appropriate specialist in the network that you can consult? Suppose you want a second opinion? The rules differ among HMOs, but these are the kinds of questions that you should be asking. You should also be familiar with the HMO's appeal procedures for coverage denied.

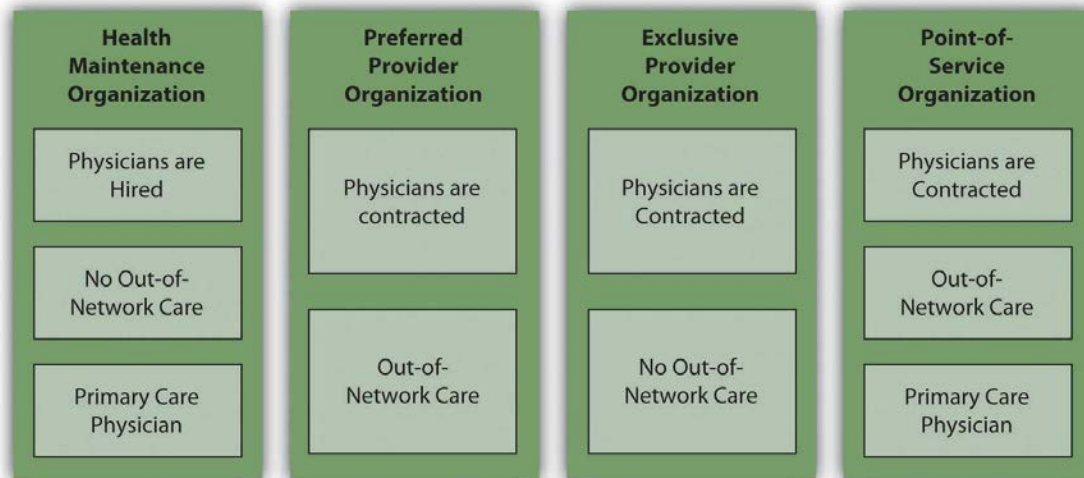
The **preferred provider organization (PPO)** has a different arrangement with affiliated physicians: it negotiates discounted rates directly with health care providers in exchange for making them the "preferred providers" for members seeking care. Care by physicians outside the network may be covered, but with more limitations, or higher co-pays and deductibles. In exchange for offering the flexibility of more choices of provider, the PPO charges a higher premium. Services covered are similar to those covered by an HMO.

The exclusive provider organization works much like the PPO, except that out-of-network services are not covered at all and become out-of-pocket expenses for the insured.

The **point-of-service (POS)** plan also uses a network of contracted, preferred providers. As in an HMO, you choose a primary care physician who then controls referrals to specialists or care beyond preventative and basic care. As in the PPO, out-of-network services may be used, but their coverage is more limited, and you pay higher out-of-pocket expenses for co-pays and deductibles.

Figure 10.9 "Managed Care Choices" shows the differences in managed care options.

Figure 10.9 Managed Care Choices



Private Health Care Financing

In the United States, if someone is not self-insured or uninsured, health insurance coverage is paid for, at least in part, by the employer. As health care costs have risen, employers in all industries have increasingly complained that this cost makes them less competitive in global markets. As an incentive to have more people paying the costs of health care themselves and to be less dependent on employers, the federal government has created tax deductions for savings earmarked for use in paying for health costs. These savings plans are known as flexible spending accounts (FSAs), health reimbursement accounts (HRAs), and health savings accounts (HSAs).

A **flexible savings account** is used to supplement your basic coverage. It is offered by employers and funded by employees: you may have a tax-exempt deduction made from your paycheck to your flexible spending account. The money from your FSA may be used for care expenses not normally covered by your plan—for example, orthodonture, elder care, or child care. At the end of the year, any money remaining in your account is forfeited; that is, it does not roll over into the next year. Unless you can foresee expenses within the coming year, flexible spending may not be worth the tax break.

A **health reimbursement account** is an account funded by employers. The amount is used to pay the premiums for basic coverage with a high deductible, and any money left over may be used for other health expenses, or, if unused, may be carried over to the next year. The account is yours until you leave your job, when it reverts back to your employer.

A **health savings account (HSA)** allows a tax-deductible contribution from your paycheck to pay the premiums for catastrophic coverage with a high deductible and whatever out-of-pocket health care costs you may have. It is employee funded, employee managed, and employee owned. Thus, it is yours, and you may take it with you when you change jobs.

Figure 10.10 "Differences in Private Funding of Health Care" shows the differences between these accounts.

Figure 10.10 Differences in Private Funding of Health Care

FSA	HRA	HSA
<ul style="list-style-type: none"> • Funded by employee • Use for 1 year • Contributions not taxed 	<ul style="list-style-type: none"> • Funded by employer • Use until leave employment 	<ul style="list-style-type: none"> • Funded by employee • No time limit on use • Contributions not taxed

A health savings account shifts the responsibility for health insurance from the employer to the employee, although it still gives the employee access to lower group rates on premiums. If you are relatively young and healthy, and your health care need is usually just an annual physical, this seems like an advantageous plan. However, remember that the idea of insurance is to shift risk away from you, to pay someone to assume the risk for you. With a high-deductible policy, you are still bearing a lot of risk. If that risk has the potential to cause a financial disaster, it's too much.

If you have employer-sponsored health insurance and you leave your job, you may be entitled to keep your insurance for eighteen months (or more under certain circumstances). Under the 1985 Consolidated Budget Omnibus Reconciliation Act (COBRA), an employee at a company with at least twenty employees who notifies the employer of his or her intention to maintain health care coverage is entitled to do so provided the employee pays the premiums. Some states extend this privilege to companies with less than twenty employees, so you should check with your state's insurance commissioner. You may also be able to convert your group coverage into an individual policy, although with more costly premiums.

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 addresses issues of transferring coverage, especially as happens with a change of jobs. It credits an insured for previous periods of insurance coverage that can be used to offset any waiting periods for coverage of preexisting conditions. In other words, it makes it easier for someone who is changing jobs to maintain continuous coverage of chronic conditions or illnesses.[4]

(For more information, research the U.S. Department of Health and Human Services at <http://www.hhs.gov>; see, for example, <http://www.hhs.gov/ocr/privacy/hipaa/administrative/statute/hipaastatutepdf.pdf>.)

Public Health Care Financing

The federal government, in concert with state governments, provides two major programs to the general public for funding health care: Medicare and Medicaid. The federal government also provides services to veterans of the armed forces, and their spouses and dependents, provided they use veterans' health care facilities and providers (see <http://www.va.gov>).

Medicare was established in 1965 to provide minimal health care coverage for the elderly, anyone over the age of sixty-five. Medicare offers hospital (Part A), medical (Part B), combined medical and hospital (Part C), and prescription coverage (Part D), as outlined in Figure 10.11 "Medicare Plans and Coverage".

Figure 10.11 Medicare Plans and Coverage

Part A	Hospital	Compulsory	Choice of doctors
Part B	Medical	Optional	Choice of doctors
Part C	Hospital and medical	Optional	HMO or PPO
Part D	Prescriptions	Optional	Purchased through an approved insurer
Medigap	Supplemental	Optional	Individual policies differ

Medicare is really a combination of privately and publicly funded health care; the optional services all require some premium paid by the insured. You may not need Medicare's supplemental plans if you have access to supplemental insurance provided by your former employer or by membership in a union or professional organization.

Medicare does not cover all services. For example, it does not cover dental and vision care, private nursing care, unapproved nursing home care, care in a foreign country, and optional or discretionary (unnecessary) care.

Medicare also determines the limits on payments for services, but physicians may charge more than that for their services (within limits determined by Medicare). You would be responsible for paying the difference. For these reasons, it is advisable to have supplemental insurance.

Marley thought she didn't need to know anything about Medicare, being young, single, and healthy, but then her sixty-six-year-old father developed a debilitating illness, requiring not only medical care but also assistance with many of his daily living activities. Suddenly, Marley was shouldering the responsibility of arranging her father's care and devising a strategy for financing it. She quickly learned about the care and limits of coverage offered by various Medicare plans.

Medicaid was also established in 1965 to provide health care based on income eligibility. It is administered by each state following broad federal guidelines and is jointly financed by the state and federal government. This means that states differ

somewhat in the benefits or coverage they offer. If someone is covered by both Medicaid and Medicare, Medicaid pays for expenses not covered by Medicare, such as co-pays and deductibles. Together, Medicare and Medicaid pay about 60 percent of all nursing home costs.[5]

Long-Term Care Insurance

Long-term care insurance is designed to insure your care should you be chronically unable to care for yourself. “Care” refers not to medical care, but to care of “activities of daily living” (ADLs) such as bathing, dressing, toileting, eating, and mobility, which may be impaired due to physical or mental illness or injury.

Long-term care coverage is offered as either indemnity coverage or “expense-incurred” policies. With an indemnity policy, you will be paid a specified benefit amount per day regardless of your costs incurred. With an “expense-incurred” policy, you will be reimbursed for your actual expenses incurred. Both types of policies can have limits, either for dollar amounts per day, week, or month or for number of days or years of coverage. Newer policies are designed as integrated policies, offering pooled benefits and specifying a total dollar limit of benefits that may be used over an unspecified period.

Need for long-term care is anticipated in older age, although anyone of any age may need it. When you buy the policy, you may be far away from needing the coverage. For that reason, many policies offer benefit limits indexed to inflation, to account for cost increases that happen before you receive benefits.

The cost of a long-term care policy varies with your age, coverage, policy features such as inflation indexing, and current health. As with any insurance purchase, you should be as informed as possible, comparing coverage and costs before buying.

KEY TAKEAWAYS

- Basic health care coverage is for physician expenses, surgical expenses, and hospital expenses; major medical insurance extends basic insurance in case of serious illness or injury.
- The insured’s responsibility for costs can be structured as
 - deductibles,
 - co-pays,
 - coinsurance.
- Health insurance is sold through private insurers, nonprofit service plans, and managed care organizations, which may be structured as

- health maintenance organizations,
 - preferred provider organizations,
 - exclusive provider organizations,
 - point-of-service plans,
 - traditional indemnity plans.
- Private health care financing may be supplemented by
 - flexible spending accounts (FSAs),
 - health reimbursement accounts (HRAs),
 - health savings accounts (HSAs).
 - Public health care financing is provided by federal programs: Medicare and Medicaid.
 - Long-term care insurance provides for the costs of assistance with activities of daily living.

EXERCISES

1. What health insurance do you have, directly or as a participant in someone else's health insurance policy (such as a spouse)? Identify the type of insurance in terms of the information presented in this chapter, and list the advantages and disadvantages of carrying this type of health insurance. Are you satisfied with the benefits and coverage in your plan? What would you change? What do you or the insured pay for health insurance each month, and how is it paid? Based on your research on health insurance, how might you try to change the way you fill this need in the future?
2. Visit the U.S. Department of Health and Human Services Web site at <http://www.ahrq.gov/consumer/insuranceqa>. According to their consumer guide to health insurance, what is indemnity insurance? What is coinsurance? What is a deductible? How are HMO, PPO, and POS plans different from indemnity insurance? Based on information in the consumer guide and this chapter, what do you feel is the right health insurance for you?
3. What is the Health Insurance Portability and Accountability Act (HIPAA), and why was the law enacted? Find out at http://www.dol.gov/ebsa/faqs/faq_consumer_hipaa.html.
4. View a classic Saturday Night Live video about getting robot insurance at http://www.robotcombat.com/video_oldglory_hi.html. Discuss with classmates what is funny

and not funny about this video. What criticism is implied, and how might that apply to other kinds of insurance? Health insurance and access to health care are significant issues in American politics and life. Many Americans are uninsured, for example, and for those who have insurance, there are critical gaps in coverage. Meanwhile, the costs of both health insurance and health care keep rising, and the public safety nets, such as Medicare, are continually at risk. Conservatives and liberals have different responses to these problems. See, for example, President Obama's call for health care reform as both a moral and a fiscal imperative, along with opposition responses to his proposal, at <http://www.cnn.com/2009/POLITICS/02/24/obama.health.care/index.html>. What are some current initiatives concerning health insurance reform that may affect you? Where do you and your classmates stand on these issues?

[1] The Henry J. Kaiser Family Foundation, "Employee Health Benefits: 2008 Annual Survey," September 2008.

[2] National Coalition on Health Care, "Health Insurance Costs," 2009, <http://www.nchc.org> (accessed May 3, 2009).

[3] David U. Himmelstein, Deborah Thorne, Elizabeth Warren, and Steffie Woolhandler, "Medical Bankruptcy in the United States, 2007: Results of a National Study," *American Journal of Medicine* 122, no. 8 (August 2009): 741–46.

[4] Centers for Medicare and Medicaid Services, U.S. Department of Health and Human Services, <http://www.cms.hhs.gov/hipaaGenInfo/> (accessed November 24, 2009).

[5] The Henry J. Kaiser Family Foundation, "The Kaiser Commission on Medicaid and the Uninsured," January 2006, <http://www.kff.org/medicaid/upload/7452.pdf> (accessed April 11, 2009).

10.3 Insuring Your Income

LEARNING OBJECTIVES

1. Describe the purposes, coverage, and costs of disability insurance.
2. Compare the appropriate uses of term life and whole life insurance.

3. Explain the differences among variable, adjustable, and universal whole life policies and the use of riders.
4. List the factors that determine the premiums for whole life policies.

As you have learned, assets such as a home or car should be protected from the risk of a loss of value, because assets store wealth, so a loss of value is a loss of wealth.

Your health is also valuable, and the costs of repairing it in the case of accident or illness are significant enough that it also requires insurance coverage. In addition, however, you may have an accident or illness that leaves you permanently impaired or even dead. In either case, your ability to earn income will be restricted or gone. Thus, your income should be insured, especially if you have dependents who would bear the consequences of losing your income. Disability insurance and life insurance are ways of insuring your income against some limitations.

Disability Insurance

Disability insurance is designed to insure your income should you survive an injury or illness impaired. The definition of “disability” is a variable feature of most policies. Some define it as being unable to pursue your regular work, while others define it more narrowly as being unable to pursue any work. Some plans pay partial benefits if you return to work part-time, and some do not. As always, you should understand the limits of your plan’s coverage.

The costs of disability insurance are determined by the features and/or conditions of the plan, including the following:

- Waiting period
- Amount of benefits
- Duration of benefits
- Cause of disability
- Payments for loss of vision, hearing, speech, or use of limbs
- Inflation-adjusted benefits
- Guaranteed renewal or noncancelable clause

In general, the greater the number of these features or conditions that apply, the higher your premium.

All plans have a waiting period from the time of disability to the collection of benefits. Most are between 30 and 90 days, but some are as long as 180 days. The longer the waiting period is, generally, the less the premium.

Plans also vary in the amount and duration of benefits. Benefits are usually offered as a percent of your current wages or salary. The more the benefits or the longer the

insurance pays out, the higher the premium. Some plans offer lifetime benefits, while others end benefits at age sixty-five (the age of Medicare eligibility).

In addition, some plans offer benefits in the following cases, all of which carry higher premiums:

- Disability due to accident or illness
- Loss of vision, hearing, speech, or the use of limbs, regardless of disability
- Benefits that automatically increase with the rate of inflation
- Guaranteed renewal, which insures against losing your coverage if your health deteriorates

You may already have some disability insurance through your employer, although in many cases the coverage is minimal. You may also be eligible for Social Security benefits from the federal government or workers' compensation benefit from your state if the disability is due to an on-the-job accident. Other providers of disability benefits include the following:

- The Veterans' Administration (if you are a veteran)
- Automobile insurance (if the disability is due to a car accident)
- Labor unions (if you are a member)
- Civil service provisions (if you are a government employee)

You should know the coverage available to you and if you find it's not adequate, supplement it with private disability insurance.

Life Insurance

Life insurance is a way of insuring that your income will continue after your death. If you have a spouse, children, parents, or siblings who are dependent on your income or care, your death would create new financial burdens for them. To avoid that, you can insure your dependents against your loss, at least financially.

There are many kinds of life insurance policies. Before purchasing one, you should determine what it is you want the insurance to accomplish for your survivors. What do you want it to do?

- Pay off the mortgage?
- Put your kids through college?
- Provide income so that your spouse can be home with the kids and not be forced out into the workplace?
- Provide alternative care for your elderly parents or dependent siblings?
- Cover the costs of your medical expenses and funeral?
- Avoid estate taxes?

These are uses of life insurance. Your goals for your life insurance will determine how much benefit you need and what kind of policy you need. Weighed against that are its costs—the amount of premium that you pay and how that fits into your current budget.

Sam and Maggie have two children, ages three and five. Maggie works as a credit analyst in a bank. Sam looks after the household and the children and Maggie's elderly mother, who lives a couple of blocks away. He does her grocery shopping, cleans her apartment, does her laundry, and runs any errands that she may need done. Sam and Maggie live in a condo they bought, financed with a mortgage. They have established college savings accounts for each child, and they try to save regularly.

Sam and Maggie need to insure both their lives, because the loss of either would cause the survivors financial hardship. With Maggie's death, her earnings would be gone, which is how they pay the mortgage and save for their children's education. Insurance on her life should be enough to pay off the mortgage and fund their children's college educations, while providing for the family's living expenses, unless Sam returns to the workforce. With Sam's death, Maggie would have to hire someone to keep house and care for their children, and also someone to keep her mother's house and provide care for her. Insurance on Sam's life should be enough to maintain everyone's quality of living.

Term Insurance

Maggie's income provides for three expenditures: the mortgage, education savings, and living expenses. While living expenses are an ongoing or permanent need, the mortgage payment and the education savings are not: eventually, the mortgage will be paid off and the children educated. To cover permanent needs, Maggie and Sam should consider permanent insurance, also known as **whole life**, straight life, or cash value insurance. To insure those two temporary goals of paying the mortgage and college tuitions, Maggie and Sam could consider temporary or term insurance.

Term insurance is insurance for a limited time period, usually one, five, ten, or twenty years. After that period, the coverage stops. It is used to cover financial needs for a limited time period—for example, to cover the balance due on a mortgage, or education costs. Premiums are lower for term insurance, because the coverage is limited. The premium is based on the amount of coverage and the length of the time period covered.

A term insurance policy may have a renewability option, so that you can renew the policy at the end of its term, or it may have a conversion option, so that you can convert it to a whole life policy and pay a higher premium. If it is multiyear level term or straight term, the premium will remain the same over the term of coverage.

Decreasing term insurance pays a decreasing benefit as the term progresses, which may make sense in covering the balance due on a mortgage, which also decreases with payments over time. On the other hand, you could simply buy a one-year term policy

with a smaller benefit each year and have more flexibility should you decide to make a change.

A return-of-premium (ROP) term policy will return the premiums you have paid if you outlive the term of the policy. On the other hand, the premiums on such policies are higher, and you may do better by simply buying the regular term policy and saving the difference between the premiums.

Term insurance is a more affordable way to insure against a specific risk for a specific time. It is pure insurance, in that it provides risk shifting for a period of time, but unlike whole life, it does not also provide a way to save or invest.

Whole Life Insurance

Whole life insurance is permanent insurance. That is, you pay a specified premium until you die, at which time your specified benefit is paid to your beneficiary. The amount of the premium is determined by the amount of your benefit and your age and life expectancy when the policy is purchased.

Unlike term insurance, where your premiums simply pay for your coverage or risk shifting, a whole life insurance policy has a **cash surrender value** or cash value that is the value you would receive if you canceled the policy before you die. You can “cash out” the policy and receive that cash value before you die. In that way, the whole life policy is also an investment vehicle; your premiums are a way of saving and investing, using the insurance company as your investment manager. Whole life premiums are more than term life premiums because you are paying not only to shift risk but also for investment management.

A **variable life** insurance policy has a minimum death benefit guaranteed, but the actual death benefit can be higher depending on the investment returns that the policy has earned. In that case, you are shifting some risk, but also assuming some risk of the investment performance.

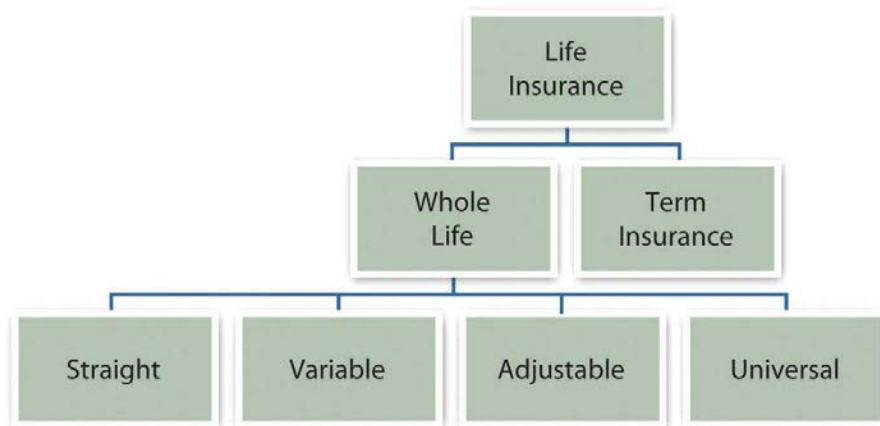
An **adjustable life** policy is one where you can adjust the amount of your benefit, and your premium, as your needs change.

A **universal life** policy offers flexible premiums and benefits. The benefit can be increased or decreased without canceling the policy and getting a new one (and thus losing the cash value, as in a basic whole life policy). Premiums are added to the policy's cash value, as are investment returns, while the insurer deducts the cost of insurance (COI) and any other policy fees.

When purchased, universal life policies may be offered with a single premium payment, a fixed (and regular) premium payment until you die, or a flexible premium where you can determine the amount of each premium, so long as the cash value in the account can cover the insurer's COI.

Figure 10.14 "Life Insurance Options" shows the life insurance options.

Figure 10.14 Life Insurance Options



So, is it term or whole life? When you purchase a term life policy, you purchase and pay for the insurance only. When you purchase a whole life policy, you purchase insurance plus investment management. You pay more for that additional service, so its value should be greater than its cost (in additional premiums). Whole life policies take some analysis to figure out the real investment returns and fees, and the insurer is valuable to you only if it is a better investment manager than you could have otherwise. There are many choices for investment management. Thus, the additional cost of a whole life policy must be weighed against your choices among investment vehicles. If it's better than your other choices, then you should buy the whole life. If not, then buy term life and save or invest the difference in the premiums.

Choosing a Policy

All life insurance policies have basic features, which then can be customized with a riderA clause to a policy that adds specific benefits under specific conditions.—a clause that adds benefits under certain conditions. The standard features include provisions that protect the insured and beneficiaries in cases of missed premium payments, fraud, or suicide. There are also loan provisions granted, so that you can borrow against the cash value of a whole life policy.

Riders are actually extra insurance that you can purchase to cover less common circumstances. Commonly offered riders include

- a waiver of premium payment if the insured becomes completely disabled,
- a double benefit for accidental death,
- guaranteed insurability allowing you to increase your benefit without proof of good health,
- cost of living protection that protects your benefit from inflation,

- accelerated benefits that allow you to spend your benefit before your death if you need to finance long-term care.

Finally, you need to consider the settlement options offered by the policy: the ways that the benefit is paid out to your beneficiaries. The three common options are

- as a lump sum, paid out all at once;
- in installments, paid out over a specified period;
- as interest payments, so that a series of interest payments is made to the beneficiaries until a specified time when the benefit itself is paid out.

You would choose the various options depending on your beneficiaries and their anticipated needs. Understanding these features, riders, and options can help you to identify the appropriate insurance product for your situation. As with any purchase, once you have identified the product, you need to identify the market and the financing.

Many insurers offer many insurance products, usually sold through brokers or agents. Agents are paid on commission, based on the amount of insurance they sell. A captive agent sells the insurance of only one company, while an independent agent sells policies from many insurers. You want a licensed agent that is responsive and will answer questions patiently and professionally. If you die, this may be the person on whom your survivors will have to depend to help them receive their benefits in a troubling time.

You will have to submit an application for a policy and may be required to have a physical exam or release medical records to verify your physical condition. Factors that influence your riskiness are your family medical history, age and weight, and lifestyle choices such as smoking, drinking, and drug use. Your risks will influence the amount of your premiums.

Having analyzed the product and the market, you need to be sure that the premium payments are sustainable for you, that you can add the expense in your operating budget without creating a budget deficit.

Life Insurance as a Financial Planning Decision

Unlike insuring property and health, life insurance can combine two financial planning functions: shifting risk and saving to build wealth. The decision to buy life insurance involves thinking about your choices for both and your opportunity cost in doing so.

Life insurance is about insuring your earnings even after your death. You can create earnings during your lifetime by selling labor or capital. Your death precludes your selling labor or earning income from salary or wages, but if you have assets that can also earn income, they may be able to generate some or even enough income to insure the continued comfort of your dependents, even without your salary or wages.

In other words, the larger your accumulated asset base, the greater its earnings, and the less dependent you are on your own labor for financial support. In that case, you will need less income protection and less life insurance. Besides life insurance, another way to protect your beneficiaries is to accumulate a large enough asset base with a large enough earning potential.

If you can afford the life insurance premiums, then the money that you will pay in premiums is currently part of your budget surplus and is being saved somehow. If it is currently contributing to your children's education savings or to your retirement plan, you will have to weigh the value of protecting current income against insuring your children's education or your future income in retirement. Or that surplus could be used toward generating that larger asset base.

These are tough decisions to weigh because life is risky. If you never have an accident or illness and simply go through life earning plenty and paying off your mortgage and saving for retirement and educating your children, then are all those insurance premiums just wasted? No. Since your financial strategy includes accumulating assets and earning income to satisfy your needs now or in the future, you need to protect those assets and income, at least by shifting the risk of losing them through a chance accident. At the same time, you must make risk-shifting decisions in the context of your other financial goals and decisions.

KEY TAKEAWAYS

- Disability insurance insures your income against an accident or illness that leaves your earning ability impaired.
- Disability insurance coverage and costs vary.
- Life insurance is designed to protect dependents against the loss of your income in the event of your death.
- Term insurance provides life insurance coverage for a specified period of time.
- Whole life insurance provides life insurance coverage until the insured's death.
- Whole life insurance has a cash surrender value and thus can be used as an investment instrument as well as a way of shifting risk.
- Variable, adjustable, and universal life policies offer more flexibility of benefits and premiums.
- Riders provide more specific coverage.
- Premiums are determined by the choice of benefits and riders and the risk of the insured, as assessed by medical history and lifestyle choices.

EXERCISES

1. Find out about workers' compensation at <http://www.dol.gov/owcp/>. What does the federal Office of Workers' Compensation Programs do, and what specific disabilities are covered in the programs that the OWCP administers? Find out what programs are available in your state for workers' compensation covering industrial and workplace accidents at <http://www.ic.nc.gov/ncic/pages/all50.htm>. What is the role of the U.S. Department of Labor's Occupational Safety & Health Administration (OSHA) in preventing workplace illness and injury? Find out at <http://www.osha.gov/>.
2. Find information about unemployment compensation at <http://www.dol.gov/dol/topic/unemployment-insurance/> and http://www.policyalmanac.org/social_welfare/archive/unemployment_compensation.shtml to answer the following questions.

- a. If you are involuntarily unemployed, do the federal and state unemployment compensation programs replace your wages?
- b. Are you entitled to unemployment compensation if you choose to be unemployed temporarily?
- c. Does it matter what kind of a job you have or how much income you earn?
- d. What does it mean to be involuntarily unemployed?
- e. Where does the money come from?
- f. If you have seasonal employment, can you collect unemployment to cover the off-season?
- g. If you are eligible, how long can you collect unemployment?
- h. Is the money you receive from unemployment compensation taxable?
- i. If you became unemployed in your state, how would your income be insured, and what could you expect from your state unemployment compensation program?

Read advice on choosing insurance from The Motley Fool

at <http://www.fool.com/insurancecenter/life/life.htm>. What are two situations in which purchasing life insurance might not be a good choice for you? According to the Insurance Information Institute (<http://www.iii.org/individuals/life/buying/pickacompany/>), what factors should you consider when choosing a life insurance company?

Chapter 11 Personal Risk Management: Retirement and Estate Planning

Introduction

While insurance is about protecting what you have, retirement and estate planning is about protecting what you may have in the future. Insuring what you have means finding the best way to protect it. Retirement planning, on the other hand, means finding the best way to protect the life that you'd like to be living after you stop earning income from employment. Estate planning involves protecting what you have even after your death. So retirement planning and estate planning are plans to create and then protect an accumulation of wealth.

Both types of planning also ask you to ask some of the following questions that you really can't answer:

- What will my life be like when I retire?
- Will I have a spouse or partner?
- Dependents?
- A home?
- A mortgage?
- Will I be disabled?
- Where will I live?
- What will I do?
- What would I like to do?
- When I die, will I have a taxable estate?

Planning, especially for retirement, should start as early as possible, allowing the most time for savings to occur and accrue. Ironically, that's when it is hardest to try to imagine answers to these questions. Understanding the practical means to planning and saving for retirement can help you get started. If your plans are flexible, they can adapt to the unexpected as it happens, which it inevitably will.

11.1 Retirement Planning: Projecting Needs

LEARNING OBJECTIVES

1. Identify the factors required to estimate savings for retirement.
2. Estimate retirement expenses, length of retirement, and the amount saved at retirement.
3. Calculate relationships between the annual savings required and the time to retirement.

Retirement planning involves the same steps as any other personal planning: figure out where you'd like to be and then figure out how to get there from where you are. More formally, the first step is to define your goals, even if they are no more specific than "I want to be able to afford a nice life after I stop getting a paycheck." But what is a "nice life," and how will you pay for it?

It may seem impossible or futile to try to project your retirement needs so far from retirement given that there are so many uncertainties in life and retirement may be far away. But that shouldn't keep you from saving. You can try to save as much as possible for now, with the idea that your plans will clarify as you get closer to your retirement, so whatever money you have saved will give you a head start.

Chris and Sam were young urban professionals until their children were born. Tired of pushing strollers through the subways, they bought a home in the suburbs. They are happy to provide a more idyllic lifestyle for their kids but miss the "buzz" and convenience of their urban lifestyle. When their children are on their own and Chris and Sam are ready to retire, they would like to sell their home and move back into the city.

Chris and Sam are planning to use the value of their house to finance a condo in the city, but they also know that real estate prices are often higher in the more desirable urban areas and that living expenses may be higher in the future. Now in their midthirties, Chris and Sam are planning to retire in thirty years.

Chris and Sam need to project how much money they will need to have saved by the time they wish to retire. To do that, they need to project both their future capital needs (to buy the condo) and their future living expense in retirement. They also need to project how long they may live after retirement, or how many years' worth of living expenses they will need, so that they won't outlive their savings.

They know that they have thirty years over which to save this money. They also know, as explained in Chapter 4 "Evaluating Choices: Time, Risk, and Value", that time affects value. Thus, Sam and Chris need to project the rate of compounding for their savings, or the rate at which time will affect the value of their money.

To estimate required savings, in other words, you need to estimate the following:

- Expenses in retirement
- The duration of retirement
- The return on savings in retirement

As difficult as these estimations seem, because it is a long time until retirement and a lot can happen in the meantime, you can start by using what you know about the present.

Estimating Annual Expenses

One approach is to assume that your current living expenses will remain about the same in the future. Given that over the long run, inflation affects the purchasing power of your income, you factor in the effect inflation may have so that your purchasing power remains the same.

For example, say your living expenses are around \$25,000 per year and you'd like to have that amount of purchasing power in retirement as well. Assuming your costs of living remain constant, if you are thirty years from retirement, how much will you be spending on living expenses then?

The overall average annual rate of inflation in the United States is about 3.25 percent, [1]

so you would have to spend $\$25,000 \times (1 + 0.0325)^{30} = \$65,269$ *per year* to maintain your standard of living thirty years from now. Put another way, thirty years from now, one dollar will buy only about thirty-eight *cents* worth of today's expenses. This calculation comes from the relationship of time and value, studied in Chapter 4 "Evaluating Choices: Time, Risk, and Value". In this case, \$25,000 is the present value of your expenses, and you are looking for the future value, given that your expenses will appreciate at a rate of 3.25 percent per year for thirty years.

As you can see, you would need about two-and-a-half times your current spending just to live the life you live now. Fortunately, your savings won't be just "sitting there" during that time. They, too, will be compounding to keep up with your needs.

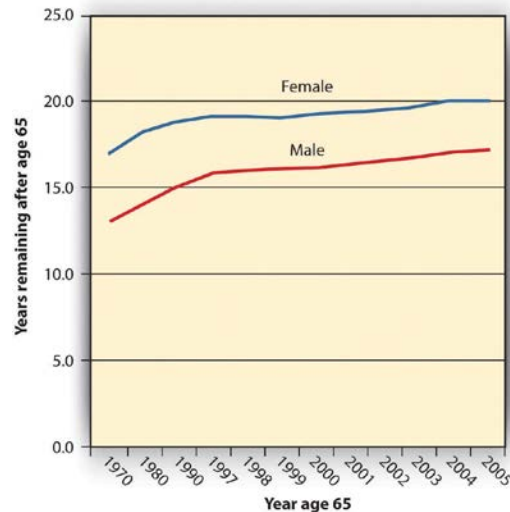
You may use your current expenses as a basis to project a more or less expensive lifestyle after retirement. You may anticipate expenses dropping with fewer household members and dependents, for example, after your children have grown. Or you may wish to spend more and live a more comfortable life, doing things you've always wanted to do. In any case, your current level of spending can be a starting point for your estimates.

Estimating Length of Retirement

How much you need to have saved to support your annual living expenses after retirement depends on how long those expenses continue or how long you'll live after retirement. In the United States, life expectancy at age sixty-five has increased dramatically in the last century, from twelve to seventeen years for males and from twelve to twenty years for females, due to increased access to health care, medical advances, and healthier lives before age sixty-five. [2]

Figure 11.2 "Life Expectancy at Age 65 in the United States, 1970–2005" shows the data from 1970 to 2005.

Figure 11.2 Life Expectancy at Age 65 in the United States, 1970–2005



If life expectancy continues to increase at these rates, in thirty years your life expectancy at age sixty-five could be twenty-eight to thirty years. In that case, your retirement savings will have to provide for your living expenses for as long as thirty years. Put another way, at age thirty-five you have thirty years to save enough to support you for thirty years after that.

Estimating the Amount Needed at Retirement

You can use what you know about time and value (from Chapter 4 "Evaluating Choices: Time, Risk, and Value") to estimate the amount you would need to have saved up by the time you retire. Your annual expenses in retirement are really a series of cash flows that will grow by the rate of inflation. At the same time, your savings will grow by your rate of return, even after you are making withdrawals to cover your expenses.

Say that when you retire, you have your retirement funds invested so they are earning a return of 5 percent per year. Assume an annual inflation rate of 3.25 percent and that your annual expenses when you retire are \$65,269 (as adjusted for inflation in the example above).

Figure 11.3 "Estimating Annual Expenses and Savings Needed at Retirement" shows what your situation would look like.

Figure 11.3 Estimating Annual Expenses and Savings Needed at Retirement

Years after Retirement	Annual Expenses	Value at Retirement	
		Return on Savings = 5%	Return on Savings = 2%
0	65,269	65,269	65,269
1	67,390	64,181	66,069
2	69,580	63,111	66,879
3	71,842	62,060	67,698
4	74,177	61,025	68,528
5	76,587	60,008	69,368
6	79,076	59,008	70,218
7	81,646	58,025	71,078
8	84,300	57,058	71,949
9	87,040	56,107	72,831
10	89,869	55,171	73,723
11	92,789	54,252	74,627
12	95,805	53,348	75,542
13	98,919	52,459	76,467
14	102,133	51,584	77,404
15	105,453	50,725	78,353
16	108,880	49,879	79,313
17	112,419	49,048	80,285
18	116,072	48,230	81,269
19	119,844	47,427	82,265
20	123,739	46,636	83,273
21	127,761	45,859	84,294
22	131,913	45,095	85,327
23	136,200	44,343	86,372
24	140,627	43,604	87,431
25	145,197	42,877	88,502
26	149,916	42,163	89,587
27	154,788	41,460	90,685
28	159,819	40,769	91,796
29	165,013	40,089	92,921
30	170,376	39,421	94,060
Total		1,590,289	2,443,381

The amount you need at retirement varies with the expected rate of return on your savings. While you are retired, you will be drawing income from your savings, but your remaining savings will still be earning a return. The more return your savings can earn while you are retired, the less you have to have saved by retirement. The less return your savings can earn in retirement, the more you need to have saved *before* retirement.

In Figure 11.3 "Estimating Annual Expenses and Savings Needed at Retirement", the total amount needed at retirement is only about \$1.5 million if your remaining savings will earn 5 percent while you are retired, but if that rate of return is only 2 percent, you would have to begin retirement with almost \$2.5 million.

Let's assume your return on savings is 5 percent. If you want to have \$1,590,289 in thirty years when you retire, you could deposit \$367,957 today and just let it compound for thirty years without a withdrawal. But if you plan to make an annual investment in your retirement savings, how much would that have to be?

Estimating the Annual Savings for Retirement

In the example above, if you make regular annual deposits into your retirement account for the next thirty years, each deposit would have to be \$23,936, assuming that your account will earn 5 percent for in thirty years. If the rate of return for your savings is less, you would have to save more to have more at retirement. If your retirement savings can earn only 2 percent, for example, you would have to deposit \$60,229 per year to have \$2,443,361 when you retire. Your retirement account grows through your contributions and through its own earnings. The more your account can earn before you retire, the less you will have to contribute to it. On the other hand, the more you can contribute to it, the less it has to earn.

The time you have to save until retirement can make a big difference to the amount you must save every year. The longer the time you have to save, the less you have to save each year to reach your goal. Figure 11.4 "Time to Retirement and Annual Savings Required" shows this idea as applied to the example above, assuming a 5 percent return on savings and a goal of \$1,590,289.

Figure 11.4 Time to Retirement and Annual Savings Required

Time to Retirement (in years)	Annual Savings Required	Funds at Retirement	Annual Return on Savings
15	153,212	1,590,289	5.00%
30	103,451	1,590,289	5.00%
40	92,679	1,590,289	5.00%

The longer the time you have to save, the sooner you start saving, and the less you need to save each year. Chris and Sam are already in their thirties, so they figure they have thirty years to save for retirement. Had they started in their twenties and had forty years until retirement, they would not have to save so much each year. If they wait until they are around fifty, they will have to save a lot more each year. The more you have to save, the less disposable income you will have to spend on current living expenses, making it harder to save. Clearly, saving early and regularly is the superior strategy.

When you make these calculations, be aware that you are using estimates to figure the money you'll need at retirement. You use the *expected* inflation rate, based on its historic average, to estimate annual expenses, historical statistics on life expectancy to *estimate* the duration of your retirement, and an *estimate* of future savings returns.

Estimates must be adjusted because things change. As you progress toward retirement, you'll want to reevaluate these numbers at least annually to be sure you are still saving enough.

KEY TAKEAWAYS

- To estimate required savings, you need to estimate
 - expenses in retirement, based on lifestyle and adjusted for inflation;
 - the duration of retirement, based on age at retirement and longevity;
 - the return on savings in retirement.
- You must save more for retirement if
 - expenses are higher,
 - duration of retirement is longer,
 - the return on savings in retirement is less.
- Your annual savings for retirement also depends on the time until retirement; the longer the time that you have to save, the less you need to save each year.

EXERCISES

1. Write in your personal finance journal or My Notes your ideas and expectations for your retirement. At what age do you want to retire? How many years do you have to prepare before you reach that age? Will you want to stop working at retirement? Will you want to have a retirement business or start a new career? Where and how would you like to live? How do you think you would like to spend your time in retirement? How much have you saved toward retirement so far?
2. Experiment with the retirement planning calculator at MSN Money (<http://moneycentral.msn.com/retire/planner.aspx>). What will you have saved for retirement by the time you retire? What will you need to live in retirement without income from employment? How old will you be when your retirement savings run out? Run several combinations of estimates to get an idea of how and why you should plan to save for retirement. Then sample the Kiplinger's articles about saving for retirement at <http://moneycentral.msn.com/content/Retirementandwills/Createaplan/P142702.asp>. According to the lead article, "The Basics: How Much Do You Need to Retire?" what percentage of annual income should young workers in their twenties and thirties today plan to invest in retirement savings accounts?

[1] The average is calculated over the period from 1913 to 2009. U.S. Bureau of Labor Statistics, <http://www.bls.gov/cpi/> (accessed May 1, 2009).

[2] U.S. Department of Health and Human Services, “Health, United States, 2008: With Special Feature on the Health of Young Adults (Health United States),” Center for Disease Control, National Center for Health Statistics, 2008.

11.2 Retirement Planning: Ways to Save

LEARNING OBJECTIVES

1. Compare and contrast employer, government, and individual retirement plans.
2. Explain the differences between a defined benefit plan and a defined contribution pension plan.
3. Summarize the structure and purpose of Social Security.
4. State the difference between a Traditional IRA and a Roth IRA.
5. Identify retirement plans for the self-employed.

While knowing the numbers clarifies the picture of your needs, you must reconcile that picture with the realities that you face now. How will you be able to afford to save what you need for retirement?

There are several savings plans structured to help you save—some offer tax advantages, some don’t—but first you need to make a commitment to save.

Saving means not spending a portion of your disposable income. It means delaying gratification or putting off until tomorrow what you could have today. That is often difficult, as you have many demands on your disposable income. You must weigh the benefit of fulfilling those demands with the cost of not saving for retirement, even though benefit in the present is much easier to credit than benefit in the future. Once you resolve to save, however, employer, government, and individual retirement plans are there to help you.

Employer Retirement Accounts

Employers may sponsor pension or retirement plans for their employees as part of the employees’ total compensation. There are two kinds of employer-sponsored plans: defined benefit plans and defined contribution plans.

A **defined benefit plan** is a retirement plan, sometimes called a **pension plan**, funded by the employer, who promises the employee a specific benefit upon retirement. The employer can be a corporation, labor union, government, or other organization that

establishes a retirement plan for its employees. In addition to (or instead of) a defined benefit plan, an employer may also offer a profit-sharing plan, a stock bonus plan, an employee stock ownership plan (ESOP), a thrift plan, or other plan. Each type of plans has advantages and disadvantages for employers and employees, but all are designed to give employees a way to save for the future and employers a way to attract and keep employees.

The payout for a defined benefit plan is usually an annual or monthly payment for the remainder of the employee's life. In some defined benefit plans, there is also a spousal or survivor's benefit. The amount of the benefit is determined by your wages and length of service with the company.

Many defined benefit plans are structured with a **vesting** option that limits your claim on the retirement fund until you have been with the company for a certain length of time. For example, Paul's employer has a defined benefit plan that provides for Paul to be 50 percent vested after five years and fully vested after seven years. If Paul were to leave the company before he had worked there for five years, none of his retirement fund would be in his account. If he left after six years, half his fund would be kept for him; after ten years, all of it would be.

With a defined benefit plan your income in retirement is constant or "fixed," and it is the employer's responsibility to fund your retirement. This is both an advantage and a disadvantage for the employee. Having your employer fund the plan is an advantage, but having a fixed income in retirement is a drawback during periods of inflation when the purchasing power of each dollar declines. In some plans, that drawback is offset by automatic cost of living increases.

Defined benefit plans also carry some risk. Most companies reserve the right to change or discontinue their pension plans. Furthermore, the pension payout is only as good as the company that pays it. If the company defaults, its pension obligations may be covered by the **Pension Benefit Guaranty Corporation (PBGC)**, an independent federal government agency. If not, employees are left without the benefit. Even if the company is insured, the PBGC may not cover 100 percent of employees' benefits.

Founded in 1974, the PBGC is funded by insurance premiums paid by employers who sponsor defined benefit plans. If a pension plan ends (e.g., through the employer's bankruptcy) the PBGC assumes pension payments up to a limit per employee. Currently, the PBGC pays benefits to approximately 640,000 retirees and insures the pensions of about 1,305,000 employees.[1]

There is some concern, however, that if too many defined benefit sponsors fail, as could happen in a widespread recession, the PBGC would not be able to fully fund its obligations.

To avoid the responsibility for employee retirement funds, more and more employers sponsor **defined contribution retirement plans**. Under defined contribution plans, each employee has a retirement account, and both the employee and the employer may

contribute to the account. The employer may contribute up to a percentage limit or offer to match the employee's contributions, up to a limit. With a matching contribution, if employees choose not to contribute, they lose the opportunity of having the employer's contribution as well as their own. The employee makes untaxed contributions to the account as a payroll deduction, up to a maximum limit specified by the tax code. The maximum for defined contribution plans is 25 percent of the employee's compensation, with a cap in 2009 of \$49,000. Defined contribution plans known as 401(k) plans had a maximum contribution limit in 2009 of \$16,500.

Defined contribution plans have become increasingly popular since section 401(k) was introduced into the tax code in 1978. The **401(k) plans**—or 403b plans for employees of nonprofits and 457 plans for employees of government organizations—offer employees a pretax (or tax-deferred) way to save for retirement to which employers can make a tax-deductible contribution.

The advantages of a 401(k) for the employee are the plan's flexibility and portability and the tax benefit. A defined contribution account belongs to the employee and can go with the employee when he or she leaves that employer. For the employer, there is the lower cost and the opportunity to shift the risk of investing funds onto the employee. There is a ceiling on the employer's costs: either a limited matching contribution or a limit set by the tax code.

The employer offers a selection of investments, but the employee chooses how the funds in his or her account are diversified and invested. Thus, the employee assumes the responsibility—and risk—for investment returns. The employer's contributions are a benefit to the employee. Employers can also make a contribution with company stock, which can create an undiversified account. A portfolio consisting only of your company's stock exposes you to market risk should the company not do well, in which case, you may find yourself losing both your job and your retirement account's value.

U.S. Government's Retirement Account

The federal government offers a mandatory retirement plan for all citizens except federal government employees and railroad workers, known as **Social Security**. Social Security is funded by a mandatory payroll tax shared by employee and employer. That tax, commonly referred to as Federal Insurance Contributions Act (FICA), also funds Medicare (see Chapter 10 "Personal Risk Management: Insurance"). Social Security was signed into law by President Franklin D. Roosevelt in 1935 to provide benefits for old age and survivors and disability insurance for workers (OASDI). The Social Security Administration (SSA) was established to manage these "safety nets."

Figure 11.6 President Franklin D. Roosevelt Signing the Social Security Act, August 14, 1935[2]



We can never insure one hundred percent of the population against one hundred percent of the hazards and vicissitudes of life. But we have tried to frame a law which will give some measure of protection to the average citizen and to his family against the loss of a job and against poverty-ridden old age...It is, in short, a law that will take care of human needs and at the same time provide for the United States an economic structure of vastly greater soundness.

- Franklin D. Roosevelt, August 14, 1935[3]

Data provided by the SSA show that almost 51,500,000 beneficiaries receive an average monthly benefit of \$1,057. The federal government's total annual payment of benefits totals \$653 billion. Most of the beneficiaries are retirees (63.6 percent) or their spouses and children (5.7 percent), but there are also survivors, widows, and orphans receiving about 12.6 percent of benefits and disabled workers, spouses, and children receiving approximately 18.3 percent of benefits.[4]

Social Security is not an automatic benefit but an entitlement. To qualify for benefits, you must work and contribute FICA taxes for forty quarters (ten years). Retirement benefits may be claimed as early as age sixty-two, but full benefits are not available until age sixty-seven for workers born in 1960 or later. If you continue to earn wage income after you begin collecting Social Security but before you reach full retirement age, your benefit may be reduced. Once you reach full retirement age, your benefit will not be reduced by additional wage income.

The amount of your benefit is calculated based on the amount of FICA tax paid during your working life and your age at retirement. Up to 85 percent of individual Social Security benefits may be taxable, depending on other sources of income.[5]

Each year, the SSA provides each potential, qualified beneficiary with a projection of the expected monthly benefit amount (in current dollars) for that individual based on the individual's wage history.

Social Security benefits represent a large expenditure by the federal government, and so the program is often the subject of debate. Economists and politicians disagree on whether the system is sustainable. As the population ages, the ratio of beneficiaries to

workers increases—that is, there are more retirees collecting benefits relative to the number of workers who are paying into the system.

Many reforms to the system have been suggested, such as extending the eligibility age, increasing the FICA tax to apply to more income (right now it applies only to a limited amount of wages, but not to income from interest, dividends, or investment gains), or having workers manage their Social Security accounts the same way they manage 401(k) plans. Some of these proposals are based on economics, some on politics, and some on social philosophy. Despite its critics, Social Security remains a popular program on which many Americans have come to rely. You should, however, be aware that Social Security can be amended and faces possible underfunding.

Keep in mind that in 1935 when Social Security was created, life expectancy for American males was only sixty-five, the age of Social Security eligibility. Social Security was never meant to be a retirement income, but rather a supplement to retirement income, merely “some measure of protection against...poverty-ridden old age.” [6]

As part of the Federal Employees Retirement System (FERS), the U.S. government also offers special retirement plans to its employees, including a Thrift Savings Plan (TSP) for civilians employed by the United States and members of the uniformed services (i.e., Army, Navy, Air Force, Marine Corps, Coast Guard, National Oceanic and Atmospheric Administration, and Public Health Service).

Federal, state, and local government plans; plans for public school teachers and administrators; and church plans are exempt from the rules of the Employee Retirement Income Security Act of 1974 (ERISA) and from some rules that govern retirement plans of private employers under the Internal Revenue Code. In some states, public school teachers pay into a state retirement system and do not pay federal Social Security taxes (or receive Social Security benefits) for the years they are working as teachers.

Nevertheless, many plans for public employees are defined benefit plans providing annuities upon retirement, similar to but separate from plans for employees in the private sector.

Individual Retirement Accounts

Any individual can save for retirement without a special “account,” but since the government would like to encourage retirement savings, it has created tax-advantaged accounts to help you do so. Because these accounts provide tax benefits as well as some convenience, it is best to use them first in planning for retirement, although their use may be limited.

Individual retirement accounts (IRAs) were created in 1974 by ERISA. They were initially available only to employees not covered by an employer’s retirement plan. In 1981, participation was amended to include everyone under the age of 70.5. [7]

IRAs are personal investment accounts, and as such may be invested in a wide range of financial products: stocks, bonds, certificate of deposits (CDs), mutual funds, and so on. Types of IRAs differ in terms of tax treatment of contributions, withdrawals, and in the limits of contributions.

The **Traditional IRA** is an account funded by tax-deductible and/or nondeductible contributions. Deductible contributions are taxed later as funds are withdrawn, but nondeductible contributions are not. In other words, you either pay tax on the money as you put it in, or you pay tax on it as you take it out.

A great advantage of a Traditional IRA is that principal appreciation (interest, dividend income, or capital gain) is not taxed until the funds are withdrawn. Withdrawals may begin without penalty after the age of 59.5. Funds may be withdrawn before age 59.5, but with penalties and taxes applied. Contributions may be made until age 70.5, at which time required minimum distributions (withdrawals) of funds must begin.

Because they create tax advantages, contributions to a Traditional IRA are limited, currently up to \$5,000 (or \$6,000 for someone over the age of fifty). That limit on deductible contributions becomes smaller (the tax benefit is phased out) as income rises. The Internal Revenue Service (IRS) provides a worksheet to calculate how much of your contribution is taxable with your personal income tax return (Form 1040).

For the **Roth IRA**, created in 1997, contributions are not tax deductible, but withdrawals are not taxed. You can continue to contribute at any age, and you do not have to take any minimum required distribution. The great advantage of a Roth IRA is that capital appreciation is not taxed.

As with the Traditional IRA, contributions may be limited depending on your income. If you have both a Traditional and a Roth IRA, you may contribute to both, but your combined contribution is limited.

Figure 11.9 "Differences between the Traditional and the Roth IRAs" is an adaptation of a guide provided by the IRS to the key differences between a Traditional and a Roth IRA.[8]

Figure 11.9 Differences between the Traditional and the Roth IRAs

	Traditional IRA	Roth IRA
Age limit to create the IRA?	Yes, 70½	No
Age limit to contribute?	Yes, 70½	No
Tax-deductible contributions allowed?	Yes	No
Tax-deductible contributions limited?	Yes, by income	N/A
Nondeductible contributions allowed?	Yes	Yes
Nondeductible contributions limited?	Yes	Yes
Withdrawals are taxed?	Yes, of deductible contributions	No
Minimum required distribution?	Yes	No
Age of mandatory distribution?	70½	None
Minimum age for distribution?	Yes, 59½	Yes, 59½

A **rollover** is a distribution of cash from one retirement fund to another. Funds may be rolled into a Traditional IRA from an employer plan (401(k), 403b, or 457) or from another IRA. You may not deduct a rollover contribution (since you have already deducted it when it was originally contributed), but you are not taxed on the distribution from one fund that you immediately contribute to another. A **transfer** moves a retirement account, a Traditional IRA, from one trustee or asset manager to another. Rollovers and transfers are not taxed if accomplished within sixty days of distribution.

Self-Employed Individual Plans

People who are self-employed wear many hats: employer, employee, and individual. To accommodate them, there are several plans that allow for deductible contributions.

A **simplified employee pension (SEP)** is a plan that allows an employer with few or even no other employees than himself or herself to contribute deductible retirement contributions to an employee's Traditional IRA. Such an account is called a SEP-IRA and is set up for each eligible employee. Contributions are limited: in any year they can't be more than 25 percent of salary or \$46,000 (in 2008), whichever is less. If you are self-employed and contributing to your own SEP-IRA, the same limits apply, but you must also include any other contributions that you have made to a qualified retirement plan.[9]

A **savings income match plan for employees (SIMPLE)** is a plan where employees make salary reduction (before tax) contributions that the employer matches. If the contributions are made to a Traditional IRA, the plan is called a SIMPLE IRA Plan. Any employer with fewer than one hundred employees who were paid at least \$5,000 in the preceding year may use a SIMPLE plan. There are also SIMPLE 401(k) Plans. Deductible contributions are limited to \$10,500 in 2008 for age forty-nine and below, for example.[10]

A **Keogh Plan** is another retirement vehicle for small or self-employers. It can be a defined benefit or a defined contribution qualified plan with deductible contribution limits.

KEY TAKEAWAYS

- Retirement plans may be sponsored by employers, government, or individuals.
- Defined benefit plans differ from defined contribution plans in that the benefit is a specified amount for which the employer is liable. In a defined contribution plan, the benefit is not specified, and the employee is responsible for the accumulation in the plan.
- Social Security is an entitlement financed by payroll taxes and designed to supplement employer retirement plans or individual retirement plans.
- Traditional and Roth IRAs differ by the taxable nature of contributions and withdrawals and by the age limits of contributions and withdrawals.
- Retirement plans for the self-employed are designed for those who are both employee and employer.

EXERCISES

1. Do you participate in an employer-sponsored retirement savings plan? If so, what kind of plan is it, and what do you see as the benefits and drawbacks of participating? If you contribute to your plan, how did you decide how much to contribute? Could you contribute more? In searching for your next good job, what kind of retirement plan would you prefer to find in the new employer's benefit package, and why?
2. As part of your planning, how can you estimate what you can expect from Social Security as a contribution to your retirement income? Find this answer by going to <http://www.ssa.gov/retire2>. Using the menus at this site, find out your retirement age. How many credits toward Social Security do you have now? How many do you expect to accumulate over your working life? Use one of the benefit calculators to find your estimated Social Security benefit. How much could you receive monthly? Would you be able to live on your Social Security alone? How much more would you need to save for? What would happen if you continued to work or went back to work after taking your retirement benefit? What would happen if you took your benefit before your full retirement age?

3. Will your career path lead you to employment through government at the local, state, or federal level (for example, in education, law enforcement, or public health)? How are retirement plans for government employees different from the plans described in this section? Find answers to this question at <http://www.opm.gov/RETIRE/>.
4. What individual retirement account(s) do you have? Which type of IRA, if any, would be best for you, and why? Why might it be a good idea to have an IRA as a means of funding your retirement along with other means? According to the Motley Fool article “All About IRAs” at <http://www.fool.com/Money/AllAboutIRAs/AllAboutIRAs.htm>, what are the chief advantages of IRAs? How many types of IRAs are there? Can you withdraw money from an IRA account? What does AGI stand for, and what is its significance for IRAs? When must you take a distribution (cash out your IRA)?

[1] The Pension Benefit Guaranty Corporation, “Mission Statement,” <http://www.pbgc.gov/about/about.html> (accessed May 1, 2009).

[2] Library of Congress photo, LC-US262-123278, <http://www.ssa.gov/history/fdrsigh.html> (accessed May 1, 2009).

[3] Franklin D. Roosevelt, “Statement on Signing the Social Security Act,” August 14, 1935, <http://www.fdrlibrary.marist.edu/odssast.html> (accessed May 1, 2009).

[4] U.S. Social Security Administration, “Monthly Statistical Snapshot, March 2009,” 2009, http://www.ssa.gov/policy/docs/quickfacts/stat_snapshot/ (accessed May 1, 2009).

[5] Retrieved from the Social Security Administration archives, <http://www.socialsecurity.gov/history/fdrstmts.html#signing> (accessed November 23, 2009).

[6] Retrieved from the Social Security Administration archives, <http://www.socialsecurity.gov/history/fdrstmts.html#signing> (accessed November 23, 2009).

[7] Wikipedia, “Legislative History of IRAs,” http://en.wikipedia.org/wiki/Individual_retirement_account (accessed May 23, 2012).

[8] U.S. Department of the Treasury, Publication 590, Internal Revenue Service, 2009.

[9] U.S. Department of the Treasury, Publication 560, Internal Revenue Service, 2009.

[10] U.S. Department of the Treasury, Publication 560, Internal Revenue Service, 2009.

11.3 Estate Planning

LEARNING OBJECTIVES

1. Identify the purposes, types, and components of a will.
2. Describe the roles and types of trusts and gifts.
3. Analyze the role of the estate tax in estate planning.

Your **estate** includes everything you own. Other aspects of financial planning involve creating and managing your assets while you are alive. Estate planning is a way to manage your assets after your death. Age is not really a factor, because death can occur at any time, at any age, by any cause. Arranging for the disposition of your estate is not a morbid concern but a kindness to those you leave behind. Death is a legal and financial event—and in some cases a taxable event—as well as an emotional one. Your loved ones will have to deal with the emotional aftermath of your loss and will appreciate your care in planning for the legal and financial outcomes of your death.

Wills

Since you won't be here, you will need to leave a written document outlining your instructions regarding your estate. That is your **will**, your legal request for the distribution of your estate, that is, assets that remain after your debts have been satisfied. If you die **intestate**, or without a will, the laws of your state of legal residence will dictate the distribution of your estate.

You can write your own will so long as you are a legal adult and mentally competent. The document has to be witnessed by two or three people who are not inheriting anything under the terms of the will, and it must be dated and signed and, in some states, notarized. A **holographic will** is handwritten; it may be more difficult to validate. A **statutory will** is a preprinted will that you can buy from a store or in a software package. Consider, however, that a will is a legal document. Having yours drawn up by a lawyer may better insure its completeness and validity in court.

Probate is the legal process of validating a will and administering the payment of debts and the distribution of assets by a probate court. Probate courts also distribute property in the absence of a will. Probate is not required in every case, however. Probate is not required if the deceased

- owned assets of little value, allowing for transfer without court supervision;
- owned assets jointly with or “payable on death” to another person;

- owned assets naming another person as beneficiary;
- held all assets in a living trust (a legal entity for managing assets on behalf of beneficiaries).

Besides the details of “who gets what,” a will should name an **executor**, the person or persons who will administer the payment of your debts and the distribution of your remaining assets, according to your wishes as expressed in your will. If you have legal dependents, your will should name a guardian for them. You may also include a “letter of last instruction” stating the location of important documents, safe deposit keys, and bank accounts and specifying your funeral arrangements.

There are several types of wills. A **simple will** leaves everything to a spouse. For comparatively small estates that are not taxable (e.g., estates with assets under a million dollars in value), a simple will may be the most appropriate kind. A **traditional marital share will** leaves one-half of the estate to a spouse and the other half to others, usually children. This may lower any tax burden on your estate and your spouse’s.

A **stated dollar amount will** allows you to leave specific amounts to beneficiaries. A drawback of this type of will is that the stated amounts may be reasonable when your will is drawn up but may not reflect your intentions at the time of your death, perhaps many years later. For that reason, rather than specifying specific amounts, it may be better to specify percentages of your asset values you would like each beneficiary to have.

You may change or rewrite your will at any time, but you should definitely do so as your life circumstances change, especially with events such as marriage or divorce, the birth of a child, and the acquisition of significant assets, such as a house. If the changes in your circumstances are substantial, you should create a new will.

It is possible that you will become mentally or physically disabled before you die and unable to direct management of your assets. To prepare for this possibility, you may create a **living will** with instructions for your care in that event. You may appoint someone—usually a spouse, child, or sibling—who would have **power of attorney**, that is, the right to act on your behalf, especially as regards financial and legal decisions. That power may be limited or unlimited (such as a “durable power of attorney”) and is restricted to certain acts or dependent on certain circumstances.

Along with granting power of attorney, your living will may include a health care proxy, requesting that medical personnel follow the instructions of a designated family member who expresses your wishes concerning your end-of-life treatment. Many people request, for example, that they not be revived or sustained if they cannot experience some quality of life. Be sure to update your living will, however, as over time your views may change and as medical and technological advances change our notions of “quality of life.”

Trusts and Gifts

A **trust** is a legal entity created by a trustor, or grantor, who owns assets managed by a trustee or trustees for the benefit of a beneficiary or beneficiaries. A **testamentary trust** may be established by a will so that beneficiaries who are unable to manage assets (minor children or disabled dependents) can benefit from the assets but have them managed for them. A **living trust** is established while the grantor is alive. Unlike a will, it does not become a matter of public record upon your death. A **revocable living trust** can be revoked by the grantor, who remains the owner of the assets, at any time. Such a trust avoids the probate process but may not shield assets from estate taxes. An **irrevocable living trust** cannot be changed; the grantor gives up ownership of his or her assets, which passes to the trust, avoiding probate and estate taxes. However, the trust then becomes a separate taxable entity and pays tax on its accumulated income.

Another way to avoid probate and estate taxes is to gift assets to your beneficiaries while you are alive. Ownership of the assets passes to the beneficiaries at the time of the gift, so the assets are no longer included in your estate. The federal government and many state governments levy a gift tax for gifts exceeding certain limits. In 2009, the annual exclusion from federal tax was \$13,000 per recipient, for example. Also, the federal government does not tax gifts to spouses and to pay others' medical bills or tuitions.

There are limits to this kind of tax-free distribution of funds, however. For example, the federal government considers any "gift" you make within three years prior to your death as part of your taxable estate. Gifting nevertheless is a way to reduce the value of an estate. Some parents also prefer to make funds available or to gift them to their children when the children need them more—for example, earlier in their adult lives when they may not have accrued enough wealth to make a down payment on a house.

Most trusts, whether testamentary or living, revocable or irrevocable, are created to avoid either the probate process or estate taxes or both. The probate process can be long and costly and therefore a burden for your executor, your beneficiaries (who may have to wait for their distributions), and your estate.

Estate Taxes

Estate taxes diminish the value of your estate that will be distributed to your beneficiaries. For that reason, one of the purposes of estate planning is to try to minimize those taxes.

The federal estate tax is "a tax on your right to transfer property at your death."^[1]

In 2009, you are required to file an estate tax return if the taxable estate is valued at \$3,500,000 or more. In states with estate taxes, you must file a return if the taxable estate value is more than \$1,000,000 or other similar cutoff amount. (For various

philosophical and practical reasons, the estate tax is the object of much political debate, so those filing limits are subject to change.)

A taxable estate is the gross estate less allowable deductions. The tax law defines the gross estate as the following:

- The value of all property in which you had an ownership interest at the time of death
- Life insurance proceeds payable to your estate or, if you owned the policy, to your heirs
- The value of certain annuities payable to your estate or your heirs
- The value of certain property you transferred within three years before your death[2]

Allowable deductions include debts that you owed at the time of death, including mortgage debt, your funeral expenses, the value of property passing directly to your surviving spouse (the marital deduction), charitable gifts, and the state estate tax.[3]

Figure 11.12 "Estate Tax Filings in 2007" shows the scope of the estate tax in the U.S. economy for 2007, the latest year for which data is available.

Figure 11.12 Estate Tax Filings in 2007

Number of Filings	17,416
Total Gross Estate Value	112,164,528,000
Total Taxable Estate Value	84,543,844,000
Total Tax Paid	22,508,292,000
Average Gross Estate Value	6,440,315
Average Taxable Estate Value	4,854,378
Average Tax Paid	1,292,392

In the United States, with a total population of more than 306 million people, those 17,416 tax returns represent about 0.0057 percent of the population, paying about 0.9393 percent of the total taxes collected by the IRS in 2007.[4]

While estate taxes tax your assets in your estate, inheritance taxes tax your assets in the hands of your beneficiaries. Because of the costs involved, beneficiaries potentially may not be able to afford to inherit or preserve wealth within the family. For this reason and others, many states have redefined or repealed their inheritance tax laws.

Estate taxes also can be more costly to beneficiaries if assets are not liquid—for example, if a large portion of the value of your taxable estate is in your home or business. Your survivors may be required to liquidate or sell assets just to pay the estate taxes. To avoid that, some estate plans include purchasing a life insurance policy for the anticipated amount of the estate tax, thus providing a source of liquid funds or cash for tax payment.

Minimizing taxes owed is a goal of estate planning, but not the only goal. Your primary objective is to see that your dependents are provided for by the distribution of your assets and that your assets are distributed as you would wish were you still there to distribute them yourself.

KEY TAKEAWAYS

- A will describes your wishes for the distribution of your assets (the estate) after your death.
- Probate courts distribute assets in the absence of a will and administer wills in estates with assets valued above a certain (variable) dollar amount.
- There are many kinds of wills, including
 - the simple will,
 - the traditional marital share will,
 - the stated dollar amount will.
- Living wills, with power of attorney and health care proxy, provide medical directives, empower someone to manage your estate while you are still alive, and authorize someone to make decision about your health and end-of-life care.
- Trusts are used to provide the benefits of assets for beneficiaries without them assuming responsibility for asset management.
- There are testamentary and living trusts, revocable and irrevocable trusts. Setting up and administering trusts involves some considerable expense.
- Creating trusts and giving gifts are ways to reduce the taxable value of an estate.
- Estate planning should try to minimize the federal and state tax obligations of estate disposition.

EXERCISES

1. What are the estate tax laws in your state? Does your state tax income from Social Security payments? Does your state tax pensions and other sources of retirement income? How does your

state treat inheritance taxes and estate taxes? What tax breaks does your state offer to retirees?

Find answers to these questions by visiting <http://www.retirementliving.com/taxes-by-state>.

2. Draft a holographic will or use a form for a statutory will recognized in your state. Start by reviewing your balance sheet, showing your assets, liabilities, net worth, and inventory of personal and household property. Think about how you would want your estate to be distributed upon your death. Identify an executor. Sample the free forms and advice for writing a will at <http://www.free-legal-document.com/how-to-write-a-will.html> and http://www.alllaw.com/forms/wills_and_trusts/last_will_and_testam/. Find out what kind of document your state requires for a “last will and testament” at <http://www.medlawplus.com/library/legal/lastwillandtestamentform.htm>. Also consider drafting a living will. What should be in a living will? See http://www.alllaw.com/articles/wills_and_trusts/article7.asp. What form for a living will does your state recognize as legal (see <http://liv-will1.uslivingwillregistry.com/forms.html>)? What is the purpose of the U.S. Living Will Registry? According to the video clips on “How to Write Your Own Will” by lawyers at <http://resources.lawinfo.com/en/Videos/Wills/Federal/how-write-your-own-will.html>, why and when should you have a lawyer draw up your will or review a will you have written yourself?
3. Survey information about living trusts (also called life estates in some states) at NOLO.com at <http://www.nolo.com/info/living-trust>. When and why might you want to create a living trust as an alternative to a will? See <http://www.investopedia.com/articles/pf/06/revocablelivingtrust.asp>. According to the National Consumer Law Center, what questions should you ask to avoid becoming a victim of living trust scams? See http://www.nclc.org/images/pdf/older_consumers/consumer_concerns/cc_avoiding_living_trust_scams.pdf.

[1] U.S. Department of the Treasury, “Estate and Gift Taxes,” Internal Revenue Service <http://www.irs.gov> (accessed May 3, 2009).

[2] U.S. Department of the Treasury, Publication 950, Internal Revenue Service, 2009.

[3] U.S. Department of the Treasury, Publication 950, Internal Revenue Service, 2009.

[4] U.S. Department of the Treasury, 2008, “SOI Tax Stats—IRS Data Book 2007,” Internal Revenue Service, <http://www.irs.gov/taxstats> (accessed May 3, 2009).



Chapter 12 Investing

Introduction

Saving to build wealth is investing. When people have too much money to spend immediately, that is, a surplus of disposable income, they become savers or investors. They transfer their surplus to individuals, companies, or governments that have a shortage or too little money to meet immediate needs. This is almost always done through an intermediary—a bank or broker—who can match up the surpluses and the shortages. If the capital markets work well, those who need money can get it, and those who can defer their need can try to profit from that. When you invest, you are transferring capital to those who need it on the assumption that they will be able to return your capital when you need or want it and that they will also pay you for its use in the meantime.

Investing happens over your lifetime. In your early adult years, you typically have little surplus to invest. Your first investments are in your home (although primarily financed with the debt of your mortgage) and then perhaps in planning for children’s education or for your retirement.

After a period of just paying the bills, making the mortgage, and trying to put something away for retirement, you may have the chance to accumulate wealth. Your income increases as your career progresses. You have fewer dependents (as children leave home), so your expenses decrease. You begin to think about your investment options. You have already been investing—in your home and retirement—but those investments have been prescribed by their specific goals.

You may reach this stage earlier or later in your life, but at some point, you begin to think beyond your immediate situation and look to increase your real wealth and to your future financial health. Investing is about that future.

12.1 Investments and Markets: A Brief Overview

LEARNING OBJECTIVES

1. Identify the features and uses of issuing, owning, and trading bonds.
2. Identify the uses of issuing, owning, and trading stocks.
3. Identify the features and uses of issuing, owning, and trading commodities and derivatives.
4. Identify the features and uses of issuing, owning, and trading mutual funds, including exchange-traded funds and index funds.
5. Describe the reasons for different instruments in different markets.

Before looking at investment planning and strategy, it is important to take a closer look at the galaxy of investments and markets where investing takes place. Understanding how markets work, how different investments work, and how different investors can use investments is critical to understanding how to begin to plan your investment goals and strategies.

You have looked at using the money markets to save surplus cash for the short term. Investing is primarily about using the capital markets to invest surplus cash for the longer term. As in the money markets, when you invest in the capital markets, you are selling liquidity.

The capital markets developed as a way for buyers to buy liquidity. In Western Europe, where many of our ideas of modern finance began, those early buyers were usually monarchs or members of the nobility, raising capital to finance armies and navies to conquer or defend territories or resources. Many devices and markets were used to raise capital,[1]

but the two primary methods that have evolved into modern times are the bond and stock markets. (Both are discussed in greater detail in Chapter 15 "Owning Stocks" and Chapter 16 "Owning Bonds", but a brief introduction is provided here to give you the basic idea of what they are and how they can be used as investments.)

In the United States, 47 percent of the adult population owns stocks or bonds, most through retirement accounts.[2]

Bonds and Bond Markets

Bonds are debt. The bond issuer borrows by selling a bond, promising the buyer regular interest payments and then repayment of the principal at maturity. If a company wants to borrow, it could just go to one lender and borrow. But if the company wants to borrow a lot, it may be difficult to find any one investor with the capital and the inclination to make large a loan, taking a large risk on only one borrower. In this case the company may need to find a lot of lenders who will each lend a little money, and this is done through selling bonds.

A bond is a formal contract to repay borrowed money with interest (often referred to as the coupon) at fixed intervals. Corporations and governments (e.g., federal, state, municipal, and foreign) borrow by issuing bonds. The interest rate on the bond may be a **fixed interest rate** or a **floating interest rate** that changes as underlying interest rates—rates on debt of comparable companies—change. (Underlying interest rates include the prime rate that banks charge their most trustworthy borrowers and the target rates set by the Federal Reserve Bank.)

There are many features of bonds other than the principal and interest, such as the **issue price** (the price you pay to buy the bond when it is first issued) and the **maturity date** (when the issuer of the bond has to repay you). Bonds may also be

“callable”: **redeemable** before **maturity** (paid off early). Bonds may also be issued with various **covenants** or conditions that the borrower must meet to protect the bondholders, the lenders. For example, the borrower, the bond issuer, may be required to keep a certain level of cash on hand, relative to its short-term debts, or may not be allowed to issue more debt until this bond is paid off.

Because of the diversity and flexibility of bond features, the bond markets are not as transparent as the stock markets; that is, the relationship between the bond and its price is harder to determine. The U.S. bond market is now more than twice the size (in dollars of capitalization) of all the U.S. stock exchanges combined, with debt of more than \$27 trillion by the end of 2007.[3]

U.S. Treasury bonds are auctioned regularly to banks and large institutional investors by the Treasury Department, but individuals can buy U.S. Treasury bonds directly from the U.S. government (<http://www.treasurydirect.gov>). To trade any other kind of bond, you have to go through a broker. The brokerage firm acts as a principal or dealer, buying from or selling to investors, or as an agent for another buyer or seller.

Stocks and Stock Markets

Stocks or equity securities are shares of ownership. When you buy a share of stock, you buy a share of the corporation. The size of your share of the corporation is proportional to the size of your stock holding. Since corporations exist to create profit for the owners, when you buy a share of the corporation, you buy a share of its future profits. You are literally sharing in the fortunes of the company.

Unlike bonds, however, shares do not promise you any returns at all. If the company does create a profit, some of that profit may be paid out to owners as a **dividend**, usually in cash but sometimes in additional shares of stock. The company may pay no dividend at all, however, in which case the value of your shares should rise as the company's profits rise. But even if the company is profitable, the value of its shares may not rise, for a variety of reasons having to do more with the markets or the larger economy than with the company itself. Likewise, when you invest in stocks, you share the company's losses, which may decrease the value of your shares.

Corporations issue shares to raise capital. When shares are issued and traded in a public market such as a stock exchange, the corporation is “publicly traded.” There are many stock exchanges in the United States and around the world. The two best known in the United States are the New York Stock Exchange (now NYSE Euronext), founded in 1792, and the NASDAQ, a computerized trading system managed by the National Association of Securities Dealers (the “AQ” stands for “Automated Quotations”).

Only members of an exchange may trade on the exchange, so to buy or sell stocks you must go through a broker who is a member of the exchange. Brokers also manage your account and offer varying levels of advice and access to research. Most brokers have

Web-based trading systems. Some discount brokers offer minimal advice and research along with minimal trading commissions and fees.

Commodities and Derivatives

Commodities are resources or raw materials, including the following:

- Agricultural products (food and fibers), such as soybeans, pork bellies, and cotton
- Energy resources such as oil, coal, and natural gas
- Precious metals such as gold, silver, and copper
- Currencies, such as the dollar, yen, and euro

Commodity trading was formalized because of the risks inherent in producing commodities—raising and harvesting agricultural products or natural resources—and the resulting volatility of commodity prices. As farming and food production became mechanized and required a larger investment of capital, commodity producers and users wanted a way to reduce volatility by locking in prices over the longer term.

The answer was futures and forward contracts. **Futures** and **forward contracts** or **forwards** are a form of **derivatives**, the term for any financial instrument whose value is derived from the value of another security. For example, suppose it is now July 2010. If you know that you will want to have wheat in May of 2011, you could wait until May 2011 and buy the wheat at the market price, which is unknown in July 2010. Or you could buy it now, paying today's price, and store the wheat until May 2011. Doing so would remove your future price uncertainty, but you would incur the cost of storing the wheat.

Alternatively, you could buy a futures contract for May 2011 wheat in July 2010. You would be buying May 2011 wheat at a price that is now known to you (as stated in the futures contract), but you will not take delivery of the wheat until May 2011. The value of the futures contract to you is that you are removing the future price uncertainty without incurring any storage costs. In July 2010 the value of a contract to buy May 2011 wheat depends on what the price of wheat actually turns out to be in May 2011.

Forward contracts are traded privately, as a direct deal made between the seller and the buyer, while futures contracts are traded publicly on an exchange such as the Chicago Mercantile Exchange (CME) or the New York Mercantile Exchange (NYMEX).

When you buy a forward contract for wheat, for example, you are literally buying future wheat, wheat that doesn't yet exist. Buying it now, you avoid any uncertainty about the price, which may change. Likewise, by writing a contract to sell future wheat, you lock in a price for your crop or a return for your investment in seed and fertilizer.

Futures and forward contracts proved so successful in shielding against some risk that they are now written for many more types of "commodities," such as interest rates and stock market indices. More kinds of derivatives have been created as well, such as

options. **Options** are the right but not the obligation to buy or sell at a specific price at a specific time in the future. Options are commonly written on shares of stock as well as on stock indices, interest rates, and commodities.

Derivatives such as forwards, futures, and options are used to hedge or protect against an existing risk or to speculate on a future price. For a number of reasons, commodities and derivatives are more risky than investing in stocks and bonds and are not the best choice for most individual investors.

Mutual Funds, Index Funds, and Exchange-Traded Funds

A **mutual fund** is an investment portfolio consisting of securities that an individual investor can invest in all at once without having to buy each investment individually. The fund thus allows you to own the performance of many investments while actually buying—and paying the transaction cost for buying—only one investment.

Mutual funds have become popular because they can provide diverse investments with a minimum of transaction costs. In theory, they also provide good returns through the performance of professional portfolio managers.

An **index fund** is a mutual fund designed to mimic the performance of an index, a particular collection of stocks or bonds whose performance is tracked as an indicator of the performance of an entire class or type of security. For example, the Standard & Poor's (S&P) 500 is an index of the five hundred largest publicly traded corporations, and the famous Dow Jones Industrial Average is an index of thirty stocks of major industrial corporations. An index fund is a mutual fund invested in the same securities as the index and so requires minimal management and should have minimal management fees or costs.

Mutual funds are created and managed by mutual fund companies or by brokerages or even banks. To trade shares of a mutual fund you must have an account with the company, brokerage, or bank. Mutual funds are a large component of individual retirement accounts and of defined contribution plans.

Mutual fund shares are valued at the close of trading each day and orders placed the next day are executed at that price until it closes. An exchange-traded fund (ETF) is a fund that tracks an index or a commodity or a basket of assets but is traded like stocks on a stock exchange. is a mutual fund that trades like a share of stock in that it is valued continuously throughout the day, and trades are executed at the market price.

The ways that capital can be bought and sold is limited only by the imagination. When corporations or governments need financing, they invent ways to entice investors and promise them a return. The last thirty years has seen an explosion in **financial engineering**, the innovation of new financial instruments through mathematical pricing models. This explosion has coincided with the ever-expanding

powers of the computer, allowing professional investors to run the millions of calculations involved in sophisticated pricing models. The Internet also gives amateurs instantaneous access to information and accounts.

Much of the modern portfolio theory that spawned these innovations (i.e., the idea of using the predictability of returns to manage portfolios of investments) is based on an infinite time horizon, looking at performance over very long periods of time. This has been very valuable for institutional investors (e.g., pension funds, insurance companies, endowments, foundations, and trusts) as it gives them the chance to magnify returns over their infinite horizons.

For most individual investors, however, most portfolio theory may present too much risk or just be impractical. Individual investors don't have an infinite time horizon. You have only a comparatively small amount of time to create wealth and to enjoy it. For individual investors, investing is a process of balancing the demands and desires of returns with the costs of risk, before time runs out.

KEY TAKEAWAYS

- Bonds are
 - a way to raise capital through borrowing, used by corporations and governments;
 - an investment for the bondholder that creates return through regular, fixed or floating interest payments on the debt and the repayment of principal at maturity;
 - traded on bond exchanges through brokers.
- Stocks are
 - a way to raise capital through selling ownership or equity;
 - an investment for shareholders that creates return through the distribution of corporate profits as dividends or through gains (losses) in corporate value;
 - traded on stock exchanges through member brokers.
- Commodities are
 - natural or cultivated resources;
 - traded to hedge revenue or production needs or to speculate on resources' prices;
 - traded on commodities exchanges through brokers.
- Derivatives are instruments based on the future, and therefore uncertain, price of another security, such as a share of stock, a government bond, a currency, or a commodity.

- Mutual funds are portfolios of investments designed to achieve maximum diversification with minimal cost through economies of scale.
 - An index fund is a mutual fund designed to replicate the performance of an asset class or selection of investments listed on an index.
 - An exchange-traded fund is a mutual fund whose shares are traded on an exchange.
- Institutional and individual investors differ in the use of different investment instruments and in using them to create appropriate portfolios.

EXERCISES

1. In My Notes or your personal finance journal, record your experiences with investing. What investments have you made, and how much do you have invested? What stocks, bonds, funds, or other instruments, described in this section, do you have now (or had in the past)? How were the decisions about your investments made, and who made them? If you have had no personal experience with investing, explain your reasons. What reasons might you have for investing (or not) in the future?
2. About how many stock exchanges exist in the world? Which geographic region has the greatest number of exchanges? Sample features of stock exchanges on each continent at http://www.tdd.lt/slnews/Stock_Exchange/Stock.Exchanges.htm. What characteristics do all the exchanges share?
3. What is a brokerage house, and when would you use a broker? Find out at <http://www.wisegeek.com/what-is-a-brokerage-house.htm>. Sample brokerage houses that advertise online. What basic products and services do all brokerages offer? According to the advice at http://gti.cuna.org/18592/worksheets/evaluate_broker.pdf, what is the best way to choose a broker? Discuss brokers with classmates to develop a list of ten questions you would want to ask a broker before you opened an account. (Hint: Search the Motley Fool's 2009 "Brokerage Questions for Beginners" at <http://www.fool.com>.)
4. Visit the Chicago Mercantile Exchange at <http://www.cmegroup.com/>. What are some examples of commodities on the CME that theoretically could be part of your investment portfolio? In what energy product does the CME specialize? Could you invest in whether a foreign currency will rise

or fall in relation to another currency? Could you invest in whether interest rates will rise or fall?
Could you invest in how the weather will change?

5. An example of financial engineering is the derivative known as the credit default swap, a form of insurance against defaults on underlying financial instruments—for example, paying out on defaults on loan payments. According to Senator Harkin’s (D-Iowa) 2009 report at <http://www.iowapolitics.com/index.iml?Article=160768>, why must derivatives like credit default swaps and their markets be more rigorously regulated? Regulation is a perennial political issue. What are some arguments for and against the regulation or deregulation of the capital markets? What are the implications of regulation and deregulation for investors?

[1] For a thorough history of the evolution of finance and financial instruments, see Charles P. Kindleberger, *A Financial History of Western Europe* (London: George Allen & Unwin, Ltd., 1984).

[2] John Sabelhaus, Michael Bogdan, and Daniel Schrass, “Equity and Bond Ownership in America, 2008,” Investment Company Institute and Securities Industry and Financial Markets Association, http://www.ici.org/pdf/rpt_08_equity_owners.pdf (accessed on May 20, 2009).

[3] Financial Industry Regulatory Authority (FINRA), <http://apps.finra.org/> (accessed May 20, 2009).

12.2 Investment Planning

LEARNING OBJECTIVES

1. Describe the advantages of the investment policy statement as a useful framework for investment planning.
2. Identify the process of defining investor return objectives.
3. Identify the process of defining investor risk tolerance.
4. Identify investor constraints or restrictions on an investment strategy.

Allison has a few hours to kill while her flight home is delayed. She loves her job as an analyst for a management consulting firm, but the travel is getting old. As she gazes at the many investment magazines and paperbacks on display and the several screens all tuned to financial news networks and watches people hurriedly checking their stocks on

their mobile phones, she begins to think about her own investments. She has been paying her bills, paying back student loans and trying to save some money for a while. Her uncle just died and left her a bequest of \$50,000. She is thinking of investing it since she is getting by on her salary and has no immediate plans for this windfall.

Allison is wondering how to get into some serious investing. She is thinking that since so many people seem to be interested in “Wall Street,” there must be money in it. There is no lack of information or advice about investing, but Allison isn’t sure how to get started.

Allison may not realize that there are as many different investment strategies as there are investors. The planning process is similar to planning a budget plan or savings plan. You figure out where you are, where you want to be, and how to get there. One way to get started is to draw up an individual investment policy statement.

Investment policy statements, outlines of the investor’s goals and constraints, are popular with institutional investors such as pension plans, insurance companies, or nonprofit endowments. Institutional investment decisions typically are made by professional managers operating on instructions from a higher authority, usually a board of directors or trustees. The directors or trustees may approve the investment policy statement and then leave the specific investment decisions up to the professional investment managers. The managers use the policy statement as their guide to the directors’ wishes and concerns.

This idea of a policy statement has been adapted for individual use, providing a helpful, structured framework for investment planning—and thinking. The advantages of drawing up an investment policy to use as a planning framework include the following:

- The process of creating the policy requires thinking through your goals and expectations and adjusting those to what is possible.
- The policy statement gives you an active role in your investment planning, even if the more specific details and implementation are left to a professional investment advisor.
- Your policy statement is portable, so even if you change advisors, your plan can go with you.
- Your policy statement is flexible; it can and should be updated at least once a year.

A policy statement is written in two parts. The first part lists your return objectives and risk preferences as an investor. The second part lists your constraints on investment. It sometimes is difficult to reconcile the two parts. That is, you may need to adjust your statement to improve your chances of achieving your return objectives within your risk preferences without violating your constraints.

Defining Return Objective and Risk

Defining return objectives is the process of quantifying the required annual return (e.g., 5 percent, 10 percent) necessary to meet your investment goals. If your investment goals are vague (e.g., to “increase wealth”), then any positive return will do. Usually, however, you have some specific goals—for example, to finance a child’s or grandchild’s education, to have a certain amount of wealth at retirement, to buy a sailboat on your fiftieth birthday, and so on.

Once you have defined goals, you must determine when they will happen and how much they will cost, or how much you will have to have invested to make your dreams come true. As explained in Chapter 4 "Evaluating Choices: Time, Risk, and Value", the rate of return that your investments must achieve to reach your goals depends on how much you have to invest to start with, how long you have to invest it, and how much you need to fulfill your goals.

As in Allison’s case, your goals may not be so specific. Your thinking may be more along the lines of “I want my money to grow and not lose value” or “I want the investment to provide a little extra spending money until my salary rises as my career advances.” In that case, your return objective can be calculated based on the role that these funds play in your life: safety net, emergency fund, extra spending money, or nest egg for the future.

However specific (or not) your goals may be, the quantified return objective defines the annual performance that you demand from your investments. Your portfolio can then be structured—you can choose your investments—such that it can be expected to provide that performance.

If your return objective is more than can be achieved given your investment and expected market conditions, then you know to scale down your goals, or perhaps find a different way to fund them. For example, if Allison wanted to stop working in ten years and start her own business, she probably would not be able to achieve this goal solely by investing her \$50,000 inheritance, even in a bull (up) market earning higher rates of return.

As you saw in Chapter 10 "Personal Risk Management: Insurance" and Chapter 11 "Personal Risk Management: Retirement and Estate Planning", in investing there is a direct relationship between risk and return, and risk is costly. The nature of these relationships has fascinated and frustrated investors since the origin of capital markets and remains a subject of investigation, exploration, and debate. To invest is to take risk. To invest is to separate yourself from your money through actual distance—you literally give it to someone else—or through time. There is always some risk that what you get back is worth less (or costs more) than what you invested (a loss) or less than what you might have had if you had done something else with your money (opportunity cost). The more risk you are willing to take, the more potential return you can make, but the higher the risk, the more potential losses and opportunity costs you may incur.

Individuals have different risk tolerances. Your **risk tolerance** is your ability and willingness to assume risk. Your ability to assume risk is based on your asset base, your

time horizon, and your liquidity needs. In other words, your ability to take investment risks is limited by how much you have to invest, how long you have to invest it, and your need for your portfolio to provide cash—for use rather than reinvestment—in the meantime.

Your willingness to take risk is shaped by your “personality,” your experiences, and your knowledge and education. Attitudes are shaped by life experiences, and attitudes toward risk are no different. Figure 12.7 "Risk Tolerance" shows how your level of risk tolerance develops.

Figure 12.7 Risk Tolerance



Investment advisors may try to gauge your attitude toward risk by having you answer a series of questions on a formal questionnaire or by just talking with you about your investment approach. For example, an investor who says, “It’s more important to me to preserve what I have than to make big gains in the markets,” is relatively **risk averse**. The investor who says, “I just want to make a quick profit,” is probably more of a risk seeker.

Once you have determined your return objective and risk tolerance (i.e., what it will take to reach your goals and what you are willing and able to risk to get there) you may have to reconcile the two. You may find that your goals are not realistic unless you are willing to take on more risk. If you are unwilling or unable to take on more risk, you may have to scale down your goals.

Defining Constraints

Defining constraints is a process of recognizing any limitation that may impede or slow or divert progress toward your goals. The more you can anticipate and include constraints in your planning, the less likely they will throw you off course. Constraints include the following:

- Liquidity needs
- Time available
- Tax obligations
- Legal requirements
- Unique circumstances

Liquidity needs, or the need to use cash, can slow your progress from investing because you have to divert cash from your investment portfolio in order to spend it. In addition you will have ongoing expenses from investing. For example, you will have to use some liquidity to cover your transaction costs such as brokerage fees and management fees. You may also wish to use your portfolio as a source of regular income or to finance asset purchases, such as the down payment on a home or a new car or new appliances.

While these may be happy transactions for you, for your portfolio they are negative events, because they take away value from your investment portfolio. Since your portfolio's ability to earn return is based on its value, whenever you take away from that value, you are reducing its ability to earn.

Time is another determinant of your portfolio's earning power. The more time you have to let your investments earn, the more earnings you can amass. Or, the more time you have to reach your goals, the more slowly you can afford to get there, earning less return each year but taking less risk as you do. Your time horizon will depend on your age and life stage and on your goals and their specific liquidity needs.

Tax obligations are another constraint, because paying taxes takes value away from your investments. Investment value may be taxed in many ways (as income tax, capital gains tax, property tax, estate tax, or gift tax) depending on how it is invested, how its returns are earned, and how ownership is transferred if it is bought or sold.

Investors typically want to avoid, defer, or minimize paying taxes, and some investment strategies will do that better than others. In any case, your individual tax liabilities may become a constraint in determining how the portfolio earns to best avoid, defer, or minimize taxes.

Legalities also can be a constraint if the portfolio is not owned by you as an individual investor but by a personal trust or a family foundation. Trusts and foundations have legal constraints defined by their structure.

“Unique circumstances” refer to your individual preferences, beliefs, and values as an investor. For example, some investors believe in socially responsible investing (SRI), so they want their funds to be invested in companies that practice good corporate governance, responsible citizenship, fair trade practices, or environmental stewardship.

Some investors don't want to finance companies that make objectionable products or by-products or have labor or trade practices reflecting objectionable political views. **Divestment** is the term for taking money out of investments. Grassroots political movements often include divestiture campaigns, such as student demands that their universities stop investing in companies that do business with nondemocratic or oppressive governments.

Socially responsible investment is the term for investments based on ideas about products or businesses that are desirable or objectionable. These qualities are in the eye of the beholder, however, and vary among investors. Your beliefs and values are unique to you and to your circumstances in investing and may change over time.

Having mapped out your goals and determined the risks you are willing to take, and having recognized the limitations you must work with, you and/or investment advisors can now choose the best investments. Different advisors may have different suggestions based on your investment policy statement. The process of choosing involves knowing what returns and risks investments have produced in the past, what returns and risks they are likely to have in the future, and how the returns and risks are related—or not—to each other.

KEY TAKEAWAYS

- The investment policy statement provides a useful framework for investment planning because
 - the process of creating the policy requires thinking through goals and expectations and adjusting those to the possible;
 - the statement gives the investor an active role in investment planning, even if the more specific details and implementation are left to a professional investment advisor;
 - the statement is portable, so that even if you change advisors your plans can go with you;
 - the statement is flexible; it can and should be updated at least once per year.
- Return objectives are defined by the investor's goals, time horizon, and value of the asset base.
- Risk tolerance is defined by the investor's ability and willingness to assume risk; comfort with risk taking relates to personality, experience, and knowledge.
- Constraints or restrictions to an investment strategy are the investor's
 - liquidity needs,
 - time horizon,
 - tax circumstances and obligations,

- legal restrictions,
- unique preferences or circumstances.
- Social investment and divestment are unique preferences based on beliefs and values about desirable or objectionable industries, products, or companies.
- Your investment policy statement guides the selection of investments and development of your investment portfolio.

EXERCISES

1. Brainstorm with classmates expressions or homilies relating to investing, such as *you gotta pay to play*; *you gotta play to win*; *no pain, no gain*; *it takes money to make money*; and so on. What does each of these expressions really mean? How do they relate to the concepts of investment risk and return on investment? In what ways are risks and returns in a reciprocal relationship?
2. Draft an individual investment policy statement as a guide to your future investment planning. What will be the advantages of having an investment policy statement? In My Notes or your personal finance journal, record your general return objectives and specific goals at this time. What is a return objective?
3. What is your level of risk tolerance? How would you rate your risk tolerance on a five-point scale (with one indicating “most risk averse”)? In your personal finance journal, record how your asset base, time horizon, and liquidity needs define your ability to undertake investment risk. Then describe the personality characteristics, past experiences, and knowledge base that you feel help shape your degree of willingness to undertake risk. Now check your beliefs by taking the Risk Tolerance Quiz at <http://www.isi-su.com/new/risktol2.htm>. How do the results compare with your estimate? Compare the results with the Risk Tolerance Questionnaire at Kiplinger’s (<http://www.kiplinger.com/tools/riskfind.html>) and other tests of risk tolerance offered on commercial Web sites. What conclusions do you draw from these tests? What percent of your investments do you now think you could put into stocks? What factor could you change that might enable you to tolerate more risk?
4. In My Notes or your personal finance journal, record the constraints you face against reaching your investment goals. With what types of constraints must you reconcile your investment planning? The more you need to use your money to live and the less time you have to achieve

your goals, the greater the constraints in your investment planning. Revise your statement of goals and return objectives as needed to ensure it is realistic in light of your constraints.

5. In collaboration with classmates, conduct an online investigation into socially responsible investing. See the following Web sites:

- o <http://www.socialinvest.org>
- o <http://www.greeninvestment.com>
- o <http://www.newsreview.com/sacramento/content?oid=323855>
- o <http://online.wsj.com/article/SB118239582814643063.html>
- o <http://www.nolo.com/article.cfm/ObjectID/8E5E996A-B251-41C1-B1F867B8EB112ED3/catID/498F840B-OB7B-4A9A-AE102EC156E16660/104/284/164/ART>

On the basis of your investigation, outline and discuss the different forms and purposes of SRI. Which form and purpose appeal most to you and why? What investments might you make, and what investments might you specifically avoid, to express your beliefs and values? Do you think investment planning could ever have a role in bringing about social change?

12.3 Measuring Return and Risk

LEARNING OBJECTIVES

1. Characterize the relationship between risk and return.
2. Describe the differences between actual and expected returns.
3. Explain how actual and expected returns are calculated.
4. Define investment risk and explain how it is measured.
5. Define the different kinds of investment risk.

You want to choose investments that will combine to achieve the return objectives and level of risk that's right for you, but how do you know what the right combination will be? You can't predict the future, but you can make an educated guess based on an investment's past history. To do this, you need to know how to read or use the information available. Perhaps the most critical information to have about an investment is its potential return and susceptibility to types of risk.

Return

Returns are always calculated as annual rates of return, or the percentage of return created for each unit (dollar) of original value. If an investment earns 5 percent, for example, that means that for every \$100 invested, you would earn \$5 per year (because $\$5 = 5\%$ of \$100).

Returns are created in two ways: the investment creates income or the investment gains (or loses) value. To calculate the annual rate of return for an investment, you need to know the income created, the gain (loss) in value, and the original value at the beginning of the year. The percentage return can be calculated as in Figure 12.8 "Calculating Percentage Return".

Figure 12.8 Calculating Percentage Return

$$\begin{aligned} &[\text{Income} + \text{Gain}] \div \text{Original value} = \text{percentage rate of return} \\ &[\text{Income} + (\text{Ending value} - \text{Original value})] \div \text{Original value} = \text{percentage rate of return} \end{aligned}$$

Note that if the ending value is greater than the original value, then $\text{Ending value} - \text{Original value} > 0$ (is greater than zero), and you have a gain that adds to your return. If the ending value is less, then $\text{Ending value} - \text{Original value} < 0$ (is less than zero), and you have a loss that detracts from your return. If there is no gain or loss, if $\text{Ending value} - \text{Original value} = 0$ (is the same), then your return is simply the income that the investment created.

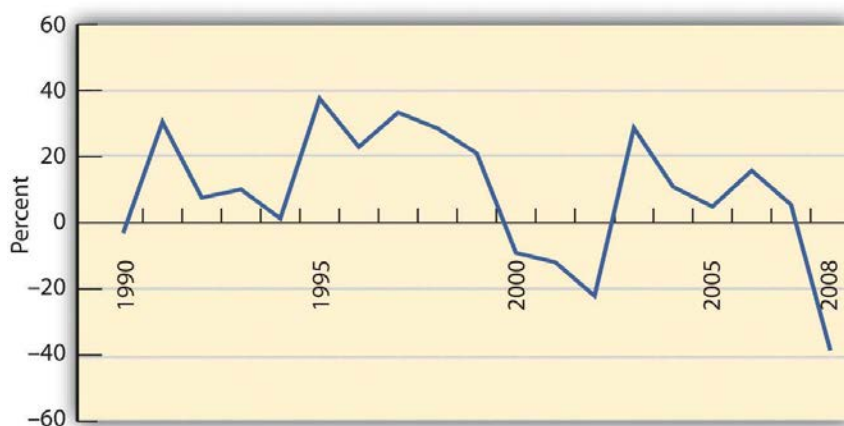
For example, if you buy a share of stock for \$100, and it pays no dividend, and a year later the market price is \$105, then your return = $[0 + (105 - 100)] \div 100 = 5 \div 100 = 5\%$. If the same stock paid a dividend of \$2, then your return = $[2 + (105 - 100)] \div 100 = 7 \div 100 = 7\%$.

If the information you have shows more than one year's results, you can calculate the annual return using what you learned in Chapter 4 "Evaluating Choices: Time, Risk, and Value" about the relationships of time and value. For example, if an investment was worth \$10,000 five years ago and is worth \$14,026 today, then $\$10,000 \times (1 + r)^5 = \$14,026$. Solving for r —the annual rate of return, assuming you have not taken the returns out in the meantime—and using a calculator, a computer application, or doing the math, you get 7 percent. So the \$10,000 investment must have earned at a rate of 7 percent per year to be worth \$14,026 five years later, other factors being equal.

While information about current and past returns is useful, investment professionals are more concerned with the **expected return** for the investment, that is, how much it may be expected to earn in the future. Estimating the expected return is complicated because many factors (i.e., current economic conditions, industry conditions, and market conditions) may affect that estimate.

For investments with a long history, a strong indicator of future performance may be past performance. Economic cycles fluctuate, and industry and firm conditions vary, but over the long run, an investment that has survived has weathered all those storms. So you could look at the average of the returns for each year. There are several ways to do the math, but if you look at the average return for different investments of the same asset class or type (e.g., stocks of large companies) you could compare what they have returned, on average, over time. Figure 12.9 "S&P 500 Average Annual Return" shows average returns on investments in the S&P 500, an index of large U.S. companies since 1990.

Figure 12.9 S&P 500 Average Annual Return[1]



If the time period you are looking at is long enough, you can reasonably assume that an investment's average return over time is the return you can expect in the next year. For example, if a company's stock has returned, on average, 9 percent per year over the last twenty years, then if next year is an average year, that investment should return 9 percent again. Over the eighteen-year span from 1990 to 2008, for example, the average return for the S&P 500 was 9.16 percent. Unless you have some reason to believe that next year will *not* be an average year, the average return can be your expected return. The longer the time period you consider, the less volatility there will be in the returns, and the more accurate your prediction of expected returns will be.

Returns are the value created by an investment, through either income or gains. Returns are also your compensation for investing, for taking on some or all of the risk of the investment, whether it is a corporation, government, parcel of real estate, or work of art. Even if there is no risk, you must be paid for the use of liquidity that you give up to the investment (by investing).

Returns are the benefits from investing, but they must be larger than its costs. There are at least two costs to investing: the opportunity cost of giving up cash and giving up all your other uses of that cash until you get it back in the future and the cost of the risk you take—the risk that you won't get it all back.

Risk

Investment risk is the idea that an investment will not perform as expected, that its actual return will deviate from the expected return. Risk is measured by the amount of volatility, that is, the difference between actual returns and average (expected) returns. This difference is referred to as the **standard deviation**. Returns with a large standard deviation (showing the greatest variance from the average) have higher volatility and are the riskier investments.

As Figure 12.9 "S&P 500 Average Annual Return" shows, an investment may do better or worse than its average. Thus, standard deviation can be used to define the expected range of investment returns. For the S&P 500, for example, the standard deviation from 1990 to 2008 was 19.54 percent. So, in any given year, the S&P 500 is expected to return 9.16 percent but its return could be as high as 67.78 percent or as low as -49.46 percent, based on its performance during that specific period.

What risks are there? What would cause an investment to unexpectedly over- or underperform? Starting from the top (the big picture) and working down, there are

- economic risks,
- industry risks,
- company risks,
- asset class risks,
- market risks.

Economic risks are risks that something will upset the economy as a whole. The economic cycle may swing from expansion to recession, for example; inflation or deflation may increase, unemployment may increase, or interest rates may fluctuate. These macroeconomic factors affect everyone doing business in the economy. Most businesses are cyclical, growing when the economy grows and contracting when the economy contracts.

Consumers tend to spend more disposable income when they are more confident about economic growth and the stability of their jobs and incomes. They tend to be more willing and able to finance purchases with debt or with credit, expanding their ability to purchase durable goods. So, demand for most goods and services increases as an economy expands, and businesses expand too. An exception is businesses that are countercyclical. Their growth accelerates when the economy is in a downturn and slows when the economy expands. For example, low-priced fast food chains typically have increased sales in an economic downturn because people substitute fast food for more expensive restaurant meals as they worry more about losing their jobs and incomes.

Industry risks usually involve economic factors that affect an entire industry or developments in technology that affect an industry's markets. An example is the effect of a sudden increase in the price of oil (a macroeconomic event) on the airline industry. Every airline is affected by such an event, as an increase in the price of airplane fuel

increases airline costs and reduces profits. An industry such as real estate is vulnerable to changes in interest rates. A rise in interest rates, for example, makes it harder for people to borrow money to finance purchases, which depresses the value of real estate.

Company risk refers to the characteristics of specific businesses or firms that affect their performance, making them more or less vulnerable to economic and industry risks. These characteristics include how much debt financing the company uses, how well it creates economies of scale, how efficient its inventory management is, how flexible its labor relationships are, and so on.

The **asset class** that an investment belongs to can also bear on its performance and risk. Investments (assets) are categorized in terms of the markets they trade in. Broadly defined, asset classes include

- corporate stock or equities (shares in public corporations, domestic, or foreign);
- bonds or the public debts of corporation or governments;
- commodities or resources (e.g., oil, coffee, or gold);
- derivatives or contracts based on the performance of other underlying assets;
- real estate (both residential and commercial);
- fine art and collectibles (e.g., stamps, coins, baseball cards, or vintage cars).

Within those broad categories, there are finer distinctions. For example, corporate stock is classified as large cap, mid cap, or small cap, depending on the size of the corporation as measured by its market capitalization (the aggregate value of its stock). Bonds are distinguished as corporate or government and as short-term, intermediate-term, or long-term, depending on the maturity date.

Risks can affect entire asset classes. Changes in the inflation rate can make corporate bonds more or less valuable, for example, or more or less able to create valuable returns. In addition, changes in a market can affect an investment's value. When the stock market fell unexpectedly and significantly, as it did in October of 1929, 1987, and 2008, all stocks were affected, regardless of relative exposure to other kinds of risk. After such an event, the market is usually less efficient or less liquid; that is, there is less trading and less efficient pricing of assets (stocks) because there is less information flowing between buyers and sellers. The loss in market efficiency further affects the value of assets traded.

As you can see, the link between risk and return is reciprocal. The question for investors and their advisors is: How can you get higher returns with less risk?

KEY TAKEAWAYS

- There is a direct relationship between risk and return because investors will demand more compensation for sharing more investment risk.

- Actual return includes any gain or loss of asset value plus any income produced by the asset during a period.
 - Actual return can be calculated using the beginning and ending asset values for the period and any investment income earned during the period.
 - Expected return is the average return the asset has generated based on historical data of actual returns.
 - Investment risk is the possibility that an investment's actual return will not be its expected return.
 - The standard deviation is a statistical measure used to calculate how often and how far the average actual return differs from the expected return.
-
- Investment risk is exposure to
 - economic risk,
 - industry risk,
 - company- or firm-specific risk,
 - asset class risk, or
 - market risk.

EXERCISES

1. Selecting a security to invest in, such as a stock or fund, requires analyzing its returns. You can view the annual returns as well as average returns over a five-, ten-, fifteen-, or twenty-year period. Charts of returns can show the amount of volatility in the short term and over the longer term. What do you need to know to calculate the annual rate of return for an investment? Consider that at the beginning of 2010 Ali invests \$5,000 in a mutual fund. The fund has a gain in value of \$200, but generates no income. What is the annual percentage rate of return? What do you need to know to estimate the expected return of an investment in the future? If the fund Ali invests in has an average fifteen-year annual return of 7 percent, what percentage rate of return should he expect for 2011? Find the estimated annualized rate of return for a hypothetical portfolio by using the calculator at <http://www.mymoneyblog.com/estimate-your-portfolios-rate-of-return-calculator.html>.

2. Try the AARP's investment return calculator at http://www.aarp.org/money/investing/investment_return_calculator/, experimenting with different figures to solve for a range of situations. Use the information on that page to answer the following questions. Can the future rate of return on an investment be estimated with any certainty? Do investments that pay higher rates of return carry higher volatility? Do investments that pay higher rates of return carry higher risk? What accounts for differences between the actual return and the expected return on an investment?
3. The standard deviation on the rate of return on an investment is a measure of its volatility, or risk. What would a standard deviation of zero mean? What would a standard deviation of 10 percent mean?
4. What kinds of risk are included in investment risk? Go online to survey current or recent financial news. Find and present a specific example of the impact of each type of investment risk. In each case, how did the type of risk affect investment performance?

12.4 Diversification: Return with Less Risk

LEARNING OBJECTIVES

1. Explain the use of diversification in portfolio strategy.
2. List the steps in creating a portfolio strategy, explaining the importance of each step.
3. Compare and contrast active and passive portfolio strategies.

Every investor wants to maximize return, the earnings or gains from giving up surplus cash. And every investor wants to minimize risk, because it is costly. To invest is to assume risk, and you assume risk expecting to be compensated through return. The more risk assumed, the more the promised return. So, to increase return you must increase risk. To lessen risk, you must expect less return, but another way to lessen risk is to diversify—to spread out your investments among a number of different asset classes. Investing in different asset classes reduces your exposure to economic, asset class, and market risks.

Concentrating investment concentrates risk. Diversifying investments spreads risk by having more than one kind of investment and thus more than one kind of risk. To truly diversify, you need to invest in assets that are not vulnerable to one or more kinds of risk. For example, you may want to diversify

- between cyclical and countercyclical investments, reducing economic risk;
- among different sectors of the economy, reducing industry risks;
- among different kinds of investments, reducing asset class risk;
- among different kinds of firms, reducing company risks.

To diversify well, you have to look at your collection of investments as a whole—as a portfolio—rather than as a gathering of separate investments. If you choose the investments well, if they are truly different from each other, the whole can actually be more valuable than the sum of its parts.

Steps to Diversification

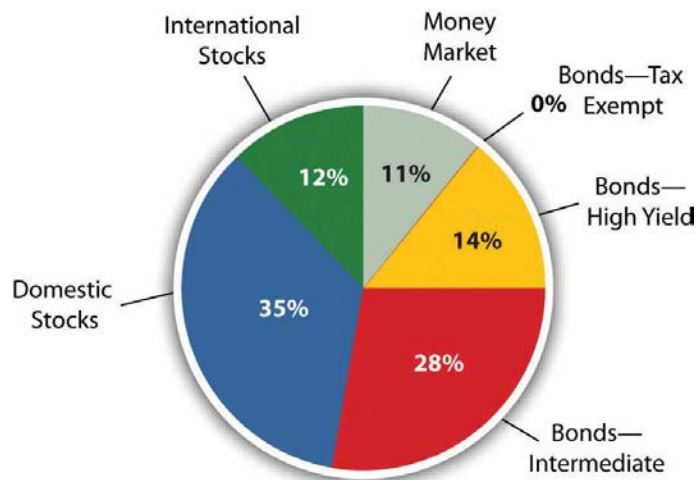
In traditional portfolio theory, there are three levels or steps to diversifying: capital allocation, asset allocation, and security selection.

Capital allocation is diversifying your capital between risky and riskless investments. A “riskless” asset is the short-term (less than ninety-day) U.S. Treasury bill. Because it has such a short time to maturity, it won’t be much affected by interest rate changes, and it is probably impossible for the U.S. government to become insolvent—go bankrupt—and have to default on its debt within such a short time.

The capital allocation decision is the first diversification decision. It determines the portfolio’s overall exposure to risk, or the proportion of the portfolio that is invested in risky assets. That, in turn, will determine the portfolio’s level of return.

The second diversification decision is **asset allocation**, deciding which asset classes, and therefore which risks and which markets, to invest in. Asset allocations are specified in terms of the percentage of the portfolio’s total value that will be invested in each asset class. To maintain the desired allocation, the percentages are adjusted periodically as asset values change. Figure 12.11 "Proposed Asset Allocation" shows an asset allocation for an investor’s portfolio.

Figure 12.11 Proposed Asset Allocation



Asset allocation is based on the expected returns and relative risk of each asset class and how it will contribute to the return and risk of the portfolio as a whole. If the asset classes you choose are truly diverse, then the portfolio's risk can be lower than the sum of the assets' risks.

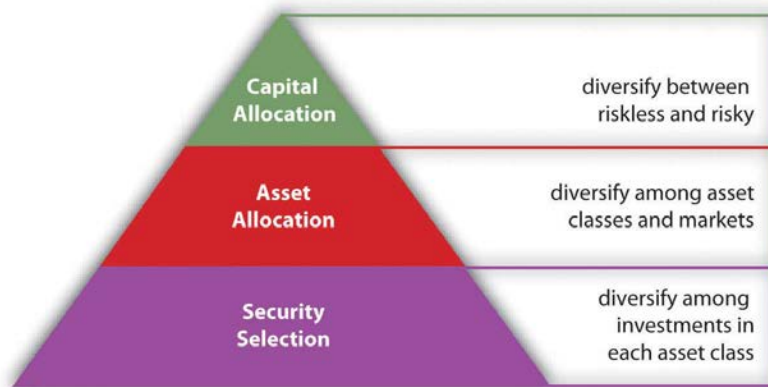
One example of an asset allocation strategy is **life cycle investing**—changing your asset allocation as you age. When you retire, for example, and forgo income from working, you become dependent on income from your investments. As you approach retirement age, therefore, you typically shift your asset allocation to less risky asset classes to protect the value of your investments.

Security selection is the third step in diversification, choosing individual investments within each asset class. Here is the chance to achieve industry or sector and company diversification. For example, if you decided to include corporate stock in your portfolio (asset allocation), you decide which corporation's stock to invest in. Choosing corporations in different industries, or companies of different sizes or ages, will diversify your stock holdings. You will have less risk than if you invested in just one corporation's stock. Diversification is not defined by the number of investments but by their different characteristics and performance.

Investment Strategies

Capital allocation decides the amount of overall risk in the portfolio; asset allocation tries to maximize the return you can get for that amount of risk. Security selection further diversifies within each asset class. Figure 12.12 "Levels of Diversification" demonstrates the three levels of diversification.

Figure 12.12 Levels of Diversification



Just as life cycle investing is a strategy for asset allocation, investing in index funds is a strategy for security selection. Indexes are a way of measuring the performance of an entire asset class by measuring returns for a portfolio containing all the investments in that asset class. Essentially, the index becomes a **benchmark** for the asset class, a standard against which any specific investment in that asset class can be measured. An index fund is an investment that holds the same securities as the index, so it provides a way for you to invest in an entire asset class without having to select particular securities. For example, if you invest in the S&P 500 Index fund, you are investing in the five hundred largest corporations in the United States—the asset class of large corporations.

There are indexes and index funds for most asset classes. By investing in an index, you are achieving the most diversification possible for that asset class without having to make individual investments, that is, without having to make any security selection decisions. This strategy of bypassing the security selection decision is called **passive management**. It also has the advantage of saving transaction costs (broker's fees) because you can invest in the entire index through only one transaction rather than the many transactions that picking investments would require.

In contrast, making security selection decisions to maximize returns and minimize risks is called **active management**. Investors who favor active management feel that the advantages of picking specific investments, after careful research and analysis, are worth the added transaction costs. Actively managed portfolios may achieve diversification based on the quality, rather than the quantity, of securities selected.

Also, asset allocation can be actively managed through the strategy of **market timing**—shifting the asset allocation in anticipation of economic shifts or market volatility. For example, if you forecast a period of higher inflation, you would reduce allocation in fixed-rate bonds or debt instruments, because inflation erodes the value of the fixed repayments. Until the inflation passes, you would shift your allocation so that more of your portfolio is in stocks, say, and less in bonds.

It is rare, however, for active investors or investment managers to achieve superior results over time. More commonly, an investment manager is unable to achieve

consistently better returns within an asset class than the returns of the passively managed index.[1]

KEY TAKEAWAYS

- Diversification can decrease portfolio risk through choosing investments with different risk characteristics and exposures.
- A portfolio strategy involves
 - capital allocation decisions,
 - asset allocation decisions,
 - security selection decisions.
- Active management is a portfolio strategy including security selection decisions and market timing.
- Passive management is a portfolio strategy omitting security selection decisions and relying on index funds to represent asset classes, while maintaining a long-term asset allocation.

EXERCISES

1. What is the meaning of the expressions “don’t count your chickens before they hatch” and “don’t put all your eggs in one basket”? How do these expressions relate to the challenge of reducing exposure to investment risks and building a high-performance investment portfolio? View ING’s presentation and graph on diversification and listen to the audio at <http://www.ingdelivers.com/pointers/diversification>. In the example, how does diversification lower risk? Which business sectors would you choose to invest in for a diversified portfolio?
2. Draft a provisional portfolio strategy. In My Notes or your personal finance journal, describe your capital allocation decisions. Then identify the asset classes you are thinking of investing in. Describe how you might allocate assets to diversify your portfolio. Draw a pie chart showing your asset allocation. Draw another pie chart to show how life cycle investing might affect your asset allocation decisions in the future. How might you use the strategy of market timing in changing your asset allocation decisions? Next, outline the steps you would take to select specific securities. How would you know which stocks, bonds, or funds to invest in? How are index funds useful as an alternative to security selection? What are the advantages and disadvantages of investing in an

index fund such as the Dow Jones Industrial Average? (Go to <http://money.cnn.com/data/markets/dow/> to find out.)

3. Do you favor an active or a passive investment management strategy? Why? Identify all the pros and cons of these investment strategies and debate them with classmates. What factors favor an active approach? What factors favor a passive approach? Which strategy might prove more beneficial for first-time investors?
4. View the online video blog “3 Keys to Investing” at <http://www.allbusiness.com/personal-finance/4968227-1.html>. What advice does the speaker, Miranda Marquit (October 26, 2007), have for novice investors? According to this source, what are the three keys to successful investing?

[1] Much research, some of it quite academic, has been done on this subject. For a succinct (and instructive) summary of the discussion, see Burton G. Malkiel, *A Random Walk Down Wall Street*, 10th ed. (New York: W. W. Norton & Company, Inc., 2007).

Chapter 13 Behavioral Finance and Market Behavior

Introduction

Much of what is known about finance and investments has come from the study of economics. Classic economics assumes that people are rational when they make economic or financial decisions. “Rational” means that people respond to incentives because their goal is always to maximize benefit and minimize costs. Not everyone shares the same idea of benefit and cost, but in a market with millions of participants, there tends to be some general consensus.

This belief in rationality leads to the idea of **market efficiency**. In an efficient market, prices reflect “fundamental value” as appraised by rational decision makers who have access to information and are free to choose to buy or sell as their rational decisions dictate. The belief in efficiency assumes that when prices do not reflect real value, people will notice and will act on the anomaly with the result that the market “corrects” that price.

People are not always rational, however, and markets are not always efficient. **Behavioral finance** is the study of why individuals do not always make the decisions they are expected to make and why markets do not reliably behave as they are expected to behave. As market participants, individuals are affected by others’ behavior, which collectively affects market behavior, which in turn affects all the participants in the market.

As an individual, you participate in the capital markets and are vulnerable to the individual and market behaviors that influence the outcomes of your decisions. The more you understand and anticipate those behaviors, the better your financial decision making may be.

13.1 Investor Behavior

LEARNING OBJECTIVES

1. Identify and describe the biases that can affect investor decision making.
2. Explain how framing errors can influence investor decision making.
3. Identify the factors that can influence investor profiles.

Rational thinking can lead to irrational decisions in a misperceived or misunderstood context. In addition, biases can cause people to emphasize or discount information or can lead to too strong an attachment to an idea or an inability to recognize an opportunity. The context in which you see a decision, the mental frame you give it (i.e., the kind of decision you determine it to be) can also inhibit your otherwise objective view.[1]

Learning to recognize your behaviors and habits of mind that act as impediments to objective decision making may help you to overcome them.

Biases

One kind of investor behavior that leads to unexpected decisions is bias. A tendency or preference or belief that interferes with objectivity, a predisposition to a view that inhibits objective thinking. Biases that can affect investment decisions are the following:

- Availability
- Representativeness
- Overconfidence
- Anchoring
- Ambiguity aversion[2]

Availability bias occurs because investors rely on information to make informed decisions, but not all information is readily available. Investors tend to give more weight to more available information and to discount information that is brought to their attention less often. The stocks of corporations that get good press, for example, claim to do better than those of less publicized companies when in reality these “high-profile” companies may actually have worse earnings and return potential.

Representativeness is decision making based on stereotypes, characterizations that are treated as “representative” of all members of a group. In investing, representativeness is a tendency to be more optimistic about investments that have performed well lately and more pessimistic about investments that have performed poorly. In your mind you stereotype the immediate past performance of investments as “strong” or “weak.” This representation then makes it hard to think of them in any other way or to analyze their potential. As a result, you may put too much emphasis on past performance and not enough on future prospects.

Objective investment decisions involve forming expectations about what will happen, making educated guesses by gathering as much information as possible and making as good use of it as possible. **Overconfidence** is a bias in which you have too much faith in the precision of your estimates, causing you to underestimate the range of possibilities that actually exist. You may underestimate the extent of possible losses, for example, and therefore underestimate investment risks.

Overconfidence also comes from the tendency to attribute good results to good investor decisions and bad results to bad luck or bad markets.

Anchoring happens when you cannot integrate new information into your thinking because you are too “anchored” to your existing views. You do not give new information its due, especially if it contradicts your previous views. By devaluing new information, you tend to underreact to changes or news and become less likely to act, even when it is in your interest.

Ambiguity aversion is the tendency to prefer the familiar to the unfamiliar or the known to the unknown. Avoiding ambiguity can lead to discounting opportunities with greater uncertainty in favor of “sure things.” In that case, your bias against uncertainty may create an opportunity cost for your portfolio. Availability bias and ambiguity aversion can also result in a failure to diversify, as investors tend to “stick with what they know.” For example, in a study of defined contribution retirement accounts or 401(k)s, more than 35 percent of employees had more than 30 percent of their account invested in the employing company’s stock, and 23 percent had more than 50 percent of their retirement account invested in their employer’s stock[3]

—hardly a well-diversified asset allocation.

Framing

Framing refers to the way you see alternatives and define the context in which you are making a decision.[4]

Your framing determines how you imagine the problem, its possible solutions, and its connection with other situations. A concept related to framing is **mental accounting**: the way individuals encode, describe, and assess economic outcomes when they make financial decisions.[5]

In financial behavior, framing can lead to shortsighted views, narrow-minded assumptions, and restricted choices.

Every rational economic decision maker would prefer to avoid a loss, to have benefits be greater than costs, to reduce risk, and to have investments gain value. **Loss aversion** refers to the tendency to loathe realizing a loss to the extent that you avoid it even when it is the better choice.

How can it be rational for a loss to be the better choice? Say you buy stock for \$100 per share. Six months later, the stock price has fallen to \$63 per share. You decide not to sell the stock to avoid realizing the loss. If there is another stock with better earnings potential, however, your decision creates an opportunity cost. You pass up the better chance to increase value in the hopes that your original value will be regained. Your opportunity cost likely will be greater than the benefit of holding your stock, but you will do anything to avoid that loss. Loss aversion is an instance where a rational aversion leads you to underestimate a real cost, leading you to choose the lesser alternative.

Loss aversion is also a form of regret aversion. Regret is a feeling of responsibility for loss or disappointment. Past decisions and their outcomes inform your current decisions, but regret can bias your decision making. Regret can anchor you too firmly in past experience and hinder you from seeing new circumstances. Framing can affect your risk tolerance. You may be more willing to take risk to avoid a loss if you are loss averse, for example, or you may simply become unwilling to assume risk, depending on how you define the context.

Framing also influences how you manage making more than one decision simultaneously. If presented with multiple but separate choices, most people tend to decide on each separately, mentally segregating each decision. [6]

By framing choices as separate and unrelated, however, you may miss making the best decisions, which may involve comparing or combining choices. Lack of diversification or overdiversification in a portfolio may also result.

Investor Profiles

An **investor profile** expresses a combination of characteristics based on personality traits, life stage, sources of wealth, and other factors. What is your investor profile? The better you can know yourself as an investor, the better investment decisions you can make.

Researchers have identified some features or characteristics of investors that seem to lead to recognizable tendencies. [7]

For example, stages of life have an effect on goals, views, and decisions, as shown in the examples in Figure 13.2 "Life Stage Profiles".

Figure 13.2 Life Stage Profiles

Stage	Ages	Investment Goals
Starting	25–40	Eliminating debt Saving for capital expenditures Investing in employee benefits
Accumulating	40–65	Managing debt Diversifying and building equity Saving for retirement and estate planning
Spending	65–80	Relying on retirement income Reducing investment risks Preserving value; preserving or reinvesting capital
Giftng	80+	Eliminating risk Distributing wealth

These “definitions” are fairly loose yet typical enough to think about. In each of these stages, your goals and your risk tolerance—both your ability and willingness to assume risk—change. Generally, the further you are from retirement and the loss of your wage income, the more risk you will take with your investments, having another source of income (your paycheck). As you get closer to retirement, you become more concerned with preserving your investment’s value so that it can generate income when it becomes your sole source of income in retirement, thus causing you to become less risk tolerant. After retirement, your risk tolerance decreases even more, until the very end of your life when you are concerned with dispersing rather than preserving your wealth.

Risk tolerance and investment approaches are affected by more than age and investment stage, however. Studies have shown that the source and amount of wealth can be a factor in attitudes toward investment.[8]

Those who have inherited wealth or come to it “passively,” tend to be much more risk averse than those who have “actively” created their own wealth. Entrepreneurs, for example, who have created wealth, tend to be much more willing to assume investment risk, perhaps because they have more confidence in their ability to create more wealth should their investments lose value. Those who have inherited wealth tend to be much more risk averse, as they see their wealth as a windfall that, once lost, they cannot replace.

Active wealth owners also tend to be more active investors, more involved in investment decisions and more knowledgeable about their investment portfolios. They have more confidence in their ability to manage and to make good decisions than do passive wealth owners, who haven’t had the experience to build confidence.

Not surprisingly, those with more wealth to invest tend to be more willing to assume risk. The same loss of value is a smaller proportional loss for them than for an investor with a smaller asset base.

Many personality traits bear on investment behavior, including whether you generally are

- confident or anxious,
- deliberate or impetuous,
- organized or sloppy,
- rebellious or conventional,
- an abstract or linear thinker.

What makes you make the decisions that you make? The more aware you are of the influences on your decisions, the more you can factor them in—or out—of the investment process.

KEY TAKEAWAYS

- Traditional assumptions about economic decision making posit that financial behavior is rational and markets are efficient. Behavioral finance looks at all the factors that cause realities to depart from these assumptions.
- Biases that can affect investment decisions are the following:
 - Availability
 - Representativeness
 - Overconfidence
 - Anchoring
 - Ambiguity aversion
- Framing refers to the way you see alternatives and define the context in which you are making a decision. Examples of framing errors include the following:
 - Loss aversion
 - Choice segregation
- Framing is a kind of mental accounting—the way individuals classify, characterize, and evaluate economic outcomes when they make financial decisions.
- Investor profiles are influenced by the investor’s
 - life stage,
 - personality,
 - source of wealth.

EXERCISES

1. Debate rational theory with classmates. How rational or nonrational (or irrational) do you think people’s economic decisions are? What are some examples of efficient and inefficient markets, and how did people’s behavior create those situations? In My Notes or your personal finance journal record some examples of your nonrational economic behavior. For example, describe a situation in which you decreased the value of one of your assets rather than maintaining or increasing its value. In what circumstances are you likely to pay more for something than it is worth? Have you ever bought something you did not want or need just because it was a bargain? Do you tend to avoid taking risks even when the odds are good that you will not take a loss? Have

you ever had a situation in which the cost of deciding not to buy something proved greater than buying it would have cost? Have you ever made a major purchase without considering alternatives? Have you ever regretted a financial decision to such an extent that the disappointment has influenced all your subsequent decisions?

2. Angus has always held shares of a big oil company's stock and has never thought about branching out to other companies or industries in the energy sector. His investment has done well in the past, proving to him that he is making the right decision. Angus has been reading about fundamental changes predicted for the energy sector, but he decides to stick with what he knows. In what ways is Angus's investment behavior irrational? What kinds of investor biases does his decision making reveal?
3. Complete the interactive investor profile questionnaire at <https://www11.ingretirementplans.com/webcalc/jsp/ws/typeOfInvestor.jsp>. According to this instrument, what kinds of investments should you consider? Then refine your understanding of your investor profile by filling out the more comprehensive interview questions at <http://www.karenibach.com/files/2493/SEI%20Questionnaire.pdf>. In My Notes or your personal finance journal, on the basis of what you have learned, write an essay profiling yourself as an investor. You may choose to post your investor profile and compare it with those of others taking this course. Specifically, how do you think your profile will assist you and your financial advisor or investment advisor in planning your portfolio?
4. Using terms and concepts from behavioral finance, how might you evaluate the consumer or investor behavior shown in the following photos? In what ways might these economic behaviors be regarded as rational? In what contexts might these behaviors become irrational?

[1] Much research has been done in the field of behavioral finance over the past thirty years. A comprehensive text for further reading is by Hersh Shefrin, *Beyond Greed and Fear: Behavioral Finance and the Psychology of Investing* (Oxford: Oxford University Press, 2002).

[2] Hersh Shefrin, *Beyond Greed and Fear: Understanding Financial Behavior and the Psychology of Investing* (Oxford: Oxford University Press, 2002).

[3] S. Holden and J. VanDerhei, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2002," *EBRI Issue Brief* 261 (2003).

[4] A. Tversky and D. Kahneman, "The Framing Decisions and the Psychology of Choice," *Science* 30, no. 211 (1981): 453–58.

[5] R. Thaler, "Mental Accounting Matters," *Journal of Behavioral Decision Making* 12, no. 3 (1999): 183–206.

[6] Hersh Shefrin, *Beyond Greed and Fear: Understanding Financial Behavior and the Psychology of Investing* (Oxford: Oxford University Press, 2002).

[7] A reference for this discussion is John L. Maginn, Donald L. Tuttle, Jerald E. Pinto, and Dennis W. McLeavey, eds., *Managing Investment Portfolios: A Dynamic Process*, 3rd ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2007).

[8] John L. Maginn, Donald L. Tuttle, Jerald E. Pinto, and Dennis W. McLeavey, eds., *Managing Investment Portfolios: A Dynamic Process*, 3rd ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2007).

13.2 Market Behavior

LEARNING OBJECTIVES

1. Define the role of arbitrage in market efficiency.
2. Describe the limits of arbitrage that may perpetuate market inefficiency.
3. Identify the economic and cultural factors that can allow market inefficiencies to persist.
4. Explain the role of feedback as reinforcement of market inefficiencies.

Your economic behaviors affect economic markets. Market results reflect the collective yet independent decisions of millions of individuals. There have been years, even decades, when some markets have not produced expected or "rational" prices because of the collective behavior of their participants. In inefficient markets, prices may go way above or below actual value.

The **efficient market theory** relies on the idea that investors behave rationally and that even when they don't, their numbers are so great and their behavioral biases are so diverse that their irrational behaviors will have little overall effect on the market. In effect, investors' anomalous behaviors will cancel each other out. Thus, diversification (of participants) lowers risk (to the market).

Another protection of market efficiency is the tendency for most participants to behave rationally. If an asset is mispriced so that its market price deviates from its intrinsic value, knowledgeable investors will see that and take advantage of the opportunity. If a stock seems underpriced they will buy, driving prices back up. If a stock seems

overpriced, they will sell, driving prices back down. These strategies are called **arbitrage**, or the process of creating investment gains from market mispricings (**arbitrage opportunities**). The knowledgeable investors who carry out market corrections through their investment decisions are called **arbitrageurs**.

There are limits to arbitrage, however. There are times when the stock markets seem to rise or fall much more or for much longer than the dynamics of market correction would predict.

Limits of Arbitrage

Arbitrage may not work when the costs outweigh the benefits. Investment costs include transaction costs, such as brokers' fees, and risk, especially market risk.

An investor who sees an arbitrage opportunity would have to act quickly to take advantage of it, because chances are good that someone else will and the advantage will disappear along with the arbitrage opportunity. Acting quickly may involve borrowing if liquid funds are not available to invest. For this reason, transaction costs for arbitrage trades are likely to be higher (because they are likely to include interest), and if the costs are higher than the benefits, the market will not be corrected.

The risk of arbitrage is that the investor rather than the market is mispricing stocks. In other words, arbitrageurs assume that the current valuation for an asset will reverse—will go down if the valuation has gone too high, or will go up if the valuation has gone too low. If their analysis of fundamental value is incorrect, the market correction may not occur as predicted, and neither will their gains.

Most arbitrageurs are professional wealth managers. They invest for very wealthy clients with a large asset base and very high tolerance for risk. Arbitrage is usually not a sound practice for individual investors.

Causes of Market Inefficiency

Market inefficiencies can persist when they go undiscovered or when they seem rational. Economic historians point out that while every asset “bubble” is in some ways unique, there are common economic factors at work.[2]

Bubbles are accompanied by lower interest rates, increased use of debt financing, new technology, and a decrease in government regulation or oversight. Those factors encourage economic expansion, leading to growth of earnings potential and thus of investment return, which would make assets genuinely more valuable.

A key study of the U.S. stock market points out that there are cultural as well as economic factors that can encourage or validate market inefficiency.[3]

Examples include

- demographic factors of the population,
- attitudes reflected in the popular culture,
- the availability of information and analyses,
- the lowering of transaction costs.

These factors all lead to increased participation in the market and a tendency to “rationalize irrationality,” that is, to think that real economic or cultural changes, rather than mispricings, are changing the markets.

Sometimes mispricings occur when real economic and cultural changes are happening, however, so that what used to be seen a mispricing is actually seen as justifiable, fundamental value because the market itself has changed profoundly. An example is the dotcom bubble of 1990–2000, when stock prices of Internet start-up companies rose far higher than their value or earning capacity. Yet investors irrationally kept investing until the first wave of start-ups failed, bursting the market bubble.

Economic and cultural factors can prolong market inefficiency by reinforcing the behaviors that created it, in a kind of feedback loop. For example, financial news coverage in the media increased during the 1990s with the global saturation of cable and satellite television and radio, as well as the growth of the Internet.[4]

More information availability can lead to more availability bias. Stereotyping can develop as a result of repeated “news,” resulting in representation bias, which encourages overconfidence or too little questioning or analysis of the situation. Misinterpreting market inefficiency as real changes can cause framing problems and other biases as well.

In this way, market inefficiencies can become self-fulfilling prophecies. Investing in an inefficient market causes asset values to rise, leading to gains and to more investments. The rise in asset values becomes self-reinforcing as it encourages anchoring, the expectation that asset values will continue to rise. Inefficiency becomes the norm. Those who do not invest in this market thus incur an opportunity cost. Participating in perpetuating market inefficiency, rather than correcting it, becomes the rational choice.

Reliance on media experts and informal communication or “word of mouth” reinforces this behavior to the point where it can become epidemic. It may not be mere coincidence, for example, that the stock market bubble of the 1920s happened as radio and telephone access became universal in the United States,[5]

or that the stock boom of the 1990s coincided with the proliferation of mobile phones and e-mail, or that the real estate bubble of the 2000s coincided with our creation of the blogosphere.

Market efficiency requires that investors act independently so that the market reflects the consensus opinion of their independent judgments. Instead, the market may be reflecting the opinions of a few to whom others defer. Although the volume of market participation would seem to show lots of participation, few are actually participating.

Most are simply following. The market then reflects the consensus of the few rather than the many; hence, the probability of mispricing rises.

It is difficult to know what is happening while you are in the middle of an inefficient market situation. It is easier to look back through market history and point out obvious panics or bubbles, but they were not so obvious to participants while they were happening. Hindsight allows a different perspective—it changes the frame—but as events happen, you can only work with the frame you have at the time.

KEY TAKEAWAYS

- The diversification of market participants should increase market efficiency.
- Arbitrage corrects market mispricing.
- Arbitrage is not always possible, due to
 - transaction costs,
 - the risk of misinterpreting market mispricing.
- Market inefficiencies can persist due to economic and cultural factors such as
 - lowered interest rates and increased use of debt financing,
 - new technology,
 - a decrease in government regulation or oversight,
 - demographic factors,
 - attitudes as reflected in popular culture,
 - the availability of information and its analysts,
 - the lowering of transaction costs,
 - increased participation in inefficient markets.
- Market mispricings can be reinforced by feedback mechanisms, perpetuating inefficiencies.

EXERCISES

1. Find out more about the tulip mania at http://www.businessweek.com/2000/00_17/b3678084.htm and at http://en.wikipedia.org/wiki/Tulip_mania, or <http://www.investopedia.com/features/crashes/crashes2.asp>. What caused mispricing in the market for tulip bulbs? What factors perpetuated the market inefficiency? What happened to

burst the tulip bubble? What are some other examples from history of similar bubbles and crashes caused by inefficient markets?

2. Reflect on your impact on the economy and the financial markets as an individual, whether or not you are an investor. How does your financial behavior affect the capital markets, for example? Record your thoughts in your personal finance journal or My Notes. Share your ideas with classmates.

[1] Barbara Schulman, "Tulips," James Ford Bell Library, University of Minnesota, 1999, <http://bell.lib.umn.edu/Products/tulips.html> (accessed May 28, 2009).

[2] Charles P. Kindleberger and Robert Aliber, *Manias, Panics, and Crashes*, 5th ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2005).

[3] Robert J. Shiller, *Irrational Exuberance*, 2nd ed. (New York: Random House, Inc., 2005).

[4] Robert J. Shiller, *Irrational Exuberance*, 2nd ed. (New York: Random House, Inc., 2005).

[5] See especially Robert J. Shiller, *Irrational Exuberance*, 2nd ed. (New York: Random House, Inc., 2005), 163.

13.3 Extreme Market Behavior

LEARNING OBJECTIVES

1. Trace the typical pattern of a financial crisis.
2. Identify and define the factors that contribute to a financial crisis.

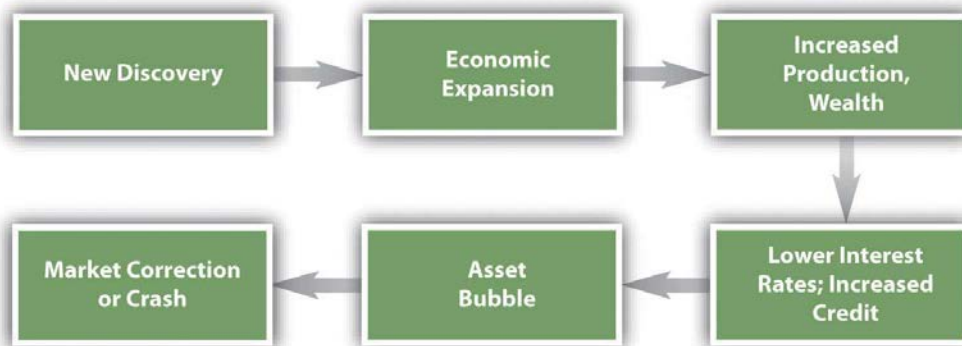
Economic forces and financial behavior can converge to create extreme markets or financial crises, such as booms, bubbles, panics, crashes, or meltdowns. These atypical events actually happen fairly frequently. Between 1618 and 1998, there were thirty-eight financial crises globally, or one every ten years.[1]

As an investor, you can expect to weather as many as six crises in your lifetime.

Patterns of events that seem to precipitate and follow the crises are shown in Figure 13.7 "Pattern of a Financial Crisis". First a period of economic expansion is sparked by a new technology, the discovery of a new resource, or a change in political balances. This leads

to increased production, markets, wealth, consumption, and investment, as well as increased credit and lower interest rates. People are looking for ways to invest their newfound wealth. This leads to an asset bubble, a rapid increase in the price of some asset: bonds, stocks, real estate, or commodities such as cotton, gold, oil, or tulip bulbs that seems to be positioned to prosper from this particular expansion.

Figure 13.7 Pattern of a Financial Crisis



The bubble continues, reinforced by the behavioral and market consequences that it sparks until some event pricks the bubble. Then asset values quickly deflate, and credit defaults rise, damaging the banking system. Having lost wealth and access to credit, people rein in their demand for consumption and investment, further slowing the economy.

Figure 13.8 "Major Asset Bubbles Since 1636" shows some of the major asset bubbles since 1636 and the events that preceded them. [2]

Figure 13.8 Major Asset Bubbles Since 1636

Bubble Began	Country	Cause of Economic Expansion	Speculative Asset	Year of Crash
1636	Netherlands	War against Spain	Exotic tulip bulbs	1637
1713	England	Treaty of Utrecht	South Sea Company stock	1720
1715	France	Death of Louis XIV	Mississippi Company stock	1720
1789	United States	Nation began	United States bonds	1792
1789	England	French Revolution	Canals	1793
1815	England	End of Napoleonic Wars	Exports	1816
1836	England	Textile boom	Cotton, railroads	1836
1836	United States	Jackson election	Cotton, land	1837
1857	England	End of the Crimean War	Railroads, wheat	1857
1863	France	Confederate defeat in the Civil War (United States)	Cotton	1864
1873	United States	Westward expansion	Railroads, land (homesteading)	1873
1890	United States	Sherman Silver Act 1890	Silver	1893
1901	United States	Panama Canal	Coffee	1907
1919	United States	Post-World War I expansion	Land, stocks	1929
1982	United States	Control of inflation	Real estate, stocks	1987
1980s	Japan	Manufacturing dominance	Real estate, stocks	1990
1997	Asia	Deregulation, globalization	Currencies	1998
1992	United States	Internet/technology	Stocks	2000
2003	United States	Monetary policy	Real estate	2007

In many cases, the event that started the asset speculation was not a macroeconomic event but nevertheless had consequences to the economy: the end of a war, a change of government, a change in policy, or a new technology. Often the asset that was the object of speculation was a resource for or an application of a new technology or an expansion into new territory that may have been critical to a new emphasis in the economy. In other words, the assets that became the objects of bubbles tended to be the drivers of a “new economy” at the time and thus were rationalized as investments rather than as speculation.

In all the examples listed in Figure 13.8 "Major Asset Bubbles Since 1636", as asset values rose—even if only on the strength of investor beliefs—speculators, financed by an expansion of credit, augmented the market and drove up asset prices even further. Many irrational financial behaviors—overconfidence, anchoring, availability bias, representativeness—were in play, until finally the market was shocked into reversal by a specific event or simply sank under its own weight.

Economists may argue that this is what you should expect, that markets expand and contract cyclically as a matter of course. In this view, a crash is nothing more than the correction for a bubble—market efficiency at work.

Examples: The Internet Stock Boom and the Crash of 1929

Much has been and will be written about a classic financial crisis, the Internet stock boom of the 1990s.[3]

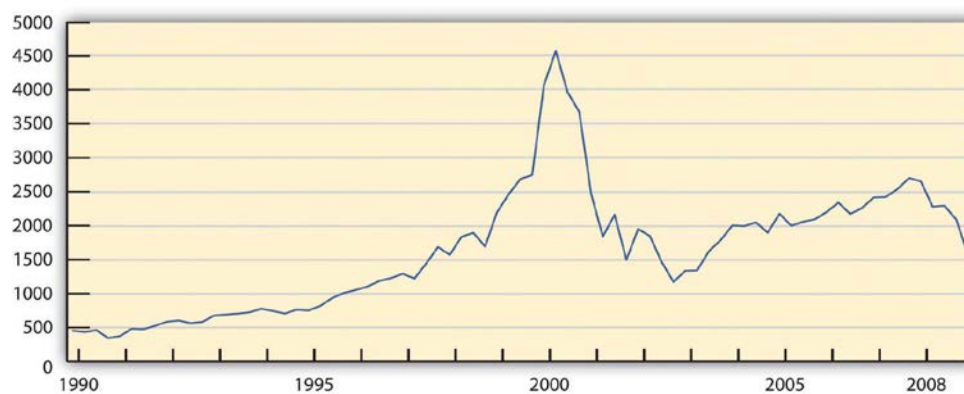
The asset bubble was in the stocks of emerging companies poised to take advantage of the “new economy” and its expanding markets of the new technology of the Internet.

The asset bubble grew from preceding economic events. The previous decade had seen a recovery from a major inflation and a recession in the United States followed by an economic expansion. Deregulation and new technologies had opened up the telecommunications industry. In 1989 the Soviet Union dissolved, opening markets and market economies in Eastern Europe as well as the former Soviet Union (FSU). The personal computer had taken hold and was gaining in household saturation.

This mix of relative prosperity, low inflation, new global markets, and new technology looked very promising. Classically, the economy expanded, and a new asset bubble was born.

Most Internet companies that were publicly traded were listed on the NASDAQ exchange. Figure 13.9 "NASDAQ Composite Index, 1989–2008" shows the NASDAQ composite index from 1991 to 2002.

Figure 13.9 NASDAQ Composite Index, 1989–2008[4]



Between 1990 and 2000 the NASDAQ Composite Index increased ten-fold. At the height of the bubble, between 1998 and 2000, the value of the index increased 2.5 times, resulting in an average annualized return of over 58 percent.

Alan Greenspan, then Chair of the Federal Reserve Bank, spoke on Capital Hill at the end of January 1999. In response to the question about how much of the stock boom was “based on sound fundamentals and how much is based on hype.” Greenspan replied,

“First of all, you wouldn’t get ‘hype’ working if there weren’t something fundamentally, potentially sound under it.

“The size of the potential market is so huge that you have these pie-in-the-sky type of potentials for a lot of different [firms]. Undoubtedly, some of these small companies whose stock prices are going through the roof will succeed. And they may very well

justify even higher prices. The vast majority are almost sure to fail. That's the way markets tend to work in this regard....

“But there is at root here something far more fundamental—the stock market seeking out profitable ventures and directing capital to hopeful projects before profits materialize. That's good for our system. And, in fact, with all its hype and craziness, is something that, at the end of the day, is probably more plus than minus.” [5]

Greenspan implies that the bubble “with all its hype and craziness” is nothing more than business as usual in the capital markets. He sees the irrational as somewhat rational and not merely the “irrational exuberance” that he saw little more than two years earlier. [6]

Going back a bit further, the Crash of 1929 was perhaps the most profound end to an asset bubble, at least in the American psyche, as it seemed to precipitate a lengthy depression, the Great Depression. The reasons for the prolonged recession that followed the crash are complex, but the factors leading up to it illustrate a classic asset bubble.

In the decade after World War I, the U.S. economy boomed. With the war over, inflation eased and markets opened. Our manufacturing competitors in Europe had suffered losses of labor, capital, and infrastructure that allowed the United States to establish a global dominance. Technologies such as radio were changing the speed of life, while the mass production of everything from cars to appliances was changing the quality of life. Electrification and roads developed a national infrastructure. To finance the consumption of all this mass production, the idea of “store credit” was beginning to expand into the system of consumer credit that we use today. As interest rates stayed low, levels of household and corporate debt rose.

New technologies were developed by new corporations that needed mass, public financing. As more and more shares were issued, they were pitched more fervently to encourage more investment by more investors. Investing became the national pastime, share prices rose, and investors were reassured that technology had spawned a new economy to create new wealth. As in the 1990s, the mix of relative prosperity, low inflation, new global markets, and new technology looked very promising. The positive feedback loop of a classic asset bubble had been created.

After it was all over, Groucho, one of the famous Marx Brothers comedians, reflected on the rationalized irrationality of the bubble: “I would have lost more, but that was all the money I had.” [7]

Given that you can expect to encounter at least a few crises during your investing lifetime, as you think about investing—creating and managing wealth—how can you protect yourself? How can you “keep your head when all about you / Are losing theirs,” [8] and is that really the right thing to do?

KEY TAKEAWAYS

- Prolonged market inefficiencies can result in asset bubbles.

- Financial crises follow a typical pattern of
 - economic expansion,
 - asset bubble(s),
 - market crash(es).
- The behavior that leads to financial crises may exhibit investor biases, but to the extent that investors are responding to real changes in the economy, it is not necessarily irrational.

EXERCISE

View a flowchart of the financial crisis of 2007 at Mint.com (<http://www.mint.com/blog/trends/a-visual-guide-to-the-financial-crisis/>). How did the real estate market become so inefficient? What thinking does the chart identify that fed into the real estate crash? For each thought bubble on the chart, what kind of bias or framing or other mental accounting was taking place? In what ways was investor behavior irrational? On the other hand, how might you argue that investors were not deciding irrationally?

[1] Charles P. Kindleberger and Robert Aliber, *Manias, Panics, and Crashes*, 5th ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2005).

[2] Charles P. Kindleberger and Robert Aliber, *Manias, Panics, and Crashes*, 5th ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2005).

[3] For a wonderfully thorough and insightful start, see Robert J. Shiller, *Irrational Exuberance*, 2nd ed. (New York: Random House, Inc., 2005).

[4] Graph created by the author, based on data retrieved from Yahoo! Finance, <http://finance.yahoo.com> (accessed October 21, 2009).

[5] John Cassidy, *Dot.con* (New York: HarperCollins, 2002), 202.

[6] Robert J. Shiller, *Irrational Exuberance*, 2nd ed. (New York: Random House, Inc., 2005), 1.

[7] Julius Henry Marx, *Groucho and Me* (New York: Da Capo Press, Inc., 1995), 197. Originally published in 1959.

[8] Rudyard Kipling, *Complete Verse* (New York: Anchor Books, 1988).

13.4 Behavioral Finance and Investment Strategies

LEARNING OBJECTIVES

1. Identify the factors that make successful market timing difficult.
2. Explain how technical analysis is used as an investment strategy.
3. Identify the factors that encourage investor fraud in an asset bubble.

You can apply your knowledge of findings from the field of behavioral finance in a number of ways. First, you can be alert to and counteract your natural tendencies toward investor bias and framing. For example, you can avoid availability bias by gathering news from different sources and by keeping the news in historical perspective.

A long-term viewpoint can also help you avoid anchoring or assuming that current performance indicates future performance. At the same time, keep in mind that current market trends are not the same as the past trends they may resemble. For example, factors leading to stock market crashes include elements unique to each.

Ambiguity aversion can be useful if your uncertainty is caused by a lack of information, as it can let you know when you need to do more homework. On the other hand, aversion to ambiguity can blind you to promising opportunities.

Loss aversion, like any fear, is useful when it keeps you from taking too much risk, but not when it keeps you from profitable opportunities. Using knowledge to best assess the scope and probability of loss is a way to see the loss in context. Likewise, segregating investments by their goals, risks, liquidity, and time horizons may be useful for, say, encouraging you to save for retirement or some other goal.

Your best protection against your own behavioral impulses, however, is to have a plan based on an objective analysis of goals, risk tolerance, and constraints, taking your entire portfolio into account. Review your plan at least once a year as circumstances and asset values may have changed. Having a plan in place helps you counteract investor biases.

Following your investment policy or plan, you determine the capital and asset allocations that can produce your desired return objective and risk tolerance within your defined constraints. Your asset allocation should provide diversification, a good idea whatever your investment strategy is.

Market Timing and Technical Analysis

Asset bubbles and market crashes are largely a matter of timing. If you could anticipate a bubble and invest just before it began and divest just before it burst, you would get

maximum return. That sort of precise timing, however, is nearly impossible to achieve. To time events precisely, you would constantly have to watch for new information, and even then, the information from different sources may be contradictory, or there may be information available to others that you do not have. Taken together, your chances of profitably timing a bubble or crash are fairly slim.

Market timing was defined in Chapter 12 "Investing" as an asset allocation strategy. Because of the difficulty of predicting asset bubbles and crashes, however, and because of the biases in financial behavior, individual investors typically develop a "buy-and-hold" strategy. You invest in a diversified portfolio that reflects your return objectives and risk tolerance, and you hold on to it. You review the asset allocation periodically so it remains in line with your return and risk preferences or as your constraints shift. You rely on your plan to make progress toward your investment goals and to resist the temptations that are the subjects of the field of behavioral finance.

As you read in Chapter 12 "Investing", a passive investment strategy ignores security selection by using index funds for asset classes. An active strategy, in contrast, involves selecting securities with a view to market timing in the selection of securities and asset allocation.

An investment strategy based on the idea that timing is everything is called technical analysis. **Technical analysis** involves analyzing securities in terms of their history, expressed, for example, in the form of charts of market data such as price and volume. Technical analysts are sometimes referred to as chartists. Chartists do not consider the intrinsic value of a security—a concern of **fundamental analysis**. Instead, using charts of past price changes and returns, technical analysts try to predict a security's future market movement.

Candlestick charting, with its dozens of symbols, is used as a way to "see" market timing trends. It is believed to have been invented by an eighteenth-century Japanese rice trader named Homma Munehisa.[1]

Although charting and technical analysis has its proponents, fundamental analysis of value remains essential to investment strategy, along with analyzing information about the economy, industry, and specific asset.

Figure 13.10 A Candlestick Chart Used in Technical Analysis[2]



Technical analysts use charts like this one, showing the NASDAQ's performance for April and May 2009. Each symbol annotating the graph, such as the shaded and clear "candlesticks," represents financial data. Chartists interpret the patterns they see on these charts as indicators of future price moves and returns as driven by traders' financial behavior.

Financial Fraud

Fraud is certainly not an investment strategy, but bubbles attract fraudulent schemers as well as investors and speculators. A loss of market efficiency and signs of greater investor irrationality attract con men to the markets. It is easier to convince a "mark" of the credibility and viability of a fraudulent scheme when there is general prosperity, rising asset values, and lower perceived risks.

During the post–World War I expansion and stock bubble of the 1920s, for example, Charles Ponzi created the first **Ponzi scheme**, a variation of the classic **pyramid scheme**. The pyramid scheme creates "returns" from new members' deposits rather than from real earnings in the market. The originator gets a number of people to invest, each of whom recruits more, and so on. The money from each group of investors, however, rather than being invested, is used to pay "returns" to the previous group of investors. The scheme is uncovered when there are not enough "returns" to go around. Thus, the originator and early investors may get rich, while later investors lose all their money.

During the prosperity of the 1980s, 1990s, and 2000s, the American financier Bernard Madoff notoriously ran a variation of the Ponzi scheme. His fraud, costing investors around the world billions of dollars, lasted through several stock bubbles and a real estate bubble before being exposed in 2008.

Fraud can be perpetrated at the corporate level as well. Enron Corporation was an innovator in developing markets for energy commodities such as oil, natural gas, and electricity. Its image was of a model corporation that encouraged bright thinkers to go

“outside the box.” Unfortunately, that ethos of innovation took a wrong turn when several of its corporate officers conspired to hide the company’s investment risks from financing complicated subsidiaries that existed “off balance sheet.” In the fall of 2001, with investor confidence shaken by the dotcom bust and the post-9/11 deepening of the recession, the fraud began to unravel. By the time the company declared bankruptcy, its stock value was less than one dollar per share, and its major corporate officers were under indictment (and later convicted) for fraud.

How can you avoid a fraud? Unfortunately, there are no foolproof rules. You can be alert to the investment advisor who pushes a particular investment (see Chapter 14 “The Practice of Investment”). You can do your own research and gather as much independent information on the investment as possible. The best advice, however, may come in the adage, “If it seems too good to be true, it probably is.” The capital markets are full of buyers and sellers of capital who are serious traders. The chances are extremely slim that any one of them has discovered a market inefficiency undiscoverable by others and exploitable only by him or her. There is too much at stake.

KEY TAKEAWAYS

- Market timing, or the ability to predict bubbles and crashes, is nearly impossible because of discrepancies in the
 - availability of information,
 - access to information,
 - interpretation of information.
- Technical analysis is a strategy based on market timing and investor sentiment.
- Asset bubbles are often accompanied by an increase in investor fraud due to the
 - loss of market efficiency,
 - increase in investor “irrationality,”
 - increase in wealth and prosperity.
- One form of financial fraud relating to market bubbles is the Ponzi scheme or pyramid scheme.

EXERCISES

1. Consider exploring the world of chartists at <http://www.investopedia.com/articles/technical/02/121702.asp> and consider trying your hand at this arcane art. You and our classmates might begin by learning how to read the charts that technical analysts use to predict price changes in the markets. For a detailed glossary of chart

symbols and patterns, see <http://www.trending123.com/patterns/index.html>. What do you see as the advantages and disadvantages of technical analysis compared to fundamental analysis?

2. What is a pyramid scheme exactly? Find out at <http://www.investopedia.com/articles/04/042104.asp>. Have you ever participated in or invested in such a scheme? Have you ever been a victim of one? Record your answers in My Notes or your personal finance journal. According to the Investopedia article, why can it be difficult to detect a pyramid scheme? What are some possible tip-offs to this kind of fraud? Why are pyramid schemes unsustainable? Who are the victims? Draw a diagram illustrating the dynamics of pyramid schemes.
3. How are investment clubs different from pyramid schemes? Read about investment clubs at http://www.ehow.com/how-does_4566462_investment-club-work.html. What does the U.S. Securities Exchange Commission have to say about investment clubs at <http://www.sec.gov/investor/pubs/invclub.htm>? Investigate further online. Would you consider joining or starting an investment club? Why, or why not? What do your classmates think about this?
4. Survey the Web site of a 2009 *60 Minutes* CBS broadcast on the Madoff affair, which includes articles, video, and links at <http://www.cbsnews.com/stories/2009/02/27/60minutes/main4833667.shtml>. According to this site, who discovered the Madoff fraud and how? Who were Madoff's victims? Visit the support group Web site created for the victims at <http://berniemadoffponzisupportgroup.blogspot.com/>. In the CBS video, how did Madoff defend himself? Read a *Wall Street Journal* article at <http://online.wsj.com/article/SB123111743915052731.html>, explaining how Madoff's Ponzi scheme was able to succeed. How did investor biases contribute to this success? How did biases in regulatory oversight contribute to the fraud? Sample some of the videos of the congressional hearings on the Madoff scandal at http://video.google.com/videosearch?hl=en&q=madoff+fraud&um=1&ie=UTF-8&ei=vSk1Sq2iOsGHtgfdumC8CQ&sa=X&oi=video_result_group&resnum=7&ct=title#. Why did representatives and senators focus their criticism on the Securities and Exchange Commission?

[1] Gregory L. Morris, *Candlestick Charting Explained: Timeless Techniques for Trading Stocks and Futures* (New York: McGraw-Hill, 2006).

[2] Courtesy of StockCharts.com, <http://stockcharts.com>.



Chapter 14 The Practice of Investment

Introduction

Once you have developed your investment policy statement and have determined your goals, risk tolerance, and constraints, it is time to choose a strategy and to act. Whether you entrust a professional advisor or you do it yourself—or both—depends on your confidence, knowledge, and the time and effort that you want to devote to your decisions. As is true of any personal finance decision, the ultimate responsibility for and consequences of your decisions are yours alone. Whatever you decide, the more you know about the practice of investment, the better an investor you will be.

There are four broad areas to take into account: (1) how to find and evaluate the information you need, (2) the agents and fees involved in securities trading, (3) the ethical standards and regulatory requirements of the securities industry, and (4) the special considerations of investing internationally.

14.1 Investment Information

LEARNING OBJECTIVES

1. Explain how leading economic indicators are used to gauge the current economic cycle and the outlook for the economy.
2. Explain how indexes are used to gauge financial market activity and as benchmarks for asset classes and industries.
3. Identify and evaluate sources of information used to analyze and forecast corporate performance.
4. Sample and evaluate media outlets providing investment information and advice.

Investment information seems to be everywhere: in print, radio, television, and Internet—24/7 and global. Successful investors are hailed as gurus and high-profile financial news reporters become celebrities. No shortage of commentators and pundits will analyze every morsel of news, but how can you find useful investment information to make investment decisions? Even more important, how can you find useful information that you can trust based on the reliability of its source?

Your investment decisions involve asset allocation and security selection. To make those decisions, you need information that will help you form an idea of the economy, industry, and company that affect your decisions. The three main kinds of information that investors use are economic indicators, market indexes, and company performance.

Economic Indicators

To gauge the economic environment or cycle, the most widely used measures are the following:

- Gross domestic product (GDP) is a common measure of the value of output.
- Inflation measures the currency's purchasing power.
- Unemployment measures the extent to which the economy creates opportunities for participation.
- Interest rates affect the future value of money.

The U.S. government tracks GDP, inflation, and unemployment through its agencies, such as the Federal Reserve Bank, the Bureau of Labor Statistics, and the National Bureau of Economic Research. Globally, the World Bank tracks similar statistics, which are widely reported in the media as recognized **benchmarks** of a nation's economic health.

In addition, interest rates are another financial market indicator. Interest rates are tracked intently because so much capital investment, consumer investment (for houses, cars, education), and even daily consumption relies on debt financing. The prime rate, the lowest available retail interest rate, and average mortgage rates are the most commonly followed rates.

Economists look at many other factors to measure the economy. The **index of leading economic indicators**, published monthly, includes the following:

1. The length of the average workweek (in hours)
2. Initial weekly claims for unemployment compensation
3. New orders placed with manufacturers
4. The percentage of companies receiving slower deliveries from suppliers (vendor performance)
5. Contracts and orders for new plants and equipment
6. Permits for new housing starts
7. The interest rate spread (difference) between the ten-year Treasury bond and the Federal Reserve Funds rate, the "overnight rate" that banks use to lend to each other
8. The index of consumer expectations (the University of Michigan Index)
9. Change in the value of the index of stock prices (for 500 common stocks)
10. Change in the money supply.

All these measures indicate how productive the economy is, how successful it is at creating jobs and incomes, and how much benefit it can create for consumers. A decline in the leading indicators for three consecutive months is thought to be a strong sign that the economy is in a downturn or even heading toward a recession.

Market Information

The health of financial markets is gauged by the values of various securities indexes that show the growth or decline of prices in various markets. The indexes are used to gauge the movement, direction, and rate of change as well as nominal value.

Figure 14.2 "Examples of Security Indexes" lists some examples of the many stock indexes and bond indexes and the publicly traded securities they track.

Figure 14.2 Examples of Security Indexes

Stock Indexes

Dow Jones Average (DJA)	60 leading corporations
Dow Jones Industrial Average (DJIA)	30 leading industrial corporations
S&P 500 (Standard & Poor's)	500 largest corporations (by capital value)
NASDAQ Composite	All companies listed on the NASDAQ exchange
Russell 3000	3,000 largest U.S. companies based on total market capitalization

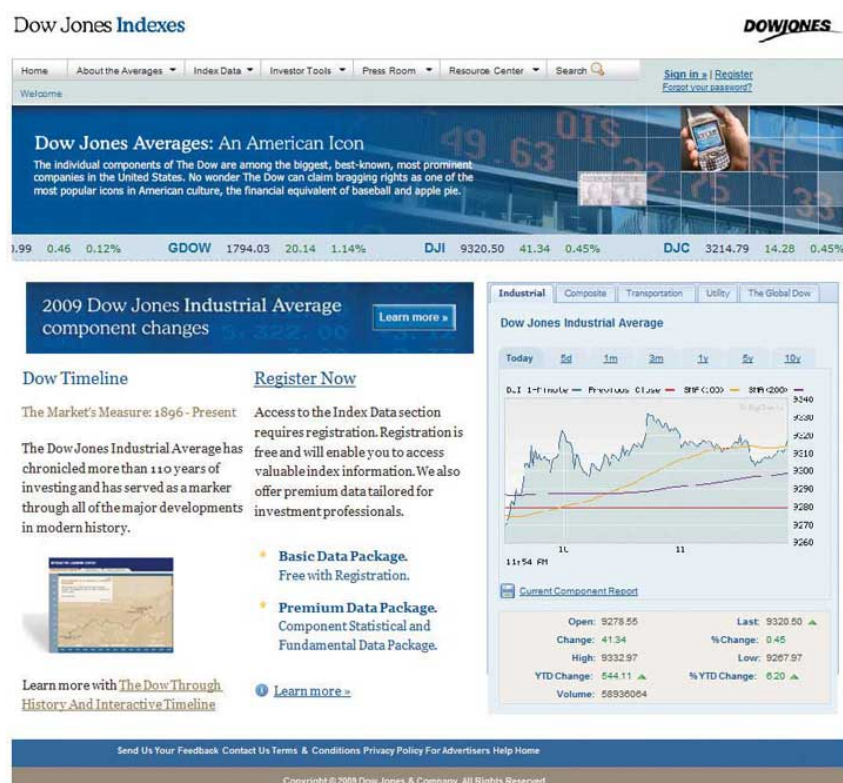
Bond Indexes

Dow Jones Corporate Bond Index	96 equally weighted, recently issued corporate bonds
Barclays Capital U.S. Government/Credit Bond Index	U.S. government, Treasury-related, and corporate bonds
J.P. Morgan Overseas Government Bond Index	Long-term, non-U.S. government bonds
J.P. Morgan Emerging Markets Bond Index (EMBI)	Government bonds issued by emerging countries

There is an index for anything that is traded: commodities, currencies, interest rate futures, and so on. Measures of market momentum include statistics such as the percentage of stocks that advanced (increased in value) or declined (decreased in value) or the volume of shares bought and sold. If more stocks advanced than declined, for example, that may suggest optimism for the stock market.

When interpreting index information, be aware of the investments an index represents. For example, the Dow Jones Industrial Average, or “the Dow,” consists of the equity values of only thirty companies of the more than five thousand publicly traded companies. The Dow is quoted widely and regularly. It was started in 1896 by Charles Dow, founder of Dow Jones, Inc., and the *Wall Street Journal*.

Figure 14.3 The Dow Jones Home Page



Some companies specialize in analyzing asset classes of particular securities. Two well-known analysts of mutual fund performance are Morningstar (<http://www.morningstar.com>), which is geared toward investors, and Lipper Reports (<http://www.lipper.com>), which is geared toward investment managers.

Indexes are used as benchmarks for an asset class or a sector of the economy. The Standard & Poor’s (S&P) 500 Index is used to benchmark the performance of large company (large cap) stocks, for example, while the Dow Jones Transportation Index is used to compare the performance of the transportation industry to that of other industries.

Industry and Company Information

An industry's media is another place to research how an industry is doing. Most industries have online trade journals and magazines that can give you an idea of industry activity, optimism, and overall health. Another source are companies that specialize in research and analysis of industry and company data, such as Hoover's (<http://www.hoovers.com>) or Value Line (<http://www.valueline.com>).

When professionals analyze a company for its investment potential, they look first at financial statements. You can access this data as well, because all publicly traded corporations must file both annual and quarterly financial reports with the U.S. Securities and Exchange Commission (SEC). Those files are then made available on the SEC's Web site (<http://www.sec.gov/edgar>) through Electronic Data Gathering and Retrieval (EDGAR), the SEC's data bank. The annual reports (10-Ks) are audited, and the quarterly reports (10-Qs) are unaudited, but both have to show the company's financial statements and report on important developments and plans or explain unusual financial results.

The 10-K and the 10-Q can give you a good sense of what and how the company has been doing or planning for the future. Similar corporate information may be found in the company's annual report, sent to shareholders and also available on the company's Web site.

An annual report is a narrative of how the company is doing. It includes financial statements, dated at least two years back so that you can see the company's progress. It also includes a discussion, presented by the company's management, of the company's strategic plans, competitive environment, industry outlook, particular risk exposures, and so on. You can get a good sense of how well positioned the company is going forward from an annual report or 10-K.

Evaluating Sources of Information

Investment information is readily available. Accessing that information is easy, but evaluating its reliability may be difficult, along with knowing how to use it. It is important to distinguish between objective news and subjective commentary. A reporter should be providing unbiased information, while a commentator is providing a subjective analysis of it. A news article ideally conveys objective facts, while an editorial or opinion provides subjective commentary. Both kinds of "news" appear in all kinds of media, such as print, radio, television, and the Internet. Most print publications have continually updated Web sites, some with streaming video, and there are financial social networks and blogs providing online discussion and observation.

As you explore the sources of financial news, you will develop a sense of which ones are the most useful to you. Figure 14.4 "Sample of Financial News Sources" lists a selection of financial news sites to explore.

Figure 14.4 Sample of Financial News Sources

Publication	Web Site URL	About
<i>The Economist</i>	http://www.economist.com	Print and online magazine with daily comprehensive world financial news and opinion
<i>The Wall Street Journal</i>	http://online.wsj.com/home-page	Print and online newspaper with daily world news relating to business and investment
<i>Barron's</i>	http://online.barrons.com/home-page	Print and online magazine with daily news relating to stock investing
<i>Bloomberg</i>	http://www.bloomberg.com/	Daily online data and commentary on companies and the financial markets
<i>Market Watch</i>	http://www.marketwatch.com/	Television, radio, print, and online news with articles about companies and comprehensive data on world financial markets
<i>Smart Money</i>	http://www.smartmoney.com/	Online financial news and advice for individual investors and small businesses
<i>Kiplinger's</i>	http://www.kiplinger.com/	Print and online personal finance information and advice for individual investors and small businesses
<i>Motley Fool</i>	http://www.fool.com/	Financial services site offering news, investment advice, and infotainment for individual investors
<i>CNN Money</i>	http://money.cnn.com/	Television, radio, mobile, and online business, financial, and personal finance news
<i>Forbes Magazine</i>	http://forbes.com	Print, online, and broadcast business news, financial news, stock market analysis, and rankings
<i>The Street</i>	http://www.thestreet.com/	Online business news and personal finance and investing advice and stock picks
<i>World Financial News Network</i>	http://www.worldfinancialnewsnetwork.com/	Online portal for collection and analysis of investment information on public companies worldwide
<i>The Suze Orman Show</i>	http://www.suzeorman.com	Online and broadcast personal financial advice

As you survey these news sources, be aware of features that might lead you to trust an online source of information. The following are some questions to help you evaluate the credibility of a Web site:[1]

1. Can the content be corroborated? (Check some of the facts.)
2. Is the site recommended by a content expert? (Look for a rating or recommendation.)
3. Is the author reputable? (Search on the author's name.)
4. Do you see the site as accurate? (Check with other sources.)
5. Was the information reviewed by peers or editors? (Read the reviews or logs.)
6. Is the author associated with a reputable organization? (Search on the organization.)
7. Is the publisher reputable? (Search on the publisher's name.)
8. Are the authors and sources identified? (Look for source citations or references.)
9. Do you see the site as current? (Check "last updated" or headline date.)

10. Do other Web sites link to this one? (Look for links.)
11. Is the site recommended by a generalist? (Ask a librarian.)
12. Is the site recommended by an independent subject area guide? (See site referrals.)
13. Does the domain include a trademark name? (Look for a trademark in the URL.)
14. Is the site's bias clear? (Read the "About." Look for a statement of purpose. Read the author's profile.)
15. Does the site have a professional look? (Look for a clean design and error-free writing.)

The more questions you can answer in the affirmative, the higher the credibility of the Web site and the more you can trust it as a source of information. The same questions can be extended to evaluate the reliability of specific online financial news sources.

KEY TAKEAWAYS

- Useful investment information analyzes the current economic, industry, and company performance.
- Leading economic indicators are used to gauge the current economic cycle and the outlook for the economy.
- Indexes are used to gauge financial market activity and as benchmarks for asset classes and industries.
- Analysis and forecasting of company performance is based on publicly reported information from SEC filings and from corporate annual reports.
- Many media provide investment information and advice for both experienced and novice individual investors, and such advice is readily available online.
- The key to finding useful information is in understanding the credibility and reliability of its source.

EXERCISES

1. What four measures are the most important indicators of the health of the economy? What are the other leading economic indicators? Go to a financial news source to find out the status of all the economic indicators at this time. Make note of your findings and the date for purposes of comparison. How does the information inform you as an investor? Discuss with classmates the implications of the economic indicators for investing. For example, read the results of the most recent Consumer Confidence Survey at <http://www.conference->

[board.org/economics/ConsumerConfidence.cfm](http://www.federalreserve.gov/boardorg/economics/ConsumerConfidence.cfm). How might these survey results inform you as an investor?

2. Read an article summarizing the index of leading economic indicators for May 2009 at <http://www.bloomberg.com/apps/news?pid=20601103&sid=aNHH IMhARc4>. How might an investor have used the reported information in making investment decisions? Survey the indexes listed in [Figure 14.2 "Examples of Security Indexes"](#). What role might each index play in choosing assets for a portfolio?
3. Visit the SEC's EDGAR site at <http://www.sec.gov/edgar.shtml>. Take the tutorial to familiarize yourself with how the site works and then click on "Search for Company Filings." Input the name of a company with publicly traded stock of interest to you. Then click on the company's most recent annual report it filed with the SEC. Read the annual report in its entirety, including parts you don't understand. Jot down your questions as you read as if you are thinking of buying shares in that company. What information encourages you in that decision? What information raises questions or concerns? Go to the company's Web site and check its online documents, news, updates, and the current status of its stock. Are you further encouraged? Why or why not? Where can you go next to get data and commentary about the company as an investment opportunity?
4. Survey the news sources listed in [Figure 14.4 "Sample of Financial News Sources"](#) and number the sites to rank them in order of their usefulness to you at this time. Record in your personal finance journal or My Notes your top five sources of financial information and why you chose them.
5. Have you ever mistaken a press release or a blog for hard news when looking for information online? Read the interviews with journalists, bloggers, and others debating the reliability and accuracy of news disseminated through the Internet at <http://www.pbs.org/wgbh/pages/frontline/newswar/tags/reliability.html>. This PBS Frontline special delves into the questions of the credibility and reliability of news information, including financial news and blogs that we access online. Commentators include Ted Koppel, Larry Kramer, Eric Schmidt, Craig Newmark, and others. Discuss with classmates the positions taken in this debate. In My Notes or your personal finance journal, write an essay expressing your own

conclusions about trusting financial information you find online and using it to make personal finance decisions.

[1] Dax R. Norman, "Web Sites You Can Trust," *American Libraries* (August 2006): 36. Also see the Librarians' Internet Index of Web Sites You Can Trust, <http://lii.org/> (accessed June 2, 2009).

14.2 Investing and Trading

LEARNING OBJECTIVES

1. Identify the important differences between types of investment agents.
2. Describe the different levels of service offered by investment agents.
3. Analyze the different fee and account structures available to investors.
4. Differentiate the types of trading orders and explain their roles in an investment strategy.

The discussion of investment so far has focused on the ideas behind your investment plan, but to be useful to you, your plan has to be implemented. You have to invest, and then, over time, trade. How do you access the capital markets? How and when do you buy, sell, or hold?

To answer these questions you need to know the types of agents who exercise trades in the financial markets; the types of services, accounts, and fees they offer; and the kinds of trading orders they execute on your behalf.

Agents: Brokers and Dealers

The markets or exchanges for stocks, bonds, commodities, or funds are membership organizations. Unless you are a member of the exchange, you cannot trade on the exchange without hiring an agent to execute trades for you. Trading essentially is buying and selling.

As you've read in Chapter 12 "Investing", a **broker** is an agent who trades on behalf of clients to fulfill client directives. A **dealer** is a firm that is trading for its own account. Many firms act as **broker-dealers**, trading on behalf of both clients and the firm's account. Many brokers, dealers, and broker-dealers are independent firms, but many are subsidiaries or operations of large investment banks, commercial banks, or investment companies.

Firms may offer different levels of brokerage services:

- **Discretionary trading** means that the broker is empowered to make investment decisions and trades on behalf of the client.
- **Advisory dealing** means that the broker provides advice and guidance to the client, but investment decisions remain with the client.
- **Execution-only** service means that the broker's only role is to execute trades per the investor's decisions.

Almost all brokerages provide online and mobile access, and most allow you to access your account information, including trading history, and to place orders and receive order confirmations online. Some discount brokers operate only online, that is, they have no retail or storefront offices at all. This allows them to lower costs and fees. Most brokerages still send out hard copies of such information as well. Some also provide research reports and tools such as calculators and data for making asset allocation decisions.

Fees

As firms offer different levels of service, their compensation or fee structures may vary. A broker is compensated for executing a trade by receiving a commission based on the volume of the security traded and its price. A discount broker may offer lower commissions on trades but may provide execution-only services.

A firm may offer all levels of service or specialize in just one. Large discount brokers such as Fidelity, Scottrade, or Charles Schwab may provide a full range of services along with execution-only services that charge lower commissions on trades. Other discount brokers and online-only brokers may charge a lower flat fee per trade, rather than a commission on the amount of the trade. Some firms charge a commission on trades and a fee for advisory or discretionary services. The fee is usually a percentage of the value of the portfolio. Some charge a flat fee for a quarterly or annual portfolio check-up and advisory services.

Both the commission-based and the fee-based compensation structures have critics. The commission-based structure results in more compensation for the broker (and more cost for you) if there are a greater number of trades. This can lead some brokers to engage in excessive trading, called **churning**—an unwarranted and unnecessary amount of trading in your account for which the broker is being compensated.

On the other hand, a fee structure based on a percentage of the value of the assets under management can reward a broker for doing nothing. If the economy expands and asset values rise, the value of the portfolio—and therefore the broker's compensation—may rise without any effort on the broker's part.

The most economical recourse for an investor is to find a broker who charges a flat fee for advisory services, independent of portfolio size, and discount fees for commissions on trading. The costs of investing and trading depend on how much trading you do and

how involved you are in the investment decisions. The more of the research and advisory work you do for yourself, the less your costs should be.

Brokerage Accounts

Two basic types of brokerage accounts are cash accounts or margin accounts. With a **cash account**, you can trade using only the cash you deposit into the account directly or as a result of previous trades, dividends, or interest payments. The cash account is the most common kind of brokerage account.

With a margin account, you may trade in amounts exceeding the cash available in the account, in effect borrowing from your broker to complete the financing of the trade. The investor is said to be “trading on margin.” The broker usually requires a minimum value for a margin account and extends credit based on the value of the cash and securities in the portfolio. If your portfolio value drops below the minimum-value threshold, perhaps because securities values have dropped, then you may be faced with a margin call. The broker calls on you to deposit more into the account.

Investors pay interest on funds borrowed on margin. As regulated by the Federal Reserve, the amount of an investment financed by debt or bought on margin is limited. The **margin requirement** is the percentage of the investment’s value that must be paid for in cash.

Custodial accounts are accounts created for minors under the federal Uniform Gifts to Minors Act (UGMA) of 1956 or the Uniform Transfers to Minors Act (UTMA) of 1986. The account is legally owned by the minor and is in his or her name, but an adult custodian must be named for the account. Otherwise, the owner of a brokerage account must be a legal adult. The account is created at a bank, brokerage firm, or mutual fund company and is managed by an adult for an underage child (as defined by the state).

Establishing a brokerage account is as easy as opening a bank account or credit card account. You will need a good credit rating, especially for a margin account, a reasonable source of income, and a minimum deposit of assets. Many brokers allow you to transfer assets from another brokerage account with minimal effort.

Brokerage Orders

You need not be an expert in the arcane language brokers use to describe trades, so long as you understand the basic types of orders you can request. Say you want to buy a hundred shares of X Corporation’s common stock. You call your broker and ask the price. The broker says that at this moment, the market is “50 bid-50.25 ask.” Stock exchanges are auction markets; that is, buyers bid what they are willing to pay and sellers ask what they’re willing to accept. If the market is “50 bid-50.25 ask,” this means that right now the consensus among buyers is that they are willing to pay \$50 per share, while sellers are willing to accept \$50.25. The “bid-ask spread” or difference is 25 cents.

If you then place a **market order** to buy a hundred shares, the order will be executed at the lowest asking price—the least that the seller is willing to accept. In other words, you will pay \$50.25 per share, the asking price, to buy the stock.

You could also place a **limit order** to buy the shares when the price is lower, say \$45 per share (or to sell when the price is higher, say \$55), specifying how long the order is in effect. If the price goes down to \$45 (or up to \$55) within the period of time, then your limit order will be filled, and otherwise it will not.

When you buy a security, you are said to have a **long position** in that security; you own it. You could close out your position by selling it. When you “go long” in a security, you are expecting its value to rise, so that you can buy it for a lower price and then sell it for a higher price.

Alternatively, you could create a **short position** in the security by borrowing it from your broker, selling it, and then buying it back and returning it to your broker at some specified point in the future. When you “short” a security, you are expecting its value to decrease, so that you can sell it at a high price and then buy it back at a lower price.

Other specialized kinds of orders include a **stop-loss order**. An order to sell a security once its price has fallen below a specified price., where you direct that the stock be sold when it reaches a certain price (below the current price) in order to limit your potential loss if the value decreases. You can use a **stop-buy order** to buy a stock at a certain price (above the current price) if you have “shorted” a security and want to limit your loss if its value rises.

If you are following a “buy-and-hold” strategy, you are establishing positions that you plan to hold for a long time. With this strategy you probably will do well to use a market order. Over the long term that you hold your position, the daily fluctuations in price won’t matter.

KEY TAKEAWAYS

- A broker trades on behalf of clients; a dealer trades for its own account, and a broker-dealer does both.
- Brokers, dealers, and broker-dealers may be independent firms or subsidiaries of investment banks, commercial banks, or investment companies.
- Firms may offer several levels of brokerage services, defining their roles as active manager, advisor, and/or traders:
 - discretionary trading,
 - advisory dealing,

- execution only.
- Brokerage fees are based on the level of service provided and may consist of
 - commissions on trading,
 - advisory fees based on portfolio value, or
 - a flat fee for management.
- Brokerage accounts may be
 - cash accounts,
 - margin accounts, or
 - custodial accounts.
- Trading orders allow you to better execute a specific trading strategy:
 - market orders,
 - limit orders,
 - stop-loss orders, or
 - stop-buy orders.

EXERCISES

1. Read the information at the following sites about choosing an investment broker or brokerage firm: <http://beginnersinvest.about.com/od/choosingabroker/a/brokeraccount.htm> and http://www.ms.money.com/mm/investing/inv_experts/brokerage_firms.htm. In My Notes or your personal finance journal, record the top ten questions about a broker or brokerage that will guide your choice. What answers will you be looking for? See how the investment industry evaluates brokers at <http://www.smartmoney.com/investing/economy/smartmoneys-annual-broker-survey-23119> and <http://www.moneybluebook.com/reviews-of-the-best-online-discount-brokers>.
2. What information (or inspiration) useful for personal finance can you get at Money Blue Book (<http://www.moneybluebook.com>)? How would you evaluate the Money Blue Book Web site as a source of financial news, information, and advice? In your opinion, how do sites such as Money Chimp (<http://www.moneychimp.com/>), Cool Investing (<http://www.coolinvesting.com/>), and Get Rich Slowly (<http://www.getrichslowly.org/blog/>) compare?

3. At the following Web sites, survey the argots, or “secret” vocabularies, that brokers use to discuss trades. From each glossary select five words relevant to you and their definitions to record in your personal finance journal or My Notes.

- Stock Trading: <http://www.mytradingsystem.net/Glossary-trading-terms.html>
- Bond Trading: <http://www.bondsonline.com/asp/trading/glossary.asp>
- Futures Trading: <http://www.webtrading.com/glossary.htm>
- Currency Trading (Foreign Exchange, or FOREX): <http://www.fxwords.com>

14.3 Ethics and Regulation

LEARNING OBJECTIVES

1. Discuss the reasons that investing behavior may be unethical.
2. Identify the key professional responsibilities of investment agents.
3. Describe practices that investment agents should pursue or avoid to fulfill their professional responsibilities.
4. Explain how investment agents are regulated.
5. Debate the role of government oversight in the securities industry.

Financial markets, perhaps more than most, seem to seduce otherwise good citizens into unethical or even illegal behavior. There are several reasons:

1. Investing is a complex, volatile, and unpredictable process, such that the complexity of the process lowers the probability of getting caught.
2. The stakes are high enough and the probability of getting caught is low enough so that the benefits can easily seem to outweigh the costs. The benefits can even blind participants to the costs of getting caught.
3. The complexity of the situation may allow some initial success, and the unethical investor or broker becomes overconfident, encouraging more unethical behavior.
4. Employers may put their employees under pressure to act in the company’s interests rather than clients’ interests.

To counteract these realities there are three forces at work: market forces, professional standards, and legal restrictions. But before these topics are discussed, it is useful to review the differences between ethical and unethical, or professional and unprofessional, behaviors in this context.

Professional Ethics

Investment intermediaries or agents such as advisors, brokers, and dealers have responsibilities to their clients, their employers, and to the markets. In carrying out these responsibilities, they should demonstrate appropriate professional conduct. Professional conduct is ethical, that is, it is based on moral principles of right and wrong as expressed in the profession's standards of conduct.

Brokers and advisors should always deal objectively and fairly with clients, putting clients' interests before their own. In other words, a broker should always give higher priority to the client's wealth than to his or her own. When acting on a client's behalf, a broker should always be aware of the trust that has been placed on him or her and act with **prudence** and care. The principle of **due diligence** stipulates, for example, that investment advisors and brokers must investigate and report to the investor every detail of a potential investment.

Kim receives an order from a client to sell shares because the client believes the stock price will drop. Kim believes the client is right and so decides to sell her own personal shares in that stock as well. She places the order to sell her shares first, so that if the price drops as she sells, her shares will be sold at a higher price. She places the order to sell the client's shares after the price has dropped. This practice of taking advantage of the client by not putting the client first is called **front-running**. According to professional ethics, Kim should be putting her client's interest—and order—ahead of her own.

Professional ethics call for brokers and advisors to disclose any potential conflicts of interest they may have. They also should be diligent and thorough when researching investments and making recommendations and should have an objective basis for their advice. Investment recommendations should be suitable for the client, and advice should be given with the best interests of the client in mind.

Shonte is a financial advisor for a large broker-dealer that has acquired a large position in a certain bond issue. It now owns a lot of bonds. Wanting to reduce the company's exposure to risk from that position, Shonte's boss suggests that whenever possible, she should advise her clients to add this bond to their portfolios. That way the company can use its clients to buy its bonds and reduce its position. This conduct is unethical, however. Shonte should not automatically recommend the bond to all her clients, because her advice should be based solely on the individual clients' interests and needs, not the company's.

An advisor or broker should

- be forthcoming about how the investment analysis was done and the changes or events could affect the outcome;
- not present himself or herself as a “guru” with a special or secret method of divining investment opportunities;

- clearly explain the logic and grounding for all judgments and advice;
- not try to pressure you into making an investment decision or use threats or scare tactics to influence you;
- communicate regularly and clearly with you about your portfolio performance and any market or economic changes that may affect its performance.

In addition to being loyal to clients, brokers and advisors are expected to be loyal to employers, the professions, and the financial markets. Accepting side deals, gifts, or “kickbacks,” for example, may damage a company’s reputation, harm colleagues as well as clients, and betray the profession. Loyalty to market integrity is shown by keeping the markets competitive and fair. For example, brokers should use only information available to all. Information from private sources to which others do not have access is **inside information**, and making trades on the basis of inside information is called **insider trading**.

For example, Jorge, a broker, just found out from a client that the company she works for is about to be granted a patent for a new product. The information has not yet been announced publicly, but it will almost certainly increase the value of the company’s stock. Jorge is tempted to buy the stock immediately, before the news breaks, both for his employer’s account and his own. He would almost surely profit and gain points with his boss as well. But that would be wrong. Trading on inside information would be disloyal to the integrity of the markets, and it is illegal.

Brokers and advisors should not manipulate markets or try to influence or distort prices to mislead market participants. Attempts to do so have become more widespread with the tremendous growth of electronic communications. For example, Tom, a dealer, has just shorted a large position in a tech stock. On his widely read blog, he announces that his “research” has revealed serious weaknesses in the tech company’s marketing strategy and rumors of competitors’ greater advantages in the market. Tom has no factual basis for his reporting, but if his “news” causes the price of the tech stock to fall, he will profit from his short position. Tom’s attempts to manipulate the market are unethical and unprofessional.

Regulation of Advisors, Brokers, and Dealers

It is often said that the financial markets are self-regulating and self-policing. Market forces may be effective in correcting or preventing unprofessional conduct, but they often don’t, so there are also professional and legal sanctions.

Sanctions provide deterrence and punishment. Registered brokers and advisors, and their firms, typically are members of professional organizations with regulatory powers. For example, professional organizations have qualifications for membership and may award credentials or accreditation that their members would not want to lose.

There are many professional designations and accreditations in the investment advising and brokerage fields (Chapter 1 "Personal Financial Planning"). However, keep in mind that no professional affiliation or designation is required to give investment advice.

The U.S. securities industry is formally regulated by federal and state governments. Government sanctions and limits have been imposed gradually, usually after a major market failure or scandal, and so form a collection of rules and laws overseen by a variety of agencies.

The Securities and Exchange Commission (SEC) is a federal government agency empowered to oversee the trading of securities and the exchanges in the capital markets. It was created in 1934 in response to the behavior that precipitated the stock market crash in 1929 and the subsequent failure of the banking system. The SEC investigates illegal activities such as trading on insider information, front-running, fraud, and market manipulation.

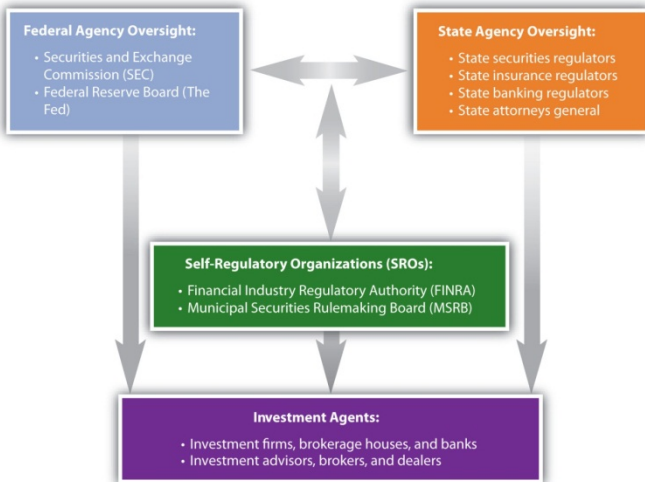
The SEC also requires information disclosures to inform the public about companies' financial performance and business strategy. Investors must report to the SEC their intention to acquire more than 5 percent of a company's shares, and business executives must report to the SEC when they buy or sell shares in their own company. The SEC then tries to minimize the use of insider information by making it publicly available.

The SEC delegates authority to **self-regulatory organizations (SROs)**, such as the National Association of Securities Dealers (NASD), and the national stock exchanges, such as the New York Stock Exchange (NYSE). NASD and the exchanges uphold industry standards and compliance requirements for trading securities and operating brokerages.

In 2007, the SEC created a new SRO that reincorporated the NASD, renamed as the Financial Industry Regulatory Authority (FINRA). FINRA's job is to focus exclusively on the enforcement of rules governing the securities industry. In addition, Congress created the Municipal Securities Rulemaking Board (MSRB) as an SRO. The MSRB's job is to create rules to protect investors involved with broker-dealers and banks that trade in tax-exempt bonds and 529 college savings plans.

Figure 14.6 "Regulatory Environment of the U.S. Securities Industry" shows the structure of the securities industry's regulatory environment.

Figure 14.6 Regulatory Environment of the U.S. Securities Industry



The Federal Reserve regulates banks and the banking system. When investment brokering and advising are services of investment or commercial banks, their actions may fall under the control of both the SEC and the Fed, as well as state banking and insurance regulators. States license investment agents. Also, each state’s attorney general is responsible for investigating securities violations in that state.

Government regulation of capital markets has long been a contentious issue in the United States. During periods of expansion and rising asset prices, there is less call for regulation and enforcement. Clients and investment agents may have fewer complaints because of investment gains and increasing earnings. When a bubble bursts or there is a true financial crisis, however, then investors demand protections and enforcement.

For example, after the stock market crash in 1929 and the widespread bank failures of 1930–1933, the Glass-Steagall Act was passed in 1933 to establish the Federal Deposit Insurance Corporation (FDIC) and take measures to reduce market speculation. A second Glass-Steagall Act, which was passed the same year and officially named the Banking Act of 1933, separated investment and commercial banking to reduce potential conflicts of interest when a bank is issuing securities for a firm that it is also lending to. In 1999, however, after years of economic expansion and at the height of the tech stock bubble, the Gramm-Leach-Bliley Act effectively repealed the Banking Act of 1933, opening the way for the consolidation of the banking industry. This consolidation led to the introduction of “one-stop-shopping” banks, which provide investment, commercial, and retail banking services all under one roof.

The financial and banking crisis that began in 2007 led to calls for increased regulation and a larger role for the federal and state governments in regulating the banking and securities industries. While history shows that the kinds of regulation and amount of government oversight vary, there clearly will always be a role for federal and state government regulators.

Investor Protection

As an investor, you have recourse if a broker or advisor has been unethical, unprofessional, or criminal in his or her conduct. If the offending agent is working for a brokerage firm or bank, a complaint to a superior is sometimes all that is needed. The firm would prefer not to risk its reputation for one “bad apple.”

If you are not satisfied, however, you can lodge a formal complaint with a professional organization such as the relevant SRO. The SROs have standard procedures in place and will investigate your complaint. If necessary, the offender will be punished by a suspension or permanent removal of his or her professional designation or certification.

You can also complain to the SEC or a state or federal consumer protection agency, file suit in civil court, or press for a criminal complaint. Due to their complexities, investment cases are often somewhat difficult to prove, so you should consult with an attorney who is experienced with such cases. Often when a broker or advisor has used illegal practices, she or he has done so with more than one client. When you are not the only victim, the state or federal prosecutor or your lawyer may choose to bring a class action suit on behalf of all the client-victims.

As always, the best defense is to take care in choosing an investment advisor or broker. Most investment agents are chosen by word of mouth, recommendations from trusted family members, friends, or colleagues who have been satisfied clients. Before you choose, check with the professional organization with which he or she claims affiliation or certification and review any records of past complaints or offenses. You can also check with government agencies such as your state’s attorney general’s office.

Your choice of advisor or broker depends largely on your expected use of services, as suggested in Figure 14.7 "Choosing an Investment Advisor or Broker".

Figure 14.7 Choosing an Investment Advisor or Broker

Your Role	Agent's Role	Type of Firm
You anticipate doing your own research and making our own investment decisions.	You want convenient access and someone to execute trades for you at a secure, accessible, and informative brokerage.	National or international firm with many branches Internet brokerage available 24/7 Brokerage account at a one-stop shopping bank
You are looking for a lot of personal guidance and investment advice.	You want an advisor to provide independent advice on investment planning and asset allocation and a separate broker who is willing to discuss research as it relates to your plan and to implement your trades. The advisor and the broker each act as a "second opinion" to the other.	A certified financial advisor A highly rated, stable brokerage firm or discount brokerage

You will be investing over a lifetime. The economic, market, and personal circumstances will change, and your plans and strategies will change, but your advisors and brokers should be able to help you learn from experience and prosper from—or despite—those changes.

KEY TAKEAWAYS

- Investing behavior may be unethical because
 - its complexity lowers the probability of getting caught,
 - the stakes are high,
 - initial success may encourage more unethical behavior,
 - companies may expect that their interests have priority.
- Investment agents have responsibilities to
 - their clients,
 - employers,
 - professions,
 - markets.

- To fulfill those responsibilities, brokers should always put the interests of clients, employers, professions, and markets before their own and so should not practice
 - front-running,
 - insider trading,
 - market manipulation.
- Regulation of investment agents comes from
 - market forces,
 - professional associations and self-regulating organizations,
 - state and federal government oversight and enforcement agencies.
- Levels of government oversight are politically contentious and subject to change.
- Through consumer protection laws, investors have recourse for losses from unprofessional or illegal behavior. The best protection is to make good choices among financial advisors and investment brokers.

EXERCISES

1. Read the Securities and Exchange Commission's explanation of what it does at <http://www.sec.gov/about/whatwedo.shtml>. In what ways is the SEC your advocate as an investor? List your answers in your personal finance journal or My Notes. Disclosure, fair dealing, and transparency are the SEC's watchwords. To what do they refer? The SEC is a complex government agency. What are its divisions? What organizations does the SEC work with? What laws does the SEC enforce? What number can you call if you have a question or complaint about your experience as an investor?
2. Go to the SEC's site on self-regulatory organizations of the securities industry at <http://www.sec.gov/rules/sro.shtml>. Click on an SRO and read the new rules it is making. Discuss with classmates how you would comment on them, as you are invited to do. Find out what is a national market system plan, a category of SROs. What do the National Market System (NMS) plans do? To see NMS plans in action, go to a Web site where you can see streaming ticker tape, such as Google Finance at <http://www.google.com/finance>. How does what you see on the streaming ticker tape relate to the regulatory environment of the world of investing?

3. Debate with classmates the desirability of government regulation of the financial markets at the federal, state, and organizational levels. What impacts do regulation and deregulation have on the economy, the markets, and you as an investor? What are some concrete examples of those impacts? Write an essay declaring and supporting your position on this issue.

14.4 Investing Internationally: Risks and Regulations

LEARNING OBJECTIVES

1. Identify the unusual risks of foreign investing compared to domestic investing.
2. Discuss the use of the Economic Freedom Index.
3. Explain the role of international investments in an investment strategy.

Investing is global. While the financial markets and the capital markets may resemble a global village, it is also true that investing in assets governed by foreign standards and regulations creates additional concerns.

Investments in foreign securities are used to diversify an investment portfolio's economic risk. The United States, most nations in Europe, and Japan have highly developed economies. Other economies may be developing, such as India and China, or may be emerging, such as Nigeria and Bolivia, and may be using different strategies to achieve different rates of growth. The world economy is truly global, however, because although different economies may be in different stages of development, they are all intimately linked through trade.

Different economies offer different kinds of opportunities because of where they are in their progress toward free-market economic diversification and stability. Along with different opportunities, however, they also offer different risks.

These risks run the gamut from the challenge of interpreting information correctly to the risk that too much or too little regulation will interfere with market forces. International investing also embodies risks relating to foreign markets, economies, currencies, and politics.

Investment Information

A general concern in international investing is the flow and quality of information. You make investment decisions by gathering and evaluating information. That information is useful to you because you know how to interpret it, because you know the standardized way in which that information was gathered and prepared.

In the United States, financial statements are prepared using Generally Accepted Accounting Principles or GAAP, the rules that frame accounting judgments. Those statements may then be audited by an independent certified public accountant (CPA) to assure that the accounting rules have been followed.

In other countries, however, accountants do not use GAAP but prepare financial statements by somewhat different rules. Some of those differences relate significantly to asset valuations, a key factor in your decision to invest. When you read financial reports written for foreign companies, therefore, you need to remain mindful that they are written under different rules and may not mean the same as financial reports following the U.S. GAAP. At the very least, you should determine whether the statements you are reading were independently audited.

Other countries also have different standards and procedures for making information available to investors. One reason that the SEC requires filings of annual and quarterly reports is to make information publicly and readily available. Other countries may not have such corporate filing requirements. Information may be harder to get, and the information that you do get may not be as complete or as uniform.

Other kinds of information are also important. A good brokerage or advisory firm will have analysts and researchers “on the ground,” tracking economic and cultural influences in foreign countries as well as corporations with promising earnings.

Market, Economic, and Currency Risks

Unless a foreign security is listed on an American exchange, you or your broker will have to purchase it through a foreign exchange. In the United States, a substantial volume of trade keeps markets liquid, except in relatively rare times of crisis. This may not be true on some foreign exchanges. In active major capital markets such as in Western Europe and Japan, there will be plenty of liquidity, but in some emerging markets, such as in Africa, there may not be. This means that your risk in holding an investment increases, because you may find it difficult to sell when you want to, just because the market is not liquid at that time.

Market risk also affects pricing. Market liquidity and the volume of trade helps the market to function more efficiently in the pricing of assets, so you are more likely to get a favorable price when trading.

Foreign investments are often used to diversify domestic investments just because foreign economies are different. They may be in different business cycles or in different stages of development. While the United States has a long-established, developed market economy, other countries may have emerging market economies with less capitalization and less experience in market-driven economic patterns.

Other economies also have different strengths and weaknesses, sources of growth and vulnerabilities. The U.S. economy is fairly well-diversified, whereas another economy

may be more dependent on fewer industries or on commodities or natural resources whose prices are volatile. Prospects for economic growth may differ based on health care and education, tax policies, and trade policies. You want to be sure that your investment is in an economy that can nurture or at least accommodate growth.

Perhaps the greatest risk in international investing is **currency risk**, risk to the value of the foreign currency. To invest overseas, you may have to use foreign currency, and you receive your return in foreign currency. When you change the foreign currency back into your own currency, differences in the values of the currencies—the exchange rate—could make your return more or less valuable.

Tim decides to invest in a French business when the exchange rate between the euro (France) and the dollar (U.S.) is €1.00 = \$1.00. So, Tim buys €1,000 of the French company's stock for \$1,000 (assuming no transaction costs for the currency exchange or for broker's fees). One year goes by and Tim decides to sell the stock. The stock is the same price, €1,000, but the exchange rate has changed. Now €1.00 = \$0.87. If Tim sells his stock, even though its value has not changed, his €1,000 will only come to \$870. Tim has incurred a loss, not because the value of the investment decreased, but because the value of his currency did.

The exchange rate between two currencies fluctuates, depending on many macroeconomic factors in each economy. At times there can be considerable volatility. Exchange rates are especially affected by inflation, especially when the spread in exchange rates between two countries is greater. When you are investing abroad, consider the time period you expect to hold your investment and the outlook for exchange rate fluctuations during that period.

Political Risks

Governments protect an economy and participate in it as both consumers and producers. The extent to which they do so is a major difference among governments and their economies.

The government's role in an economy influences its growth potential. When investing in a foreign company, you should consider the government's effect on its growth. Economic and political stability are important indicators for growth.

Because investing is long term, investors try to predict an investment's performance, and forecasting requires a stable context. The type of economy or government is less relevant than its relative stability. A country given to economic upheaval or with a history of weak governments or high government turnover is a less stable environment for investment.

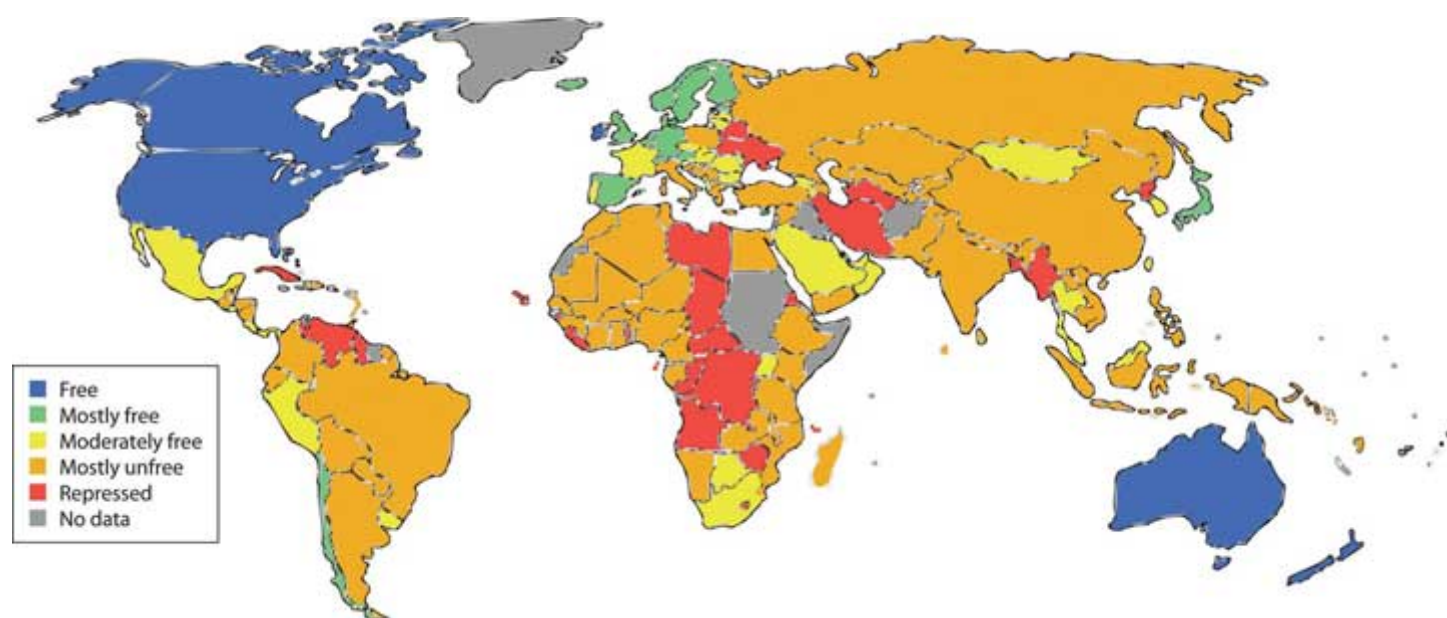
Market-based economies thrive when markets thrive, so anything the government does to support markets will foster a better environment for investing. While some market regulation is helpful, too much may work against market liquidity and thus investors. A

central bank that can encourage market liquidity and help stabilize an economy is also helpful.

In 1995 the Heritage Foundation and the *Wall Street Journal* created the Index of Economic Freedom (IEF) to try to measure a country's welcoming of investment and encouragement of economic growth. Using data from the World Bank and the International Monetary Fund (IMF), the IEF is based on ten indicators of economic freedom that measure the governments' support and constraint of individual wealth and trade.

Figure 14.9 "2009 Index of Economic Freedom" shows the Index of Economic Freedom compiled by the Heritage Foundation for 2009 (reproduced courtesy of the Heritage Foundation). The blue countries, notably the United States, Canada, and Australia, are the most "free" and the red countries (concentrated in central and sub-Saharan Africa, parts of the Middle East, and some states of the former U.S.S.R.) are the least.

Figure 14.9 2009 Index of Economic Freedom[1]



Governments can change, peacefully or violently, slowly or suddenly, and can even change their philosophies in governing, especially as they affect participation in the global economy. Fiscal, monetary, and tax policies can change as well as fundamental attitudes toward entrepreneurship, ownership, and wealth. For example, the sudden nationalization or privatization of companies or industries can increase or decrease growth, return potential, market liquidity, volatility, and even the viability of those companies or industries. Because changes in fundamental government policies will affect the economy and its markets, you should research the country to learn as much as possible about its political risks to you as an investor.

Foreign Regulatory Environments

One of the largest political risks is regulatory risk: that a government will regulate its economy too little or too much. Too little regulation would reduce the flow of information, allowing companies to keep information from investors and to trade on inside information. A lack of regulatory oversight would also allow more unethical behavior, such as front-running and conflicts of interest.

Too much regulation, on the other hand, could stifle liquidity and also increase the potential for government corruption. The more government officials oversee more rules, the more incentive there may be for bribery, favoritism, and corruption, raising transaction costs and discouraging investment participation.

In addition to a body of laws or rules, regulation also requires enforcement and judicial processes to ensure compliance with those rules. If there is little respect for the rule of law, or if the rule of law is not consistently enforced or is arbitrarily prosecuted, then there is greater investment risk. Inappropriate levels of regulation lead to increased information costs, transaction costs, and volatility.

Often, foreign investments seem promising in part because economic growth may be higher in an emerging economy, and often, they are. Such economies often have higher levels of risk, however, because of their emergent character. Before you invest, you want to be aware of the political and regulatory environment as well as the economic, market, and investment-specific risk.

KEY TAKEAWAYS

- The flow, quality, and comparability of information are concerns in international investing.
- Investing internationally may pose unusual risks compared to domestic investing, such as
 - market or liquidity risk,
 - economic risk,
 - currency risk,
 - political risk,
 - regulatory risk.
- The Index of Economic Freedom measures a country's economic environment, growth potential, and regulatory cost, which affect investment risk.
- Greater investment risks require more research to gauge their effects on an investment opportunity and the overall investing environment.

EXERCISES

1. Go to the Web site of the International Accounting Standards Board (IASB) at <http://www.iasb.org/Home.htm>. What is the IASB's mission? See <http://www.iasb.org>. What is the value of this mission for international investing today? What are the International Financial Reporting Standards (IFRS)? How could the IFRS strengthen the global economy and aid investors in the international markets? Read the 2009 Technical Summary at <http://www.iasb.org/NR/ronlyres/4CF78A7B-B237-402A-A031-709A687508A6/0/Framework.pdf>. Write a summary of the IASB's "Framework for the Preparation and Presentation of Financial Statements." If adopted by countries in which you wish to invest, how would this framework work to your advantage? Now read Investopedia's explanation of the differences between international accounting standards (IAS) and the generally accepted accounting standards (GAAP) used in the United States at <http://www.investopedia.com/ask/answers/05/iasvsgaap.asp?viewed=1>. What would be the advantage of every country having the same GAAP?
2. Use the currency converters at <http://www.xe.com/ucc> and <http://www.oanda.com/convert/classic> to sample differences between foreign currencies and the U.S. dollar. For example, how much is one euro worth compared to the U.S. dollar? On the foreign currency exchange what are the minimum bid and ask prices for euros? Did the price rise or fall compared to the previous day? Check foreign exchange rates at <http://www.x-rates.com>. Choose three currencies to compare with the American dollar (USD) and look at the tables or graphs showing the comparison history of those currencies. Which of the three currencies has been the most volatile? Which currency is presently closest to par with U.S. dollar?
3. Examine the Index of Economic Freedom at <http://www.heritage.org/Index>. What is economic freedom? In the 2009 Index, which economies are freer than the United States? Visit the World Bank at <http://www.worldbank.org> and the IMF at <http://www.imf.org/external/about.htm>. What role do these organizations play in international finance? For example, what is the World Bank doing to help increase investment opportunities in developing countries such as the Republic of Indonesia? How does the IMF seek to strengthen the international financial markets?

[1] The Heritage Foundation, “The Link between Economic Opportunity and Prosperity: The 2009 Index of Economic Freedom,” <http://www.heritage.org/index> (accessed June 2, 2009).

Chapter 15 Owning Stocks

Introduction

By 1976, computers had been around for decades. They were typically the size of a large room and just as expensive. To use one, you had to learn a programming language. On April 1, 1976, Steve Jobs, Steve Wozniak, and Ron Wayne started a company to make personal computers. On January 3, 1977, Jobs and Wozniak incorporated without Wayne, buying his 10-percent share of the company for \$800.[1]

On December 12, 1980, Apple Computer, Inc., went public; its stock sold for \$22 per share.[2]

Had you bought Apple’s stock when the company went public and held it until today, you would have earned an annual return of about 14.5 percent. To look at it another way, \$1,000 invested in Apple shares when they went public would be worth over \$50,000 today.[3]

History, as much as it is a litany of wars and rulers struggling for power, is a story of invention and innovation, broadening our understanding of how the world works and, if successful, improving the quality of our lives. Theoretical milestones have to be made practical, however, to be truly effective. The steam engine, the light bulb, the telephone—and the personal computer—had to be produced and sold to be widely used and useful.

Typically, an inventor has a great idea, then teams up with—or becomes—an entrepreneur. The entrepreneur’s job is to build a company that can make the invention a reality. The company needs to find the resources to make the product and sell it widely enough to pay for those resources and to create a profit, making the whole effort

worthwhile. No matter how great the idea is, if it can't be done profitably, it can't be done.

As an investor, you buy stocks hoping to share in corporate profits, benefiting directly from the inventive vitality of the economy and participating in economic growth. Understanding what stocks are, where they come from, what they do, and how they have value will help you decide how to include stocks in your investment portfolio and how to use them to reach your investment goals.

[1] Ronald W. Linzmayer, *Apple Confidential: The Real Story of Apple Computer, Inc.* (San Francisco: No Starch Press, 1999).

[2] FundingUniverse, "Company Histories: Apple Computer, Inc.," <http://www.fundinguniverse.com/company-histories/Apple-Computer-Inc-Company-History.html> (accessed June 9, 2009).

[3] Calculations were done by the author, assuming a split-adjusted IPO price of \$2.75 per share (http://blogs.indews.com/financial_analysis/apple_financial_analysis.php [accessed June 9, 2009]) and a current stock price of \$140 per share (June 2009).

15.1 Stocks and Stock Markets

LEARNING OBJECTIVES

1. Explain the role of stock issuance and ownership in economic growth.
2. Contrast and compare the roles of the primary and secondary stock markets.
3. Identify the steps of stock issuance.
4. Contrast and compare the important characteristics of common and preferred stock.
5. Explain the significance of American Depository Receipts for U.S. investors.

Resources have costs, so a company needs money, or capital, which is also a resource. To get that start-up capital, the company could borrow or it could offer a share of ownership, or equity, to those who chip in capital.

If the costs of debt (interest payments) are affordable, the company may choose to borrow, which limits the company's commitment to its capital contributor. When the loan matures and is paid off, the relationship is over.

If the costs of debt are too high, however, or the company is unable to borrow, it seeks equity investors willing to contribute capital in exchange for an unspecified share of the company's profits at some time in the future. In exchange for taking the risk of no exact return on their investment, equity investors get a say in how the company is run.

Stock represents those shares in the company's future and the right to a say in how the company is run. The original owners—the inventor(s) and entrepreneur(s)—choose equity investors who share their ideals and vision for the company. Usually, the first equity investors are friends, family, or colleagues, allowing the original owners freedom of management. At that point, the corporation is privately held, and the company's stock may be traded privately between owners. There may be restrictions on selling the stock, often the case for a family business, so that control stays within the family.

If successful, however, eventually the company needs more capital to grow and remain competitive. If debt is not desirable, then the company issues more equity, or stock, to raise capital. The company may seek out an **angel investor**, **venture capital firm**, or **private equity firm**. Such investors finance companies in the early stages in exchange for a large ownership and management stake in the company. Their strategy is to buy a significant stake when the company is still “private” and then realize a large gain, typically when the company goes public. The company also may seek a buyer, perhaps a competitive or complementary business.

Alternatively, the company may choose to **go public**, to sell shares of ownership to investors in the public markets. Theoretically, this means sharing control with random strangers because anyone can purchase shares traded in the stock market. It may even mean losing control of the company. Founders can be fired, as Steve Jobs was from Apple in 1985 (although he returned as CEO in 1996).

Going public requires a profound shift in the corporate structure and management. Once a company is publicly traded, it falls under the regulatory scrutiny of federal and state governments, and must regularly file financial reports and analysis. It must broaden participation on the board of directors and allow more oversight of management. Companies go public to raise large amounts of capital to expand products, operations, markets, or to improve or create competitive advantages. To raise public equity capital, companies need to sell stock, and to sell stock they need a market. That's where the stock markets come in.

Primary and Secondary Markets

The private corporation's board of directors, shareholders elected by the shareholders, must authorize the number of shares that can be issued. Since issuing shares means opening up the company to more owners, or sharing it more, only the existing owners have the authority to do so. Usually, it authorizes more shares than it intends to issue, so it has the option of issuing more as need be.

Those **authorized shares** are then issued through an **initial public offering (IPO)**. At that point the company goes public. The IPO is a **primary market** transaction, which occurs when the stock is initially sold and the proceeds go to the company issuing the stock. After that, the company is publicly traded; its stock is outstanding, or publicly available. Then, whenever the stock changes hands, it is a **secondary market**

transaction. The owner of the stock may sell shares and realize the proceeds. When most people think of “the stock market,” they are thinking of the secondary markets.

The existence of secondary markets makes the stock a liquid or tradable asset, which reduces its risk for both the issuing company and the investor buying it. The investor is giving up capital in exchange for a share of the company’s profit, with the risk that there will be no profit or not enough to compensate for the opportunity cost of sacrificing the capital. The secondary markets reduce that risk to the shareholder because the stock can be resold, allowing the shareholder to recover at least some of the invested capital and to make new choices with it.

Meanwhile, the company issuing the stock must pay the investor for assuming some of its risk. The less that risk is, because of the liquidity provided by the secondary markets, the less the company has to pay. The secondary markets decrease the company’s cost of equity capital.

A company hires an investment bank to manage its initial public offering of stock. For efficiency, the bank usually sells the IPO stock to institutional investors. Usually, the original owners of the corporation keep large amounts of stock as well.

What does this mean for individual investors? Some investors believe that after an initial public offering of stock, the share price will rise because the investment bank will have initially underpriced the stock in order to sell it. This is not always the case, however. Share price is typically more volatile after an initial public offering than it is after the shares have been outstanding for a while. The longer the company has been public, the more information is known about the company, and the more predictable its earnings are and thus share price.[1]

When a company goes public, it may issue a relatively small number of shares. Its **market capitalization**—the total dollar value of its outstanding shares—may therefore be small. The number of individual shareholders, mostly institutional investors and the original owners, also may be small. As a result, the shares may be “thinly traded,” traded infrequently or in small amounts.

Thinly traded shares may add to the volatility of the share price. One large shareholder deciding to sell could cause a decrease in the stock price, for example, whereas for a company with many shares and shareholders, the actions of any one shareholder would not be significant. As always, diversification—in this case of shareholders—decreases risk. Thinly traded shares are less liquid and more risky than shares that trade more frequently.

Common, Preferred, and Foreign Stocks

A company may issue **common stock** or **preferred stock**. Common stock is more prevalent. All companies issue common stock, whereas not all issue preferred stock. The

differences between common and preferred have to do with the investor's voting rights, risk, and dividends.

Common stock allows each shareholder voting rights—one vote for each share owned. The more shares you own, the more you can influence the company's management. Shareholders vote for the company's directors, who provide policy guidance for and hire the management team that directly operates the corporation. After several corporate scandals in the early twenty-first century, some shareholders have become more active in their voting role.

Common stockholders assume the most risk of any corporate investor. If the company encounters financial distress, its first responsibility is to satisfy creditors, then the preferred shareholders, and then the common shareholders. Thus, common stocks provide only residual claims on the value of the company. In the event of bankruptcy, in other words, common shareholders get only the residue—whatever is left after all other claimants have been compensated.

Common shareholders share the company's profit after interest has been paid to creditors and a specified share of the profit has been paid to preferred shareholders. Common shareholders may receive all or part of the profit in cash—the dividend. The company is under no obligation to pay common stock dividends, however. The management may decide that the profit is better used to expand the company, to invest in new products or technologies, or to grow by acquiring a competitor. As a result, the company may pay a cash dividend only in certain years or not at all.

Shareholders investing in preferred stock, on the other hand, give up voting rights but get less risk and more dividends. Preferred stock typically does not convey voting rights to the shareholder. It is often distributed to the “friends and family” of the original founders when the company goes public, allowing them to share in the company's profits without having a say in its management. As noted above, preferred shareholders have a superior claim on the company's assets in the event of bankruptcy. They get their original investment back before common shareholders but after creditors.

Preferred dividends are more of an obligation than common dividends. Most preferred shares are issued with a fixed dividend as **cumulative preferred shares**. This means that if the company does not create enough profit to pay its preferred dividends, those dividends ultimately must be paid before any common stock dividend.

For the individual investor, preferred stock may have two additional advantages over common stock:

1. Less volatile prices
2. More reliable dividends

As the company goes through its ups and downs, the preferred stock price will fluctuate less than the common stock price. If the company does poorly, preferred stockholders are more likely to be able to recoup more of their original investment than common

shareholders because of their superior claim. If the company does well, however, preferred stockholders are less likely to share more in its success because their dividend is fixed. Preferred shareholders thus are exposed to less risk, protected by their superior claim and fixed dividend. The preferred stock price reflects less of the company's volatility.

Because the preferred dividend is more of an obligation than the common dividend, it provides more predictable dividend income for shareholders. This makes the preferred stock less risky and attractive to an investor looking for less volatility and more regular dividend income.

Figure 15.3 "Stock Comparisons" summarizes the differences between common stock and preferred stock.

Figure 15.3 Stock Comparisons

Common versus Preferred Stock	Common Stock	Preferred Stock
Voting Rights	Yes	Usually not
Downside Risk	More	Less
Upside Risk	More	Less or None
Reliability of Investment Income	Less	More
Price Volatility	More	Less

As an investment choice, preferred stock is more comparable to bonds than to common stock. Bonds also offer less volatility and more reliable income than common stock (see Chapter 16 "Owning Bonds"). If there is a difference in the tax rate between dividend income (from preferred stock) and interest income (from bonds), you may find a tax advantage to investing in preferred stock instead of bonds.

Corporations often issue and trade their stocks on exchanges or in markets outside their home country, especially if the foreign market has more liquidity and will attract more buyers. Many foreign corporations issue and trade stock on the New York Stock Exchange (NYSE) or on the National Association of Securities Dealers Automated Quotations (NASDAQ), for example.

Investing in foreign shares is complicated by the fact that stock represents ownership, a legal as well as an economic idea, and because foreign companies operate in foreign currencies. To get around those issues and make foreign shares more tradable, the **American Depositary Receipt (ADR)** was created in 1927. U.S. banks buy large amounts of shares in a foreign company and then sell ADRs (each representing a

specified number of those shares) to U.S. investors. Individual shares of the stock are called American Depository Shares, or ADSs.

The ADR is usually listed on a major U.S. stock exchange, such as the New York Stock Exchange, or is quoted on the NASDAQ. One ADR can represent more or less than one share of the foreign stock, depending on its price and the currency exchange rate, so that the bank issuing the ADR can “price” it according to the norms of U.S. stock markets.

ADRs lower transaction costs for U.S. investors investing in foreign corporations. Because they are denominated in U.S. dollars, they lower exchange rate or currency risk for U.S. investors. They also lower your usual risks with investing overseas, such as lack of information and too much or too little regulatory oversight.

In return for marketing their shares in the lucrative U.S. market, foreign companies must provide U.S. banks with detailed financial reports. This puts available foreign corporate information on par with that of U.S. companies. Because they are issued and sold in the United States on U.S. exchanges, ADRs fall under the regulatory control of the Securities and Exchange Commission (SEC) and other federal and state regulatory agencies, which also lowers your risk.

KEY TAKEAWAYS

- Companies go public to raise capital to finance growth by selling equity shares in the public markets.
 - A primary market transaction happens between the original issuer and buyer.
 - Secondary market transactions are between all subsequent sellers and buyers.
 - The secondary market lowers risk and transaction costs by increasing liquidity.
 - Shares are authorized and issued and then become outstanding or publicly available.
- Equity securities may be common or preferred stock, differing by
 - the assignment of voting rights,
 - dividend obligations,
 - claims in case of bankruptcy,
 - risk.
 - Common stocks have less predictable income, whereas most preferred stocks have fixed-rate cumulative dividends.
 - ADRs represent foreign shares traded in U.S. markets, lowering risks, such as currency risks, and transaction costs for U.S. investors.

EXERCISES

1. See the video “Woz-Bing!” of Steve Wozniak, cofounder of Apple, Inc., (along with Steve Jobs and Ron Wayne) at [http://finance.yahoo.com/tech-ticker/article/255750/Woz-Bing!-Apple-Co-Founder-a- %22Big-Fan%22-of-Microsofts-New-Search-Engine](http://finance.yahoo.com/tech-ticker/article/255750/Woz-Bing!-Apple-Co-Founder-a-%22Big-Fan%22-of-Microsofts-New-Search-Engine). In this Yahoo! video Wozniak talks about Bing, a new search engine launched in 2009 as Microsoft’s answer to Google. How does the discussion of this new technology relate to understanding the role of stock investing in an economy? What factors would you consider when deciding which investments in new technology to include in your stock portfolio? Record your thoughts in My Notes or your personal finance journal.
2. What is a venture capitalist? Watch noted venture capitalist (or VC) and entrepreneur Guy Kawasaki at http://www.youtube.com/watch?v=1etQC2-Vg_s. What three top pieces of advice does he give to new ventures seeking equity investment? According to http://www.investorwords.com/212/angel_investor.html, what is an angel investor?
3. Explore Hoover’s at <http://www.hoovers.com/global/ipoc/>. What information about IPOs can be found there? Click on a recently listed IPO. Read about the company and click on its stock ticker symbol. What was the price per share when the company was first listed on the stock exchange? How many shares were sold? What is its price today? Where did the proceeds from the IPO sale of shares go, and where will the proceeds from sales on the secondary markets go?

[1] M. B. Lowery, M. S. Officer, and G. W. Schwert, “The Variability of IPO Initial Returns,” *Journal of Finance*, <http://schwert.ssb.rochester.edu/ipovolatility.htm> (accessed June 9, 2009).

15.2 Stock Value

LEARNING OBJECTIVES

1. Explain the basis of stock value.
2. Identify the factors that affect earnings expectations.
3. Analyze how market capitalization affects stock value.
4. Discuss how market popularity or perception of value affects stock value.

5. Explain how stocks can be characterized by their expected performance relative to the market.

The value of a stock is in its ability to create a return, to create income or a gain in value for the investor. With common stock, the income is in the form of a dividend, which the company is not obligated to pay. The potential gain is determined by estimations of the future value of the stock.

If you knew that the future value would likely be more than the current market price—over your transaction costs, tax consequences, and opportunity cost—then you would buy the stock.

If you thought the future value would be less, you would short the stock (borrow it to sell with the intent of buying it back when its price falls), or you would just look for another investment.

Every investor wants to know what a stock will be worth, which is why so many stock analysts spend so much time estimating future value. Equity analysis is the process of gathering as much information as possible and making the most educated guesses.

Corporations exist to make profit for the owners. The better a corporation is at doing that, the more valuable it is, and the more valuable are its shares. A company also needs to increase earnings, or grow, because the global economy is competitive. A corporation's future value depends on its ability to create and grow earnings.

That ability depends on many factors. Some factors are company-specific, some are specific to the industry or sector, and some are macroeconomic forces. Chapter 12 "Investing" discussed these factors in terms of the risk that a stock creates for the investor. The risk is that the company will not be able to earn the expected profit.

A company's size is an indicator of its earnings and growth potential. Size may correlate with age. A large company typically is more mature than a smaller one, for example. A larger company may have achieved economies of scale or may have gotten large by eliminating competitors or dominating its market. Size in itself is not an indicator of success, but similarly sized companies tend to have similar earnings growth. [1]

Companies are usually referred to by the size of their market capitalization or market cap, that is, the current market value of the debt and equity they use to finance their assets. Common market cap categories are the sizes micro, small, mid (medium), and large, or

- micro cap, with a market capitalization of less than \$300 million;
- small cap, with a market capitalization between \$300 million and \$2 billion;
- mid cap, with a market capitalization between \$2 billion and \$10 billion;
- large cap, with a market capitalization of more than \$10 billion.

The market capitalization of a company—along with industry and economic indicators—is a valuable indicator of earnings potential.

The economist John Maynard Keynes (1883–1946) famously compared the securities markets with a newspaper beauty contest. You “won” not because you could pick the prettiest contestant, but because you could pick the contestant that everyone else would pick as the prettiest contestant. In other words, the stock market is a popularity contest, but the “best” stock was not necessarily the most popular.

Keynes described investing in the stock market as follows:

“The smart player recognizes that personal criteria of beauty are irrelevant in determining the contest winner. A better strategy is to select those faces the other players are likely to fancy. This logic tends to snowball. After all, the other participants are likely to play the game with at least as keen a perception. Thus, the optimal strategy is not to pick those faces the player thinks are prettiest, or those the other players are likely to fancy, but rather to predict what the average opinion is likely to be about what the average opinion will be.”[2]

In the stock market, the forces of supply and demand determine stock prices. The more demand or popularity there is for a company’s stock, the higher its price will go (unless the company issues more shares). A stock is popular, and thus in greater demand, if it is thought to be more valuable—that is, if it has more earnings and growth potential.

Sometimes a company is under- or overpriced relative to the going price for similar companies. If the market recognizes the “error,” the stock price should rise or fall as it “corrects” itself.

A **growth stock** is a stock that promises a higher rate of return because the market has underestimated its growth potential. A **value stock** is a stock that has been underpriced for some other reason. For example, investors may be wary of the outlook for its industry. Because it is underpriced, a value stock is expected to provide a higher-than-average return.

Stocks may be characterized by the role that they play in a diversified portfolio—and some by their colorful names—as shown in Table 15.1 "Definitions of Stocks and their Roles in a Portfolio".

Table 15.1 Definitions of Stocks and their Roles in a Portfolio

	Definition	Role
Growth stock	Underestimated potential for growth.	Expect a higher rate of return.
Value stock	Undervalued by	Expect a higher-than-

	Definition	Role
	the market; underpriced.	average return.
Defensive stock	Less volatility than the overall market and less sensitive to market changes.	Expect the value to fall less than the market's during a market decline.
Cyclical stock	More volatility than the overall market and more sensitive to market changes.	When the market rises, expect the price to rise at a higher rate. When the market falls, expect the price to fall at a higher rate.
Speculative stock	Overvalued by the market; overpriced.	Expect the price to continue rising for a time before it falls.
Blue chip stock	Stock of a stable, well-established, large cap company.	Expect stable returns.
Widow-and-orphan stock	A blue chip defensive stock.	Expect a steady dividend.
Wallflower stock	Overlooked and therefore underpriced.	Expect the value to rise when the stock is "discovered."
Penny stock	Low-priced stock of a small or micro cap company.	Expect the value to rise if and when the company succeeds.

Each term in Table 15.1 "Definitions of Stocks and their Roles in a Portfolio" names a stock's relationship to the market and to investors. For example, an investor who wants to invest in stocks but wants to minimize economic risk would include defensive stocks such as Boeing (a large military contractor) in the stock portfolio along with some blue chips, such as Coca Cola or Proctor and Gamble. Implicit is its potential for price growth, risk, or role in a diversified portfolio.

KEY TAKEAWAYS

- A stock's value is based on the corporation's ability to create and grow profits.
- Earnings expectations are based on economic, industry, and company-specific factors.
- The size of the market capitalization affects stock value.

- A stock’s market popularity or perception of value affects its value.
- Stocks can be characterized by their expected behavior relative to the market as
 - growth stocks,
 - value stocks,
 - cyclical stocks,
 - defensive stocks, or
 - other named types (e.g., blue chip stocks, penny stocks).

EXERCISES

1. Compare and contrast equity investment opportunities in relation to market capitalization. Start by reading *Forbes Magazine’s* article on the “Best 100 Mid-Cap Stocks in America” at http://www.forbes.com/2007/09/25/best-midcap-stocks-07midcaps-cx_bz_0925midcap_land.html. Click on one or more of the “top 10” and read about those companies. According to *Forbes*, what is the advantage of investing in mid cap stocks? Now go to the Securities and Exchange Commission’s (SEC) page on micro cap stocks, also known as penny stocks, at <http://www.sec.gov/investor/pubs/microcapstock.htm>. How are micro cap stocks traded? Why might investors be attracted to micro cap stocks? According to the government, what are four reasons that investors should be wary of micro caps? What is a “pump and dump” scheme?
2. Find and list examples of defensive and cyclical stocks online. Start at <http://www.bionomicfuel.com/stock-sector-classifications-defensive-vs-cyclical/>. What is a sector? What are the eleven sectors and which of them are regarded as defensive? As an investor when might you consider defensive stocks over cyclical stocks? Choose a sector that interests you and read about small cap, mid cap, and large cap companies in that sector. What are their stock prices? What do their recent price histories tell you about their perceived value in the stock market? Write your observations in My Notes or your personal finance journal and share your observations with classmates.

[1] E. F. Fama and K. R. French, “The Cross-section of Expected Stock Returns,” *Journal of Finance* 47 (1992): 427–86.

[2] Burton G. Malkiel, *A Random Walk Down Wall Street* (New York: W. W. Norton & Company, Inc., 2007).

15.3 Common Measures of Value

LEARNING OBJECTIVES

1. Identify common return ratios and evaluate their usefulness.
2. Explain how to interpret dividend yield.
3. Explain the significance of growth ratios.
4. Explain the significance of market value ratios.

A corporation creates a return for investors by creating earnings. Those earnings may be paid out in cash as a dividend or retained as capital by the company. A company's ability to create earnings is watched closely by investors because the company's earnings are the investor's return.

A company's earnings potential can be tracked and measured, and several measurements are expressed as ratios. Mathematically, as discussed in Chapter 3 "Financial Statements", a ratio is simply a fraction. In investment analysis, a ratio provides a clear means of comparing values. Three kinds of ratios important to investors are return ratios, growth ratios, and market value ratios.

The ratios described here are commonly presented in news outlets and Web sites where stocks are discussed (e.g., <http://www.nasdaq.com>), so chances are you won't have to calculate them yourself. Nevertheless, it is important to understand what they mean and how to use them in your investment thinking.

Return Ratios

One of the most useful ratios in looking at stocks is the earnings per share (EPS) The dollar value of the earnings per each share of common stock. ratio. It calculates the company's earnings, the portion of a company's profit allocated to each outstanding share of common stock. The calculation lets you see how much you benefit from holding each share. Here is the formula for calculating EPS:

EPS = (net income – preferred stock dividends) ÷ average number of common shares outstanding

The company's earnings are reported on its income statement as net income, so a shareholder could easily track earnings growth. However, EPS allows you to make a

direct comparison to other stocks by putting the earnings on a per-share basis, creating a common denominator. Earnings per share should be compared over time and also compared to the EPS of other companies.

When a stock pays a dividend, that dividend is income for the shareholder. Investors concerned with the cash flows provided by an equity investment look at **dividends per share** or **DPS** as a measure of the company's ability and willingness to pay a dividend.

$DPS = \text{common stock dividends} \div \text{average number of common shares outstanding}$

Another measure of the stock's usefulness in providing dividends is the **dividend yield**, which calculates the dividend as a percentage of the stock price. It is a measure of the dividend's role as a return on investment: for every dollar invested in the stock, how much is returned as a dividend, or actual cash payback? An investor concerned about cash flow returns can compare companies' dividend yields.

$\text{dividend yield} = \text{dividend per share (in dollars)} \div \text{price per share (in dollars)}$

For example, Microsoft, Inc., has a share price of around \$24, pays an annual dividend of \$4.68 billion, and has about nine billion shares outstanding; for the past year, it shows earnings of \$15.3 billion. [1]

Assuming it has not issued preferred stock and so pays no preferred stock dividends,
 $EPS = 15.3 \text{ billion} / 9 \text{ billion} = \1.70
 $DPS = 4.68 \text{ billion} / 9 \text{ billion} = \0.52
 $\text{dividend yield} = 0.52 / 24 = 2.1667\%$

Microsoft earned \$15.3 billion, or \$1.70 for each share of stock held by stockholders, from which \$0.52 is actually paid out to shareholders. So if you buy a share of Microsoft by investing \$24, the cash return provided to you by the company's dividend is 2.1667 percent.

Earnings are either paid out as dividends or are retained by the company as capital. That capital is used by the company to finance operations, capital investments such as new assets for expansion and growth or repayment of debt.

The dividend is the return on investment that comes as cash while you own the stock. Some investors see the dividend as a more valuable form of return than the earnings that are retained as capital by the company. It is more liquid, since it comes in cash and comes sooner than the gain that may be realized when the stock is sold (more valuable because time affects value). It is the "bird in the hand," perhaps less risky than waiting for the eventual gain from the company's **retained earnings**.

Some investors see a high dividend as a sign of the company's strength, indicative of its ability to raise ample capital through earnings. Dividends are a sign that the company can earn more capital than it needs to finance operations, make capital investments, or

repay debt. Thus, dividends are capital that can be spared from use by the company and given back to investors.

Other investors see a high dividend as a sign of weakness, indicative of a company that cannot grow because it is not putting enough capital into expansion and growth or into satisfying creditors. This may be because it is a mature company operating in saturated markets, a company stifled by competition, or a company without the creative resources to explore new ventures.

As an investor, you need to look at dividends in the context of the company and your own income needs.

Growth Ratios

The more earnings are paid out to shareholders as dividends, the less earnings are retained by the company as capital.

earnings = dividends + capital retained

Since retained capital finances growth, the more earnings are used to pay dividends, the less earnings are used to create growth. Two ratios that measure a company's choice in handling its earnings are the dividend payout rate and the retention rate. The **dividend payout rate** compares dividends to earnings. The **retention rate** compares the amount of capital retained to earnings.

The dividend payout rate figures the dividend as a percentage of earnings.

dividend payout rate = dividends ÷ earnings

The retention rate figures the retained capital as a percentage of earnings.

retention rate = capital retained ÷ earnings

Because earnings = dividends + capital retained, then

100% of earnings = dividend payout + retention rate.

If a company's dividend payout rate is 40 percent, then its retention rate is 60 percent; if it pays out 40 percent of its earnings in dividends, then it retains 60 percent of them.

Since Microsoft has earnings of \$15.3 billion and dividends of \$4.68 billion, it must retain \$10.62 billion of its earnings. So, for Microsoft,

dividend payout rate = 4.68 billion/15.3 billion = 30.59% retention rate = 10.62 billion/15.3 billion = 69.41%.

There is no benchmark dividend payout or retention ratio for every company; they vary depending on the age and size of the company, industry, and economic climate. These numbers are useful, however, to get a sense of the company's strategy and to compare it to competitors.

A company's value is in its ability to grow and to increase earnings. The rate at which it can retain capital, earn it and not pay it out as dividends, is a factor in determining how fast it can grow. This rate is measured by the **internal growth rate** and the sustainable growth rate. The internal growth rate answers the question, "How fast could the company grow (increase earnings) without any new capital, without borrowing or issuing more stock?" Given how good the company is at taking capital and turning it into assets and using those assets to create earnings, the internal growth rate looks at how fast the company can grow without any new borrowing or new shares issued.

The **sustainable growth** rate answers the question, "How fast could the company grow without changing the balance between using debt and using equity for capital?" Given how good the company is at taking capital and turning it into assets and using those assets to create earnings, the sustainable growth rate looks at how fast the company can grow if it uses some new borrowing, but keeps the balance between debt and equity capital stable.

Both growth rates use the retention rate as a factor in allowing growth. The fastest rate of growth could be achieved by having a 100 percent retention rate, that is, by paying no dividends and retaining all earnings as capital.

An investor who is not using stocks as a source of income but for their potential gain may look for higher growth rates (evidenced by a higher retention rate and a lower dividend payout rate). An investor looking for income from stocks would instead be attracted to companies offering a higher dividend payout rate and a lower retention rate (despite lower growth rates).

Market Value Ratios

While return and growth ratios are measures of a company's fundamental value, and therefore the value of its stocks, the actual stock price is affected by the market. Investors' demand can result in underpricing or overpricing of a stock, depending on its attractiveness in relation to other investment choices or opportunity cost.

A stock's market value can be compared with that of other stocks. The most common measure for doing so is the **price-to-earnings ratio**, or P/E. Price-to-earnings ratio is calculated by dividing the price per share (in dollars) by the earnings per share (in dollars). The result shows the investment needed for every dollar of return that the stock creates.

$P/E = \text{price per share} \div \text{earnings per share}$

For Microsoft, for example, the price per share is around \$24, and the EPS is \$1.70, so the $P/E = 24.00/1.70 = \$14.12$. This means that the price per share is around fourteen times bigger than the earnings per share.

The larger the P/E ratio, the more expensive the stock is and the more you have to invest to get one dollar's worth of earnings in return. To get \$1.00 of Microsoft's earnings, you have to invest around \$14. By comparing the P/E ratio of different companies, you can see how expensive they are relative to each other.

A low P/E ratio could be a sign of weakness. Perhaps the company has problems that make it riskier going forward, even if it has earnings now, so the future expectations and thus the price of the stock is now low. Or it could be a sign of a buying opportunity for a stock that is currently underpriced.

A high P/E ratio could be a sign of a company with great prospects for growth and so a higher price than would be indicated by its earnings alone. On the other hand, a high P/E could indicate a stock that is overpriced and has nowhere to go but down. In that case, a high P/E ratio would be a signal to sell your stock.

How do you know if the P/E ratio is "high" or "low"? You can compare it to other companies in the same industry or to the average P/E ratio for a stock index of similar type companies based on company size, age, debt levels, and so on. As with any of the ratios discussed here, this one is useful in comparison.

Another indicator of market value is the **price-to-book ratio (P/B)**. Price-to-book ratio compares the price per share to the book value of each share. The **book value** is the value of the company that is reported "on the books," or the company's balance sheet, using the intrinsic or original values of assets, liabilities, and equity. The balance sheet does not show the market value of the company's assets, for example, not what they could be sold for today; it shows what they were worth when the company acquired them. The book value of a company should be less than its market value, which should have appreciated over time. The company should be worth more as times goes on.

$P/B = \text{price per share} \div \text{book value of equity per share}$

Since the price per share is the market value of equity per share, the P/B ratio compares the current market value of the company's equity to its book value. If that ratio is greater than one, then the company's equity is worth more than its original value, and the company has been increasing its value. If that ratio is less than one, then the company's current value is less than its original value, so the value has been decreasing. A P/B of one would indicate that a company has just been breaking even in terms of value over the years.

The higher the P/B ratio, the better the company has done in increasing its value over time. You can calculate the ratio for different companies and compare them by their ability to increase value.

Figure 15.5 "Ratios and Their Uses" provides a summary of the return, growth, and market value ratios.

Figure 15.5 Ratios and Their Uses

Ratio	What It Measures
Earnings per Share (EPS)	Earnings (in dollars) for every outstanding share of stock
Dividends per Share (DPS)	Dividend (in dollars) for every outstanding share of stock
Dividend Yield	Dividend (in dollars) returned for every dollar invested in the stock
Dividend Payout	Percentage of earnings paid out as dividends
Retention Rate	Percentage of earnings retained as capital
Internal Growth Rate	The fastest rate of growth without using more debt or issuing more equity
Sustainable Growth Rate	The fastest rate of growth using more debt but without changing the balance of debt and equity
Price-to-Earnings Ratio (P/E)	The market value of each dollar's worth of earnings
Price-to-Book Ratio (P/B)	The market value of the company's equity compared to its book value

Ratios can be used to compare a company with its past performance, with its competitors, or with competitive investments. They can be used to project a stock's future value based on the company's ability to earn, grow, and be a popular investment. A company has to have fundamental value to be an investment choice, but it also has to have market value to have its fundamental value appreciated in the market and to have its price reflect its fundamental value.

To go back to Keynes's analogy: it may take beauty to win a beauty contest, but beauty has to shine through to be appreciated by a majority of the judges. And beauty, as you know, is in the eye of the beholder.

KEY TAKEAWAYS

- Earnings per share (EPS) and dividends per share (DPS) indicate stock returns on investment.
- Dividend yield measures a shareholder's cash return relative to investment.

- Growth ratios such as the internal and sustainable growth rates indicate the company's ability to grow given earnings and dividend expectations.
- Market value ratios, most commonly price-to-earnings and price-to-book, indicate a stock's market popularity and its effects on its price.

EXERCISES

1. What do companies' EPS tell an investor? Study examples of the return, growth, and market value ratios, included among other business ratios at <http://www.investopedia.com/university/ratios/eps.asp>. Look at the raw data as well as the interpretation to grasp how the information could inform an investment decision. For example, as an investor, would you find the earnings-per-share ratio of Cory's Tequila Co. encouraging or discouraging? Click "Next" on each page of the Investopedia site to get to each ratio analysis. For example, as an investor, what would you make of the Cory's Tequila Co.'s price-to-earnings ratio?
2. Find sample calculations online of the other ratios discussed in this chapter. For example, study the example of calculating a company's dividend payout ratio and retained earnings at http://www.accountingformanagement.com/dividend_payout_ratio.htm. As an investor, what might you conclude about the desirability of this company's stock? Suppose a company has a dividend per share ratio of \$1.60, based on an original value of \$8 per share, and a dividend yield ratio of 6.4 percent, based on a market value of \$25 per share. As an investor, what does this information tell you?

[1] NASDAQ, <http://quotes.nasdaq.com/asp/SummaryQuote.asp?symbol=MSFT&selected=MSFT> (accessed July 29, 2009).

15.4 Equity Strategies

LEARNING OBJECTIVES

1. Identify and explain the rationales behind common long-term strategies.
2. Identify and explain the rationales behind common short-term strategies.

The best stock strategy is to know what you are looking for (i.e., what kind of stock will fulfill the role you want it to play in your portfolio) and to do the analyses you need to find it. That is easier said than done, however, and requires that you have the knowledge, skill, and data for stock analysis. Commonly used general stock strategies may be long term (returns achieved in more than one year) or short term (returns achieved in less than one year), but the strategies you choose should fit your investing horizon, risk tolerance, and needs. An important part of that strategy, as with financial planning in general, is to check your stock investments and reevaluate your holdings regularly. How regularly depends on to long- or short-term horizon of your investing strategies.

Long-Term Strategies

Long-term strategies favor choosing a long-term approach to avoid the volatility and risk of market timing. For individual investors, a **buy-and-hold strategy** can be effective over the long run. The strategy is just what it sounds like: you choose the stocks for your equity investments, and you hold them for the long term. The idea is that if you choose wisely and your stocks are well diversified, over time you will do at least as well as the stock market itself. Though it suffers through economic cycles, the economy's long-term trend is growth.

By minimizing the number of transactions, you can minimize transaction costs. Since you are holding your stocks, you are not realizing gains and are not paying gains tax. Thus, even if your gross returns are not spectacular, you are minimizing your costs and maximizing net returns. This strategy is optimal for investors with a long horizon, low risk tolerance, and little need for liquidity in the short term.

Another long-term strategy is **dollar-cost averaging**. The idea of dollar-cost averaging is that you invest in a stock gradually by buying the same dollar amount of the same stock at regular intervals. This is a way of negating the effects of market timing. By buying at regular intervals, you will buy at times when the price is low and when it is high, but over time your price will average out. Dollar-cost averaging is a way of avoiding a stock's price volatility because the net effect is that you buy the stock at its average price.

An investor uses dollar-cost averaging when regular payroll deductions are made to fund defined contribution retirement plans, such as a 401(k) or a 403b. The same amount is contributed to the plan in regular intervals and is typically used to purchase the same set of specified assets.

A buy-and-hold or dollar-cost averaging strategy only makes sense over time because both assume a long time horizon in order to "average out" volatility, making them better than other investment choices. If you have a long-term horizon, as with a retirement plan, those strategies can be quite effective. However, as the most recent decade has shown, market or economic cycles can be long too, so you need to think about whether

your “long-term” horizon is likely to outlast or be outlasted by the market’s cycle, especially as you near your investment goals.

Direct investment and dividend reinvestment are ways of buying shares directly from a company without going through a broker. This allows you to avoid brokerage commissions. **Direct investment** means purchasing shares from the company, while **dividend reinvestment** means having your dividends automatically invested in more shares (rather than being sent to you as cash). Dividend reinvestment is also a way of building up your equity in the stock by reinvesting cash that you might otherwise spend.

The advantage of direct investment and dividend reinvestment is primarily the savings on brokers’ commissions. You can also buy fractional shares or less than a whole share, and there is no minimum amount to invest, as there can be with brokerage transactions. The disadvantage is that by having funds automatically reinvested, you are not actively deciding how they should be invested and thus may be missing better opportunities.

Indexing is a passive long-term investment strategy to invest in index funds as a diversified asset rather than select stocks. Instead of choosing individual large cap companies, for example, you could invest in Standard & Poor’s (S&P) 500 Index fund, which would provide more diversification for only one transaction cost than you could get picking individual securities. The disadvantage to indexing is that you do not enjoy the potential of individual stocks producing above-average returns.

Figure 15.7 "Long-Term Stock Strategies" summarizes long-term stock strategies.

Figure 15.7 Long-Term Stock Strategies

Strategy	Avoids Market Timing	Avoids Stock Selection	Lowers Transaction Costs	Schedules Investment (Savings)
Buy and Hold	✓		✓	
Dollar Cost Averaging	✓		✓	✓
Direct Investment			✓	
Dividend Reinvestment	✓		✓	✓
Indexing		✓	✓	

Short-Term Strategies

Short-term stock strategies rely on taking advantage of market timing to earn above-average returns. Some advisors believe that the stock market fluctuates between favoring value stocks and favoring growth stocks. That is, the market will go through cycles when value stocks that are temporarily underpriced will outperform stocks of companies poised for higher growth, and vice versa. If true, you would want to weight

your portfolio with growth stocks when they are favored and with value stocks when they are favored.

This value-growth weighting strategy relies on market timing, which is difficult for the individual investor. It also relies on correctly identifying growth and value stocks and market trends in their favor, complicating the process of market timing even further.

Day trading is a very short-term strategy of taking and closing a position in a day or two. Literally, it means buying in the morning and selling in the afternoon. Day trading became popular in the 1990s when stock prices were riding the tide of the tech stock bubble. At that time it was possible to hold a stock for just a few hours and earn a gain. Technology, especially the Internet, also made real-time quotes and other market data available to individual investors at a reasonable cost. At the same time, Internet and discount brokers drove down the costs of trading.

Day trading declined, but did not die, after the tech bubble burst. It turns out that in a bubble, any strategy can make money, but when market volatility is more closely related to earnings potential and fundamental value, there is no shortcut to doing your homework, knowing as much as possible about your investments, and making appropriate strategic choices for you.

KEY TAKEAWAYS

- Common long-term strategies try to maximize returns by
 - minimizing transaction costs or
 - minimizing the effects of market timing.
- Long-term stock strategies include buy and hold, dollar-cost averaging, direct investment, dividend reinvestment, and indexing.
- Common short-term strategies try to maximize return by taking advantage of market timing.

EXERCISES

1. Review your investing horizon, risk tolerance, and needs. In My Notes or your personal finance journal, record your ideas about the effects of your horizon, risk profile, and personal circumstances on your decisions about investing in stocks. Rank the long-term and short-term investment strategies in order of their appropriateness for you. Explain why your top-ranked strategies seem best for you at this time.
2. Survey (but do not join) Web sites for day traders online. Then read an article for beginning day traders at <http://www.investopedia.com/articles/trading/06/DayTradingRetail.asp?viewed=1>.

What information in this article do you find discouraging about getting involved in day trading?

Read the Securities and Exchange Commission's (SEC) page on day trading

at <http://www.sec.gov/answers/daytrading.htm>. According to the SEC, what regulatory rules would apply to you if you were identified as a "pattern day trader"?

Chapter 16 Owning Bonds

Introduction

In common parlance, a bond is an affinity between people. In science, that affinity is physically held together by an attraction of atoms. In finance, a bond is a debt agreement, holding lender and borrower together in a shared financial fate.

Investors buy bonds to participate in economic growth as lenders rather than as shareholders, with less risk and a firmer claim on assets. Bonds are issued by different kinds of organizations—by governments and government agencies as well as by corporations—giving investors different kinds of partners in growth.

Since bonds are a different form of capital than stocks, and since bond investments are made in different kinds of borrowers, bonds offer diversification from the stocks in your portfolio. Your use of bonds may change over time, as your risk tolerance or liquidity needs change.

16.1 Bonds and Bond Markets

LEARNING OBJECTIVES

1. Identify bond features that can determine risk and return.
2. Differentiate the roles of various U.S. government bonds.
3. List the types and features of state and municipal bonds.
4. Compare and contrast features of the corporate bond markets, the markets for corporate stock, and the markets for government bonds.
5. Explain the role of rating agencies and the process of bond rating.

Bonds are a relatively old form of financing. Formalized debt arrangements long preceded corporate structure and the idea of equity (stock) as we know it. Venice issued the first known government bonds of the modern era in 1157,[1]

while private bonds are cited in British records going back to the thirteenth century.[2] Venice issued bonds to raise funds to finance a Crusade against Constantinople, which included expansion of a shipyard attached to the Venetian Arsenal. (Go to http://en.wikipedia.org/wiki/Venetian_Arsenal to view images.)

Bonds

In addition to financing government projects, bonds are used by corporations to capitalize growth. Bonds are also a legal arrangement, couched in conditions, obligations, and consequences. As a result of their legal and financial roles, bonds carry a quaint and particular vocabulary. Bonds come in all shapes and sizes to suit the needs of the borrowers and the demands of lenders. Figure 16.1 "Basic Bond Features" lists the descriptive terms for basic bond features.

Figure 16.1 Basic Bond Features

Bond Term	Meaning
Issuer	Borrower
Investor	Lender or Creditor
Principal, Face Value, Par Value	Amount Borrowed
Coupon Rate	Interest Rate
Coupon	Interest Payment
Maturity	Due Date
Term	Time until Maturity
Yield to Maturity	Annualized Return on Bond Investment
Market Value	Current Price

The **coupon** is usually paid to the investor twice yearly. It is calculated as a percentage of the **face value**—amount borrowed—so that the annual coupon = coupon rate \times face value. By convention, each individual bond has a face value of \$1,000. A corporation issuing a bond to raise \$100 million would have to issue 100,000 individual bonds (100,000,000 divided by 1,000). If those bonds pay a 4 percent coupon, a bondholder who owns one of those bonds would receive a coupon of \$40 per year ($1,000 \times 4\%$), or \$20 every six months.

The **coupon rate** of interest on the bond may be fixed or floating and may change. A floating rate is usually based on another interest benchmark, such as the U.S. **prime rate**, a widely recognized benchmark of prevailing interest rates.

A **zero-coupon bond** has a coupon rate of zero: it pays no interest and repays only the principal at maturity. A “zero” may be attractive to investors, however, because it can be purchased for much less than its face value. There are **deferred coupon bonds** (also called **split-coupon bonds** and issued below par), which pay no interest for a specified period, followed by higher-than-normal interest payments until maturity. There are also **step-up bonds** that have coupons that increase over time.

The face value, the principal amount borrowed, is paid back at maturity. If the bond is **callable**, it may be redeemed after a specified date but before maturity. A borrower typically “calls” its bonds after prevailing interest rates have fallen, making lower-cost debt available. Borrowers can borrow new, cheaper debt and pay off the older, more expensive debt. As an investor (lender), you would be paid back early, which sounds great, but because interest rates have fallen, you would have trouble finding another bond investment that would pay as high a rate of return.

A **convertible bond** is a corporate bond that may be converted into common equity at maturity or after some specified time. If a bond were converted into stock, the bondholder would become a shareholder, assuming more of the company's risk.

The bond may be secured by collateral, such as property or equipment, sometimes called a **mortgage bond**. If unsecured, or secured only by the "full faith and credit" of the borrower (the borrower's unconditional commitment to pay principal and interest on the debt), the bond is a **debenture**. Most bonds are issued as debentures.

A bond specifies if the borrower has more than one bond issue outstanding or more than one set of lenders to repay, which establishes the bond's seniority in relation to previously issued debt. This "pecking order" determines which lenders will be paid back first in case of default on the debt or bankruptcy. Thus, when the borrower does not meet its coupon obligations, investors holding **senior debt** as opposed to **subordinated debt** have less risk of default.

Bonds may also come with **covenants** or conditions on the borrower. Covenants are usually attached to corporate bonds and require the company to maintain certain performance goals during the term of the loan. Those goals are designed to lower **default risk** for the lender. Examples of typical covenants are

- dividend limits,
- debt limits,
- limits on sales of assets,
- maintenance of certain liquidity ratios or minimum cash balances.

Corporations issue corporate bonds, usually with maturities of ten, twenty, or thirty years. Corporate bonds tend to be the most "customized," with features such as callability, conversion, and covenants.

The U.S. government issues **Treasury bills** for short-term borrowing, **Treasury notes** for intermediate-term borrowing (longer than one year but less than ten years), and **Treasury bonds** for long-term borrowing for more than ten years. The federal government also issues **Treasury Inflation-Protected Securities (TIPS)**. TIPS pay a fixed coupon, but the principal adjusts with inflation. At maturity, you are repaid either the original principal or the inflation-adjusted principal, whichever is greater.

State and municipal governments issue revenue bonds or general obligation bonds. A **revenue bond** is repaid out of the revenue generated by the project that the debt is financing. For example, toll revenue may secure a debt that finances a highway. A **general obligation bond** is backed by the state or municipal government, just as a corporate debenture is backed by the corporation.

Interest from state and **municipal bonds** (also called "munis") may not be subject to federal income taxes. Also, if you live in that state or municipality, the interest may not be subject to state and local taxes. The tax exemption differs from bond to bond, so you

should be sure to check before you invest. Even if the interest is not taxable, however, any gain (or loss) from the sale of the bond is taxed, so you should not think of munis as “tax-free” bonds.

Foreign corporations and governments issue bonds. You should keep in mind, however, that foreign government defaults are not uncommon. Mexico in 1994, Russia in 1998, and Argentina in 2001 are all recent examples. Foreign corporate or sovereign debt also exposes the bondholder to currency risk, as coupons and principal will be paid in the foreign currency. Figure 16.2 "Bond Issuers and Terms" shows a summary of bonds and their issuers.

Figure 16.2 Bond Issuers and Terms

	Government				Corporate
	U.S. Treasury	State	Municipality	Foreign	
Short-Term (< 1 year)	Treasury Bills				Commercial Paper
Intermediate-Term (1–10 years)	Treasury Notes	Revenue Bonds or General Obligation Bonds	Revenue Bonds or General Obligation Bonds	Sovereignty Bonds	Bonds
Long-Term (> 10 years)	Treasury Bonds	Revenue Bonds or General Obligation Bonds	Revenue Bonds or General Obligation Bonds	Sovereignty Bonds	Bonds

Bond Markets

The volume of capital traded in the bond markets is far greater than what is traded in the stock markets. All sorts of borrowers issue bonds: corporations; national, state and municipal governments; and government agencies. Even small towns issue bonds to finance capital expenditures such as schools, fire stations, and roads. Each kind of bond has its own market.

Private placement refers to bonds that are issued in a private sale rather than through the public markets. The investors in privately placed bonds are institutional investors such as insurance companies, endowments, and pension funds.

U.S. Treasury bonds are issued to the primary market through auctions. Participants, usually dealers or institutional investors, bid for the bonds, but no one participant is allowed to buy enough shares to monopolize the secondary market. Individuals can also buy Treasuries directly from the U.S. Treasury through its online service, called TreasuryDirect (<http://www.treasurydirect.gov/>).[3]

Corporate bonds are traded in over-the-counter transactions through brokers and dealers. Because the details of each bond issue may vary—maturity, coupon rate, callability, convertibility, covenants, and so on—it is hard to directly compare bond values the way stock values are compared. As a result, the corporate bond markets are less transparent to the individual investor.

To provide guidance, **rating agencies** provide bond ratings; that is, they “grade” individual bond issues based on the likelihood of default and thus the risk to the investor. Rating agencies are independent agents that base their ratings on the financial stability of the company, its business strategy, competitive environment, outlook for the industry and the economy—any factors that may affect the company’s ability to meet coupon obligations and pay back debt at maturity.

Ratings agencies such as Fitch Ratings, A. M. Best, Moody’s, and Standard & Poor’s (S&P) are hired by large borrowers to analyze the company and rate its debt. Moody’s also rates government debt. Ratings agencies use an alphabetical system to grade bonds (shown in Figure 16.3 "Bond Ratings") based on the highest-to-lowest rankings of two well-known agencies.

Figure 16.3 Bond Ratings

Standard & Poor’s	Moody’s	Grade	Meaning
AAA	Aaa	Investment	Risk is almost zero
AA	Aa	Investment	Low risk
A	A	Investment	Risk if economy declines
BBB	Baa	Investment	Some risk; more if economy declines
BB	Ba	Speculative	Risky
B	B	Speculative	Risky; expected to get worse
CCC	Caa	Speculative	Probable bankruptcy
CC	Ca	Speculative	Probable bankruptcy
C	C	Speculative	In bankruptcy or default
D		Speculative	In bankruptcy or default

A plus sign (+) following a rating indicates that it is likely to be upgraded, while a minus sign (–) following a rating indicates that it is likely to be downgraded.

Bonds rated BBB or Baa and above are considered **investment grade bonds**, relatively low risk and “safe” for both individual and institutional investors. Bonds rated below BBB or Baa are speculative in that they carry some default risk. These are called

speculative grade bonds, junk bonds, or high-yield bonds. Because they are riskier, speculative grade bonds need to offer investors a higher return or yield in order to be “priced to sell.”

Although the term “junk bonds” sounds derogatory, not all speculative grade bonds are “worthless” or are issued by “bad” companies. Bonds may receive a speculative rating if their issuers are young companies, in a highly competitive market, or capital intensive, requiring lots of operating capital. Any of those features would make it harder for a company to meet its bond obligations and thus may consign its bonds to a speculative rating. In the 1980s, for example, companies such as CNN and MCI Communications Corporation issued high-yield bonds, which became lucrative investments as the companies grew into successful corporations.

Default risk is the risk that a company won't have enough cash to meet its interest payments and principal payment at maturity. That risk depends, in turn, on the company's ability to generate cash, profit, and grow to remain competitive. Bond-rating agencies analyze an issuer's default risk by studying its economic, industry, and firm-specific environments and estimate its current and future ability to satisfy its debts. The default risk analysis is similar to equity analysis, but bondholders are more concerned with cash flows—cash to pay back the bondholders—and profits rather than profits alone.

Bond ratings can determine the coupon rate the issuer must offer investors to compensate them for default risk. The higher the risk, the higher the coupon must be. Ratings agencies have been criticized recently for not being objective enough in their ratings of the corporations that hire them. Nevertheless, over the years bond ratings have proven to be a reliable guide for bond investors.

KEY TAKEAWAYS

- Bond features that can determine risk and return include
 - coupon and coupon structure,
 - maturity, callability, and convertibility,
 - security or debenture,
 - seniority or subordination,
 - covenants.

- The U.S. government issues Treasury
 - bills for short-term borrowing,
 - notes for intermediate-term borrowing,
 - bonds for long-term borrowing,

- TIPS, which are inflation-protected.
- State and municipal governments issue
 - revenue bonds, secured by project revenues, or
 - general obligation bonds, secured by the government issuer.
- State and municipal government muni bonds may or may not have tax advantages for certain investors.
- Corporate bonds may be issued through the public bond markets or through private placement.
- U.S. government bonds are issued through auctions managed by the Federal Reserve.
- The secondary bond market offers little transparency because of the differences among bonds and the lower volume of trades.
- To help provide transparency, rating agencies analyze default risk and rate specific bonds.

EXERCISES

1. Explore the homepages of S&P at <http://www2.standardandpoors.com/portal/site/sp/en/us/page.home/home/0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0.html> and Moody's at <http://www.moody.com>. Access to bond ratings at these sites requires registration, but other information is readily available. For example, how does S&P explain that its rating system does not directly measure default risk? Next, read Moody's explanation of its performance as a rating agency at <http://www.moody.com/cust/content/content.ashx?source=StaticContent/Free%20pages/Credit%20Policy%20Research/documents/current/2001700000407258.pdf>. What do the data generally show about the relationship between ratings and defaults on corporate bonds? What examples of defaults on municipal bonds does Moody's give as examples of the effects of financial stress on city governments? According to Moody's, how do municipal bonds compare to corporate bonds as investments? To find more information about bonds and investor tools for choosing bonds and calculating bond value, go to <http://www.bondsonline.com>.
2. What is your state's bond rating? A keyword search ("[state name] bond rating") will bring up current articles on this subject in the news media. What state government activities or

expenditures do the bond issues finance? What factors have caused your state's bond rating to be increased or decreased recently? How does your state's bond rating compare with ratings of other states in your region? Now find the current bond rating for your city or town. In My Notes or your personal finance journal, write an explanation of why you might or might not invest in your city or town and state at this time. In general, why might you want to invest in municipal bonds? What role would bonds play in your investment portfolio?

[1] Isadore Barmash, *The Self-Made Man* (Washington, DC: Beard Books, 2003), 55.

[2] George Burton Adams, *The Constitutional History of England* (London: H. Holt, 1921), 93.

[3] TreasuryDirect, <http://www.treasurydirect.gov/> (accessed June 13, 2009).

16.2 Bond Value

LEARNING OBJECTIVES

1. Explain how bond returns are measured.
2. Define and describe the relationships between interest rates, bond yields, and bond prices.
3. Define and describe the risks that bond investors are exposed to.
4. Explain the implications of the three types of yield curves.
5. Assess the role of the yield curve in bond investing.

Bond-rating systems do not replace bond analysis, which focuses on bond value. Like any investment, a bond is worth the value of its expected return. That value depends on the amount expected and the certainty of that expectation. To understand bond values, then, is to understand the value of its return and the costs of its risks.

Bonds return two cash flows to their investors: (1) the coupon, or the interest paid at regular intervals, usually twice yearly or yearly, and (2) the repayment of the principal at maturity. The amounts are spelled out in the bond itself. The coupon rate is specified (for a fixed-rate bond) and the face value is the principal to be returned at the stated maturity.

Unlike a stock, for which the cash flows—both the amount and the timing—are “to be determined,” in a bond everything about the cash flows is established at the outset. Any bond feature that makes those cash flows less certain increases the risk to the investor and thus the investor’s return. If the bond has a floating-rate coupon, for example, then there is uncertainty about the amount of the coupon payments. If the bond is callable, there is uncertainty about the number of coupon payments.

Whatever the particular features of a bond, as debt instruments, bonds expose investors to specific risks. What are those risks, and what is their role in defining expectations of returns?

Bond Returns

Unlike a stock, a bond’s future cash returns are known with certainty. You know what the coupon will be (for a fixed-rate bond) and you know that at maturity the bond will return its face value. For example, if a bond pays a 4 percent coupon and matures in 2020, you know that every year you will receive \$20 twice per year ($20 = 4\% \times 1,000 \times \frac{1}{2}$) until 2020 when you will also receive the \$1,000 face value at maturity. You know what you will get and when you will get it. However, you can’t be sure what that will be worth to you when you do. You don’t know what your opportunity cost will be at the time.

Investment returns are quoted as an annual percentage of the amount invested, the rate of return. For a bond, that rate is the yield. Yield is expressed in two ways: the current yield and the yield to maturity. The **current yield** is a measure of your bond’s rate of return in the short term, if you buy the bond today and keep it for one year. You can calculate the current yield by looking at the coupon for the year as a percentage of your investment or the current price, which is the market price of the bond.

current yield = annual coupon (interest received, or cash flows) ÷ market value =
(coupon rate × face value) ÷ market value.

So, if you bought a 4 percent coupon bond, which is selling for \$960 today (its market value), and kept it for one year, the current yield would be 40 (annual coupon) ÷ 960 (market value) = 4.1667%. The idea of the current yield is to give you a quick look at your immediate returns (your return for the next year).

In contrast, the **yield to maturity (YTM)** is a measure of your return if you bought the bond and held it until maturity, waiting to claim the face value. That calculation is a bit more complicated, because it involves the relationship between time and value (Chapter 4 "Evaluating Choices: Time, Risk, and Value"), since the yield is over the long term until the bond matures. You will find bond yield-to-maturity calculators online, and many financial calculators have the formulas preprogrammed.

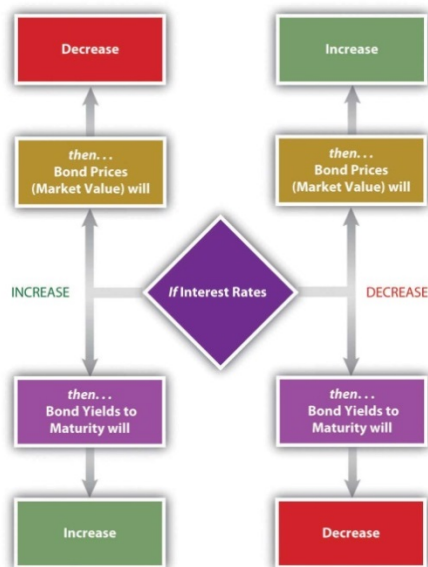
To continue the example, if you buy a bond for \$960 today (2010), you will get \$20 every six months until 2020, when you will also get \$1,000. Because you are buying the

bond for less than its face value, your return will include all the coupon payments (\$400 over 10 years) plus a gain of \$40 ($1,000 - 960 = 40$). Over the time until maturity, the bond returns coupons plus a gain. Its yield to maturity is close to 4.5 percent.

Bond prices, their market values, have an inverse relationship to the yield to maturity. As the price goes down, the yield goes up, and as the price goes up, the yield goes down. This makes sense because the payout at maturity is fixed as the face value of the bond (\$1,000). Thus, the only way a bond can have a higher rate of return is to have a lower price in the first place.

The yield to maturity is directly related to interest rates in general, so as interest rates increase, bond yields increase, and bond prices fall. As interest rates fall, bond yields fall, and bond prices increase. Figure 16.4 "Bond Prices, Bond Yields, and Interest Rates" shows these relationships.

Figure 16.4 Bond Prices, Bond Yields, and Interest Rates



You can use the yield to maturity to compare bonds to see how good they are at creating returns. This yield holds if you hold the bond until maturity, but you may sell the bond at any time. When you sell the bond before maturity, you may have a gain or a loss, since the market value of the bond may have increased or decreased since you bought it. That gain or loss would be part of your return along with the coupons you have received over the holding period, the period of time that you held the bond.

Your **holding period yield** is the annualized rate of return that you receive depending on how long you have held the bond, its gain or loss in market value, and the coupons you received in that period. For example, if you bought the bond for \$960 and sold it again for \$980 after two years, your return in dollars would be the coupons of \$80 ($\40 per year \times 2 years) plus your gain of \$20 ($\$980 - 960$), relative to your original investment of \$960. Your holding period yield would be close to 5.2 percent.

Bond Risks

The basic risk of bond investing is that the returns—the coupon and the principal repayment (face value)—will not be repaid, or that when they are repaid, they won't be worth as much as you thought they would be. The risk that the company will be unable to make its payments is default risk—the risk that it will default on the bond. You can estimate default risk by looking at the bond rating as well as the economic, sector, and firm-specific factors that define the company's soundness.

Part of a bond's value is that you can expect regular coupon payments in cash. You could spend the money or reinvest it. There is a risk, however, that when you go to reinvest the coupon, you will not find another investment opportunity that will pay as high a return because interest rates and yields have fallen. This is called **reinvestment risk**. Your coupons are the amount you thought they would be, but they are not worth as much as you expected, because you cannot earn as much from them.

If interest rates and bond yields have dropped, your fixed-rate bond, which is still paying the now-higher-than-other-bonds coupon, has become more valuable. Its market price has risen. But the only way to realize the gain from the higher price is to sell the bond, and then you won't have any place to invest the proceeds in other bonds to earn as much return.

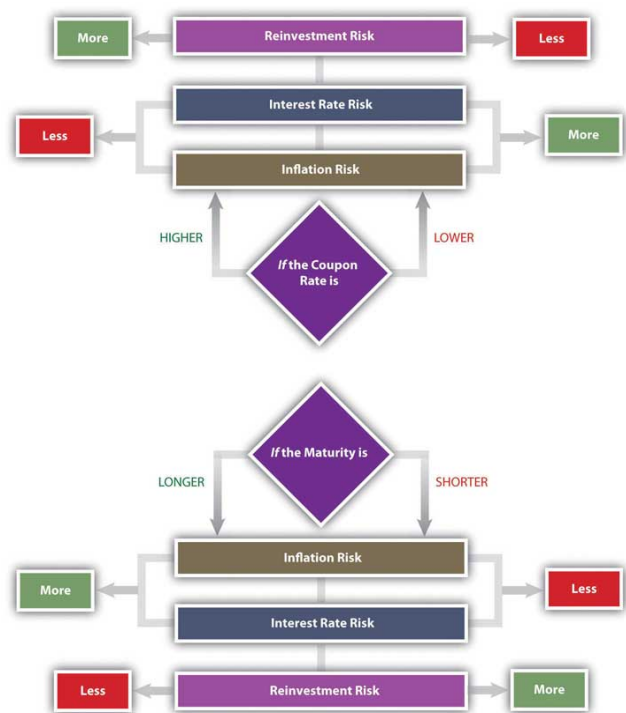
Reinvestment risk is one facet of interest rate risk, which arises from the fundamental relationship between bond values and interest rates. **Interest rate risk** is the risk that a change in prevailing interest rates will change bond value—that interest rates will rise and the market value of the bond will fall. (If interest rates fell, the bond value would increase, which the investor would not see as a risk.)

Another threat to the value of your coupons and principal repayment is inflation. **Inflation risk** is the risk that your coupons and principal repayment will not be worth as much as you thought, because inflation has decreased the purchasing power or the value of the dollars you receive.

A bond's features can make it more or less vulnerable to these risks. In general, the longer the term to maturity is, the riskier the bond is. The longer the term is, the greater the probability that the bond will be affected by a change in interest rates, a period of inflation, or a damaging business cycle.

In general, the lower the coupon rate and the smaller the coupon, the more sensitive the bond will be to a change in interest rates. The lower the coupon rate and the smaller the coupon, the more of the bond's return comes from the repayment of principal, which only happens at maturity. More of your return is deferred until maturity, which also makes it more sensitive to interest rate risk. A bond with a larger coupon provides more liquidity, over the term of the bond, and less exposure to risk. Figure 16.5 "Bond Characteristics and Risks" shows the relationship between bond characteristics and risks.

Figure 16.5 Bond Characteristics and Risks



A zero-coupon bond offers the lowest coupon rate possible: zero. Investors avoid reinvestment risk since the only return—and reinvestment opportunity—comes when the principal is returned at maturity. However, a “zero” is exposed to the maximum interest rate risk, because interest rates will always be higher than its coupon rate of zero. The attraction of a zero is that it can be bought for a very low price.

As a bond investor, you can make better decisions if you understand how the characteristics of bonds affect their risks and yields as you use those yields to compare and choose bonds.

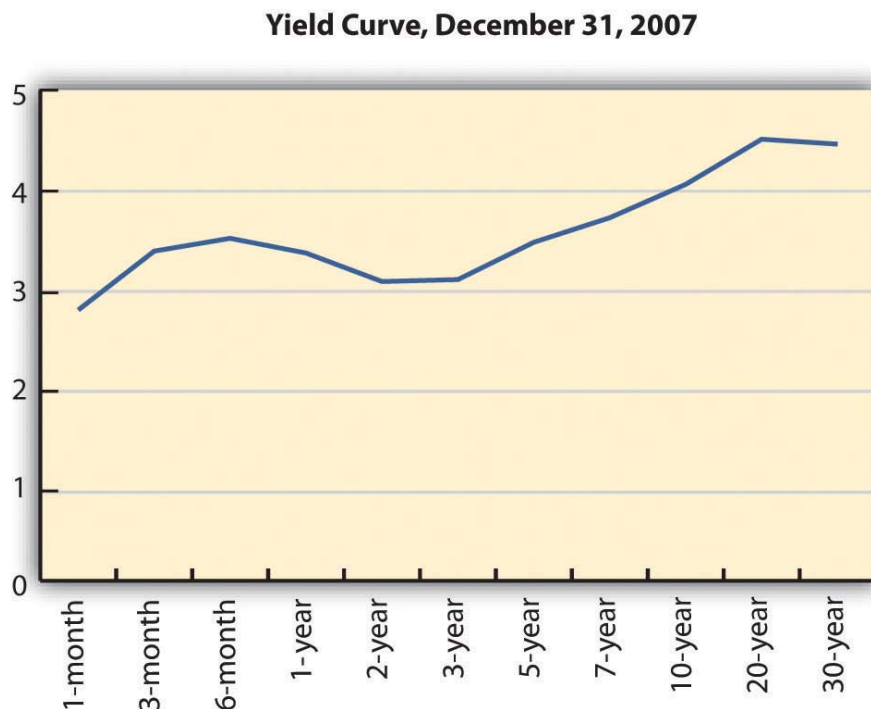
Yield Curve

Interest rates affect bond risks and bond returns. If you plan to hold a bond until maturity, interest rates also affect reinvestment risk. If you plan to sell the bond before maturity, you face interest rate risk or the risk of a loss of market value. When you invest in bonds, then, you want to be able to forecast future interest rates.

Investors can get a sense of how interest rates are expected to change in the future by studying the yield curve. The **yield curve** is a graph of U.S. Treasury securities compared in terms of the yields for bonds of different maturities. U.S. Treasury securities are used because the U.S. government is considered to have no default risk, so that the yields on its bills and bonds reflect only interest rate, reinvestment, and inflation risks—all of which are reflected in expected, future interest rates.

The yield curve illustrates the **term structure of interest rates**, or the relationship of interest rates to time. Usually, the yield curve is upward sloping—that is, long-term rates are higher than short-term rates. Long-term rates indicate expected future rates. If the economy is expanding, future interest rates are expected to be higher than current interest rates, because capital is expected to be more productive in the future. Future interest rates will also be higher if there is inflation because lenders will want more interest to make up for the fact that the currency has lost some of its purchasing power. Figure 16.6 "Upward-Sloping Yield Curve" shows an upward-sloping yield curve.

Figure 16.6 Upward-Sloping Yield Curve[1]



Depending on economic forecasts, the yield curve can also be flat, as in Figure 16.7 "Flat Yield Curve", or downward sloping, as in Figure 16.8 "Downward-Sloping Yield Curve".

Figure 16.7 Flat Yield Curve[2]

Yield Curve, January 2, 2007

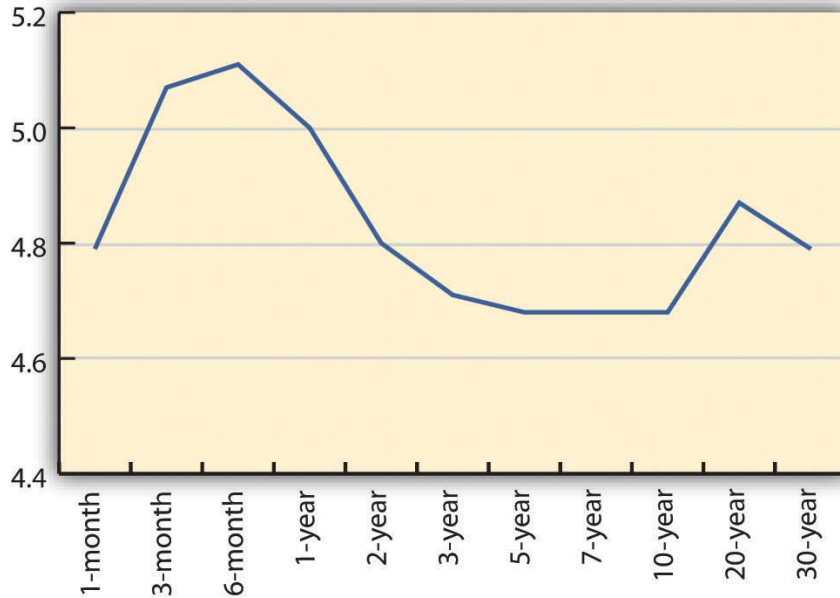
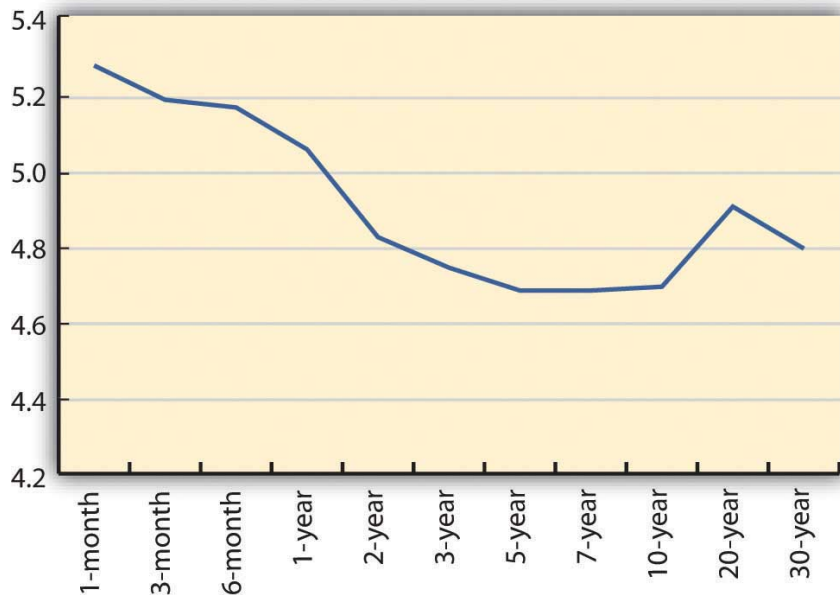


Figure 16.8 Downward-Sloping Yield Curve[3]

Yield Curve, February 21, 2007



A flat yield curve indicates that future interest rates are expected to be about the same as current interest rates or that capital will be about as productive in the economy as it is now. A downward-sloping yield curve shows that future interest rates are expected to be lower than current rates. This is often interpreted as a signal of a recession, because capital would be less productive in the future if the economy were less productive then.

The yield curve is not perfectly smooth; it changes every day as bonds trade and new prices and new yields are established in the bond markets. It is a widely used indicator of interest rate trends, however. It can be useful to you to know the broad trends in interest rates that the market sees.

For your bond investments, an upward-sloping yield curve indicates that interest rates will go up, which means that bond yields will go up but bond prices will go down. If you are planning to sell your bond in that period of rising interest rates, you may be selling your bond at a loss.

Because of their known coupon and face value, many investors use bonds to invest funds for a specific purpose. For example, suppose you have a child who is eight years old and you want her to be able to go to college in ten years. You might invest in bonds that have ten years until maturity. However, if you invest in bonds that have twenty years until maturity, they will have a higher yield (all else being equal), so you could invest less now.

You could buy the twenty-year bonds but plan to sell them before maturity for a price determined by what interest rates are in ten years (when you sell them). If the yield curve indicates that interest rates will rise over the next ten years, then you could expect your bond price to fall, and you would have a loss when you sell the bond, which would take away from your returns.

In general, rising interest rates mean losses for bondholders who sell before maturity, and falling interest rates mean gains for bondholders who sell before maturity. Unless you are planning to hold bonds until maturity, the yield curve can give you a sense of whether you are more likely to have a gain or loss.

KEY TAKEAWAYS

- All bonds expose investors to
 - default risk (the risk that coupon and principal payments won't be made),
 - reinvestment risk (the risk that coupon payments will be reinvested at lower rates),
 - interest rate risk (the risk that changing interest rates will affect bond values),
 - inflation risk, (the risk that inflation will devalue bond coupons and principal repayment).
- Bond returns can be measured by yields.
 - The current yield measures short-term return on investment.
 - The yield to maturity measures return on investment until maturity.
 - The holding period yield measures return on investment over the term that the bond is held.

- There is a direct relationship between interest rates and bond yields.
 - There is an inverse relationship between bond yields and bond prices (market values).
 - There is an inverse relationship between bond prices (market values) and interest rates.
 - The yield curve illustrates the term structure of interest rates, showing yields of bonds with differing maturities and the same default risk. The purpose of a yield curve is to show expectations of future interest rates.
- The yield curve may be
 - upward sloping, indicating higher future interest rates;
 - flat, indicating similar future interest rates; or
 - downward sloping, indicating lower future interest rates.

EXERCISES

1. How do you buy bonds? Read Investopedia's primer at <http://www.investopedia.com/university/bonds/bonds6.asp>. What is the minimum investment for bonds? What is the difference between investing in bonds and investing in a bond fund? Read eHow's explanation of how to buy bonds online at http://www.ehow.com/how_3294_buy-bonds-online.html.
2. Read Investopedia's explanation of how to read a bond table at <http://www.investopedia.com/university/bonds/bonds5.asp>. In the example of a bond table, suppose you invested \$5,000 in Avco's bond issue. What coupon rate were you getting? When was the maturity date, and how much did you get then? What was the current value of the bond at that time? What does it mean for a bond to be trading above par? What was the bond's annual return during the time you held it? If you held the bond for ten years, what cash flows did you receive? Would you have reinvested in the bond when it matured, or would you have sold it and why? Study the other corporate bonds listed in the Investopedia example of a bond table. If in 2005 you had \$5,000 to invest in bonds, which issuing company would you have chosen and why?
3. To find out more about how to use bond tables when making investment decisions, go to <http://www.investinginbonds.com/learnmore.asp?catid=3&id=45>. Where will you find bond

tables? What will you compare in bond tables? At the top of this Securities Industry and Financial Markets Association (SIFMA) page, click on one of the bond markets “at-a-glance” under “Bond Markets & Prices.” Then enter the name of an issuer on the form and choose the data you want to see. For example, enter your state’s name and ask to see all the bonds by yield or by maturity date or by some other search factor. What do these data tell you? For each search factor, how would the information assist you in making decisions about including bonds in your investment portfolio?

4. Experiment with Investopedia’s yield-to-maturity calculator

at <http://www.investopedia.com/calculator/AOYTM.aspx>. Try other calculators as well, such as the one at <http://www.mahalo.com/how-do-i-calculate-yield-to-maturity-on-bonds>. Why should you know the yield to maturity, indicated as YTM on the calculator, before investing in bonds?

[1] U.S. Department of the Treasury, “Daily Treasury Yield Curve Rates,” <http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2007> (accessed May 23, 2012).

[2] U.S. Department of the Treasury, “Daily Treasury Yield Curve Rates,” <http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2007> (accessed May 23, 2012).

[3] U.S. Department of the Treasury, “Daily Treasury Yield Curve Rates,” <http://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2007> (accessed May 23, 2012).

16.3 Bond Strategies

LEARNING OBJECTIVES

1. Discuss diversification as a strategic use of bonds.
2. Summarize strategies to achieve bond diversification.
3. Define and compare matching strategies.
4. Explain life cycle investing and bond strategy.

Bonds provide more secure income for an investment portfolio, while stocks provide more growth potential. When you include bonds in your portfolio, you do so to have more income and less risk than you would have with just stocks. Bonds also diversify the portfolio. Because debt is so fundamentally different from equity, debt markets and equity markets respond differently to changing economic conditions.

Diversification Strategies

If your main strategic goal of including bonds is diversification, you can choose an active or passive bond selection strategy. As with equities, an active strategy requires individual bond selection, while a passive strategy involves the use of indexing, or investing through a broadly diversified bond index fund or mutual fund in which bonds have already been selected.

The advantage of the passive strategy is its greater diversification and relatively low cost. The advantage of an active strategy is the chance to create gains by finding and taking advantage of market mispricings. An active strategy is difficult for individual investors in bonds, however, because the bond market is less transparent and less liquid than the stock market.

If your main strategic goal of including bonds is to lower the risk of your portfolio, you should keep in mind that bond risk varies. U.S. Treasuries have the least default risk, while U.S. and foreign corporate bonds have the most. Bond ratings can help you to compare default risks.

Another way to look at the effect of default risk on bond prices is to look at spreads. A **spread** is the difference between one rate and another. With bonds, the spread generally refers to the difference between one yield to maturity and another. Spreads are measured and quoted in basis points. A **basis point** is one one-hundredth of one percent, or 0.0001 or 0.01 percent.

The most commonly quoted spread is the difference between the yield to maturity for a Treasury bond and a corporate bond with the same term to maturity. Treasury bonds are considered to have no default risk because it is unlikely that the U.S. government will default. Treasuries are exposed to reinvestment, interest rate, and inflation risks, however.

Corporate bonds are exposed to all four types of risk. So the difference between a twenty-year corporate bond and a twenty-year Treasury bond is the difference between a bond with and without default risk. The difference between their yields—the spread—is the additional yield for the investor for taking on default risk. The riskier the corporate bond is, the greater the spread will be.

Spreads generally fluctuate with market trends and with confidence in the economy or expectations of economic cycles. When spreads narrow, the yields on corporate bonds are closer to the yields on Treasuries, indicating that there is less concern with default

risk. When spreads widen—as they did in the summer and fall of 2008, when the debt markets seemed suddenly very risky—corporate bondholders worry more about default risk.

As the spread widens, corporate yields rise and/or Treasury yields fall. This means that corporate bond prices (market values) are falling and/or Treasury bond values are rising. This is sometimes referred to as the “flight to quality.” In uncertain times, investors would rather invest in Treasuries than corporate bonds, because of the increased default risk of corporate bonds. As a result, Treasury prices rise (and yields fall) and corporate prices fall (and yields rise).

Longer-term bonds are more exposed to reinvestment, interest rate, and inflation risk than shorter-term bonds. If you are using bonds to achieve diversification, you want to be sure to be diversified among bond maturities. For example, you would want to have some bonds that are short-term (less than one year until maturity), intermediate-term (two to ten years until maturity), and long-term (more than ten years until maturity) in addition to diversifying on the basis of industries and company and perhaps even countries.

Matching Strategies

Matching strategies are used to create a bond portfolio that will finance specific funding needs, such as education, a down payment on a second home, or retirement. If the timing and cash flow amounts of these needs can be predicted, then a matching strategy can be used to support them. This strategy involves matching a “liability” (to yourself, because you “owe” yourself the chance to reach that goal) with an asset, a bond investment. The two most commonly used matching strategies are immunization and cash flow matching.

Immunization is designing a bond portfolio that will achieve a certain rate of return over a specific period of time, based on the idea of balancing interest rate risk and reinvestment risk.

Recall that as interest rates rise, bond values decrease, but reinvested income from bond coupons earns more. As interest rates fall, bond values increase, but reinvested income from bond coupons decreases. Immunization is the idea of choosing a portfolio of bonds such that the exposure to interest rate risk is exactly offset by the exposure to reinvestment risk for a certain period of time, thus guaranteeing a minimum return over that period.[1]

In other words, the interest rate risk and the reinvestment risk cancel each other out, and the investor is left with a guaranteed return. You would use this kind of strategy when you had a liquidity need with a deadline, for example, to fund a child’s higher education.

Cash flow matching, also called a dedication strategy, is an alternative to immunization. It involves choosing bonds that match your anticipated cash flow needs by having maturities that coincide with the timing of those needs. For example, if you will need \$50,000 for travel in twenty years, you could buy bonds with a face value of \$50,000 and a maturity of twenty years. If you hold the bonds to maturity, their face value provides the amount of cash flow you need, and you don't have to worry about interest rate or reinvestment risk. You can plan on having \$50,000 in twenty years, barring any default.

If you had the \$50,000 now, you could just stuff it under your mattress or save it in a savings account. But buying a bond has two advantages: (1) you may be able to buy the bond for less than \$50,000 now, requiring less upfront investment and (2) over the next twenty years, the bond will also pay coupons at a higher rate than you could earn with a savings account or under your mattress.

If you will need different cash flows at different times, you can use cash flow matching for each one. When cash flow matching is used to create a steady stream of regular cash flows, it is called **bond laddering**. You invest in bonds of different maturities, such that you would have one bond maturing and providing cash flow in each period (like the CD laddering discussed in Chapter 7 "Financial Management").

Strategies such as immunization and cash flow matching are designed to manage interest rate and reinvestment risk to minimize their effects on your portfolio's goals. Since you are pursuing an active strategy by selecting individual bonds, you must also consider transaction costs and the tax consequences of your gain (or loss) at maturity and their effects on your target cash flows.

Life Cycle Investing

Bonds most commonly are used to reduce portfolio risk. Typically, as your risk tolerance decreases with age, you will include more bonds in your portfolio, shifting its weight from stocks—with more growth potential—to bonds, with more income and less risk. This change in the weighting of portfolio assets usually begins as you get closer to retirement.

For years, the conventional wisdom was that you should have the same percentage of your portfolio invested in bonds as your age, so that when you are thirty, you have 30 percent of your portfolio in bonds; when you are fifty, you have 50 percent of your portfolio in bonds, and so on. That wisdom is being questioned now, however, because while bonds are lower risk, they also lower growth potential. Today, since more people can expect to live much longer past retirement age, they run a real risk of outliving their funds if they invest as conservatively as the conventional wisdom suggests.

It is still true nevertheless that for most people, risk tolerance changes with age, and your investment in bonds should reflect that change.

KEY TAKEAWAYS

- One strategic use of bonds in a portfolio is to increase diversification.
- Diversification can be achieved
 - by an active strategy, using individual bond selection; or
 - by a passive strategy, using indexing.
- Spreads indicate the “price” or the yield on default risk.
- Matching strategies to minimize interest rate and reinvestment risks can include
 - immunization,
 - cash flow matching,
 - bond laddering.
- Life cycle investing considers the relationship of age and risk tolerance to the strategic use of bonds in a portfolio.

EXERCISES

1. In My Notes or your personal finance journal, record your bond strategy. What will be your purpose in including bonds in your portfolio? What types of bonds will you include and why? Will you take an active or passive approach and why? How will spreads inform your investment decisions? Which bond strategies described in this section will you plan to use and why? How will your bond strategies reflect your needs to diversify, reduce risk, and maximize liquidity at the right times? How will your bond strategies reflect your age and risk tolerance?
2. View the video “Investment Bond Basics” at <http://www.videojug.com/interview/investment-bond-basics>. Discuss with classmates how this video serves as a review of the information in this chapter. As part of your review, brainstorm additional questions about bond investing to ask the expert.

[1] John L. Maginn, Donald L. Tuttle, Jerald E. Pinto, and Dennis W. McLeavey, eds., *Managing Investment Portfolios: A Dynamic Process*, 3rd ed. (Charlottesville, VA: CFA Institute, 2007).

Chapter 17 Investing in Mutual Funds, Commodities, Real Estate, and Collectibles

Introduction

When people think of investing, they tend to think of stocks and bonds, investing in companies that create productivity, employment, and profit. Investments in stocks and bonds are ways of sharing in that profit and ultimately in economic growth.

While companies are the engines of economic growth, other assets such as real estate and commodities—natural resources or raw materials—fuel those engines. Increased market transparency and access, largely through the technologies of the Internet and global communications, have made it possible for more investors to invest in the “fuels” as well as the “engines” of commerce. Real estate and commodities investing have become increasingly popular as diversifiers for a sound investment portfolio.

Mutual funds are not another kind of asset but another way of investing in any kind of asset. The fund is a pool capable of much greater diversification than an individual’s investment portfolio, given transaction costs. A mutual fund can also provide security

selection, expertise, liquidity, and convenience. Some funds are even designed to perform the asset allocation task for the investor. Mutual funds are fast becoming the dominant investment vehicle for individual investors, changing the role of the broker and financial advisor.

17.1 Mutual Funds

LEARNING OBJECTIVES

1. Identify the general purposes of using mutual funds in individual investment portfolios.
2. Analyze the advantages of an index fund or a fund of funds.
3. List and define the structures of mutual funds.
4. Describe the strategic goals of lifestyle funds, leveraged funds, and inverse funds.
5. Identify the costs and differences in costs of mutual fund investing.
6. Calculate returns from mutual fund investing.
7. Summarize the information found in a mutual fund prospectus.

As defined in the Chapter 12 "Investing", a mutual fund is a portfolio of securities, consisting of one type of security or a combination of several different types. A fund serves as a convenient way for an investor to have a diversified portfolio of investments in just about any investable asset. The oldest mutual fund is believed to have been founded by Adriaan van Ketwich in 1774. Ketwich invited investors to contribute to a trust fund to spread the risk of investing in foreign bonds. The idea moved from the Netherlands to Scotland to the United States, where the Boston Personal Property Trust established the first mutual fund in 1893.[1]

The mutual fund's popularity has grown in periods of economic expansion. At the height of the stock market boom in 1929, there were over seven hundred mutual funds in the United States. After 1934, mutual funds fell under the regulatory eye of the Securities and Exchange Commission (SEC), and it wasn't until the 1950s that there were once again over one hundred mutual funds in the United States.

Mutual funds multiplied in the 1970s, spurred on by the creation of IRAs and 401(k) retirement plans, and again in the 1980s and 1990s, inspired by economic growth and the tech stock boom. By the end of 2008, U.S. mutual funds—which account for just over half of the global market—had \$9.6 trillion in assets under management. Forty-five percent of all U.S. households owned mutual funds, compared to 6 percent in 1980. For 69 percent of those households, mutual funds were more than half of their financial assets.[2]

Mutual funds play a significant role in individual investment decisions.

A mutual fund provides an investor with cheaper and simpler diversification and security selection, requiring only one transaction to own a diversified portfolio (the mutual fund). By buying shares in the fund rather than individual securities, you achieve extensive diversification for a much lower transaction cost than by investing in individual securities and making individual transactions. You also receive the benefit of professional security selection, which theoretically minimizes the opportunity costs of lesser choices. So by using a mutual fund, you get more and better security selection and diversification.

A mutual fund also provides stock and bond issuers with a mass market. Rather than selling shares to investors individually (and incurring the costs of doing so), issuers can more easily find a market for their shares in mutual funds.

Structures and Types of Mutual Funds

Like stocks and bonds, mutual funds may be actively or passively managed. As you read in Chapter 15 "Owning Stocks" and Chapter 16 "Owning Bonds", actively managed funds provide investors with professional management and the expected research, analysis, and watchfulness that goes with it. Passively managed **index funds**, on the other hand, are designed to mirror the performance of a specific index constructed to be representative of an asset class. Recall, for example, that the Standard & Poor's (S&P) 500 Index is designed to mirror the performance of the five hundred largest large cap stocks in the United States.

Mutual funds are structured in three ways:

1. Closed-end funds
2. Open-end funds
3. Exchange-traded funds

Closed-end funds are funds for which a limited number of shares are issued. Once all shares have been issued, the fund is "closed" so a new investor can only buy shares from an existing investor. Since the shares are traded on an exchange, the limited supply of shares and the demand for them in that market directly determines the value of the shares for a closed-end fund.

Most mutual funds are **open-end funds** in which investors buy shares directly from the fund and redeem or sell shares back to the fund. The price of a share is its **net asset value (NAV)**, or the market value of each share as determined by the fund's assets and liabilities and the number of shares that exist. Here is the basic formula for calculating NAV:

$$\text{NAV} = (\text{market value of fund securities} - \text{fund liabilities}) \div \text{number of shares outstanding.}$$

Demand for shares is reflected in the number of shares outstanding, because the fund can create new shares for new investors. NAV calculations are usually done once per day at the close of trading, when mutual fund transactions are recorded.

The NAV is the price that the fund will pay you when you redeem your shares, so it is a gauge of the shares' value. It will increase if the market value of the securities in the fund increases faster than the number of new shares.

Exchange-traded funds (ETFs) are structured like closed-end funds but are traded like stocks. Shares are traded and priced continuously throughout the day's trading session, rather than once per day at the end of trading. ETFs trade more like individual securities; that is, if you are trying to time a market, they are a more nimble asset to trade than open-end or closed-end funds.

Originally designed as index funds, exchange-traded funds now target just about every asset, sector, and economic region imaginable. Because of this, ETFs have become quite popular, with over \$529 billion invested in over seven hundred funds (as of April 2009).[3]

Figure 17.2 "Fund Features" compares the features of closed-end funds, open-end funds, and ETFs.

Figure 17.2 Fund Features

	Closed-End	Open-End	ETF
Number of Shares	Limited	Unlimited	Limited
Trades	End of the trading day	Fund sponsor	Continuously
Traded with	Other shareholders (after the fund closes)	End of the trading day	Other shareholders

Shares of closed-end funds and exchange-traded funds are bought and sold on exchanges, much like shares of stock. You would go through a broker to make those transactions. Shares of open-end funds may be bought and sold directly from the fund sponsor, a mutual fund company or investment manager such as Fidelity, Vanguard, Janus, T. Rowe Price, or Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF). You can make those transactions at any of the company's offices, by telephone, or online. About 40 percent of all mutual fund transactions are done directly (without a broker) through a retirement plan contribution or a mutual fund company.[4]

Some other types of mutual funds are shown in Table 17.1 "Other Types of Mutual Funds". Some research companies, such as Morningstar, track as many as forty-eight different categories of mutual funds.

Table 17.1 Other Types of Mutual Funds

Funds of funds	<p>Mutual funds that own shares in other mutual funds rather than in specific securities. If you decide to use mutual funds rather than select securities, a fund of funds will provide expertise in choosing funds.</p> <p>Funds of stocks and bonds that manage portfolio risk based on age or the time horizon for liquidity needs.</p>
Lifestyle funds	<p>Lifestyle funds perform both security selection and asset allocation for investors, determined by the target date. For example, if you were now thirty years old, you might choose a lifestyle fund with a target date of thirty-five years from now for your retirement savings. As the fund approaches its target date, its allocation of investments in stocks and bonds will shift to carry less risk as the target nears. Lifestyle funds are used primarily in saving for retirement; many are created as funds of funds.</p>
Leveraged funds	<p>Funds that invest both investors' money and money that the fund borrows to augment the investable assets and thus potential returns. Because they use borrowing, leveraged funds are riskier than funds that do not use leverage.</p>
Inverse funds	<p>Funds that aim to increase in value when the market declines, to be countercyclical to index funds, which aim to increase in value when the market rises. Inverse funds, also called bear funds, are set up to perform contrary to the index. Since most economies become more productive over time, however, you can expect indexes to rise over time, so an inverse fund would make sense only as a very short-term investment.</p>

Mutual Fund Fees and Returns

All funds must disclose their fees to potential investors: sales fees, management fees, and expenses. A **load fund** charges a sales commission on each share purchase. That sales charge (also called a **front-end load**) is a percentage of the purchase price. A **no-load fund**, in contrast, does not charge a sales commission, because shares may be purchased directly from the fund or through a discount broker. The front-end load can be as much as 8.5 percent, so if you plan to invest often or in large amounts, that can be a substantial charge. For example, a \$5,000 investment may cost you \$425, reducing the amount you have to invest and earn a return.

A fund may charge a **back-end load**, actually a deferred sales charge, paid when you sell your shares instead of when you buy them. The charge may be phased out if you own the shares for a specified length of time, however, usually five to seven years.

A fund may charge a management fee on an annual basis. The management fee is stated as a fixed percentage of the fund's asset value per share. Management fees can range from 0.1 percent to 2.0 percent annually. Typically, a more actively managed fund can be expected to charge a higher management fee, while a passively managed fund such as an index fund should charge a minimal management fee.

A fund may charge an annual **12b-1 fee** or distribution fee, also calculated as not more than 1.0 percent per year of the fund's asset value. Some mutual funds charge other extra fees as well, passing on fund expenses to shareholders. You should consider fee structure and rate when choosing mutual funds, and this can be done through calculations of the expense ratio.

Taken together, the annual management, distribution, and expense fees are measured by the **expense ratio**—the total annual fees expressed as a percentage of your total investment. The expense ratio averages around 0.99 percent for all mutual funds, but it may be more than 2 percent of your investment's value. [5]

That may not sound like much, but it means that if the fund earns a 5 percent return, your net return may be less than 3 percent (and after taxes, it's even less). When choosing a fund, you should be aware of all charges—especially annual or ongoing charges—that can affect your investment return.

Say you invest in a load fund with a 5 percent front-end load and an expense ratio of 2.25 percent and suppose the fund earns a 5 percent return. Figure 17.3 "Mutual Fund Example" shows how your \$5,000 investment would look after one year.

Figure 17.3 Mutual Fund Example

Original investment	5,000.00
Load (5%)	- 250.00
Net investment	4,750.00
Return (5%)	+ 237.50
End-of-year assets	4,987.50
Less expenses (2.25%)	- 112.22
Ending investment	4,875.28
Net return (ending investment value - net investment)	125.28
Net percentage return	2.64%

Expenses can be a significant determinant of your net return, and since expenses vary by fund, fund strategy (active or passive), and fund sponsor, you should shop around and understand what your costs of investing will be.

Owning shares of a mutual fund means owning shares in a pool of assets. The returns of the fund are the returns of those assets: interest, dividends, or gains (losses). Income may come from **interest distribution** if the fund invests in bonds or interest-producing assets or as **dividend distribution** if the fund invests in stocks.

Mutual funds buy and sell or “turn over” the fund assets. Even passively managed funds need to rebalance to keep pace with their benchmarks as market values change. The **turnover ratio** is the percentage of fund assets that have been turned over or replaced in the past year, a measure of the fund’s trading activity.

Turnover can create capital gains or losses. Periodically, usually once per year, the fund’s net capital gains (or losses) are distributed on a per share basis as a **capital gains distribution**. You would expect turnover to produce more gains than losses. The more turnover, or the higher the turnover ratio, the greater the capital gains distributions you may expect.

Unless you have invested in a tax-exempt savings plan such as an Individual Retirement Account (IRA) or a 401(k), interest and dividend distributions are taxable as personal income, as are capital gains, including capital gains distributions. A higher turnover ratio may mean a higher tax expense for capital gains distributions. Most open-end mutual funds allow you the option of having your income and gains distributions automatically reinvested rather than paid out, which means that you may be paying taxes on earnings without ever “seeing” the money.

Mutual Fund Information and Strategies

All mutual fund companies must offer a **prospectus**, a published statement detailing the fund’s assets, liabilities, management personnel, and performance record. You should always take the time to read it and to take a closer look at the fund’s investments to make sure that the fund will be compatible and appropriate to your investment goals.

For example, suppose you have an investment in an S&P 500 Index fund and now are looking for a global stock fund to complement and diversify your holdings in domestic (U.S.) equities. You go to the Web site of a large mutual fund company offering hundreds of funds. You find a stock fund called “Global Stock Fund”—sounds like it’s just what you are looking for. Looking closer, however, you can see that this fund is invested in the stocks of companies in Germany, Japan, and the United Kingdom. While they are not U.S. stocks, those economies are similar to the U.S. economy, perhaps too similar to provide the diversity you are looking for.

Or suppose you are looking for a bond fund to create income and security. You find a fund called the “Investment Grade Fixed Income Fund.” On closer inspection, however,

you find that the fund does not invest only in investment grade bonds but that the *average* rating of its bonds is investment grade. This means that the fund invests in many investment grade bonds but also in some speculative grade bonds to achieve higher income. While this fund may suit your need for income, it may not be appropriate for your risk tolerance.

Mutual fund companies make this information readily available on Web sites and in prospectuses. You should always make the extra effort to be sure you know what's in your fund. In addition, mutual funds are widely followed by many performance analysts. Ratings agencies such as Morningstar and investment publications such as *Barron's* and *Forbes* track, analyze, and report the performance of mutual funds. That information is available online or in print and provides comparisons of mutual funds that you may find helpful in choosing your fund.

In print and online newspapers, mutual fund performance is reported daily in the form of tables that compare the average returns of funds from week to week. Reported average returns are based on the net asset value per share (NAVPS). Investors can use this information to choose or compare funds and track the performance of funds they own.

In conclusion, since a mutual fund may be made up of any kind or many kinds of securities (e.g., stocks, bonds, real estate, and commodities), it is not really another kind of investment. Rather, it is a way to invest without specifically selecting securities, a way of achieving a desired asset allocation without choosing individual assets.

The advantages of investing in a mutual fund are the diversification available with minimal transaction costs and the professional management or security selection that you buy when you buy into the fund.

Compared to actively managed funds, passively managed or index funds offer similar diversification but with lower management fees and expense ratios because you aren't paying for market timing or security selection skills. The turnover ratio shows how passive or active the fund management is. About half of all equity mutual funds have a turnover ratio of less than 50 percent.[6]

Performance history has shown that actively managed funds, on average, do not necessarily outperform passively managed funds.[7]

Since they usually have higher fees, any advantage created by active management is usually canceled out by their higher costs. Still, there are investors who believe that some mutual funds and mutual fund managers can, on average, outperform the markets or the indexes that provide the benchmarks for passively managed funds.

KEY TAKEAWAYS

- Mutual funds provide investors with
 - diversification,

- security selection,
 - asset allocation.
 - Funds may be actively or passively managed.
 - Index funds mirror an index of securities, providing diversification without security selection.
 - Funds of funds provide the investor with preselected funds.
- Mutual funds may be structured as
 - closed-end funds,
 - open-end funds,
 - exchange-traded funds.
- Some funds are structured to achieve specific investment goals:
 - Lifestyle funds with target dates to minimize liquidity risk through asset allocation
 - Leveraged funds to increase return through using debt
 - Inverse funds to increase return through active management with the expectation of a down market
- Mutual fund costs may include
 - a sales charge when shares are purchased, or front-end load,
 - a sales charge when shares are sold, or back-end load,
 - a management fee while shares are owned, or
 - a 12b-1 (distribution) fee while shares are owned.
 - The management expense ratio is the total mutual fund cost expressed as a percentage of the funds invested.
- Fees vary by
 - fund sponsor,
 - fund strategy (active or passive),
 - fund sales (direct or through a broker).
- Returns from a mutual fund include returns on the securities it owns, including
 - interest distributions,

- dividend distributions,
- capital gains distributions.
- A fund prospectus details the fund’s investment holdings, historic returns, and costs. Mutual fund ratings in the financial media are another source of information.

EXERCISES

1. View the video “Investing in Mutual Funds” at http://efinancedirectory.com/multimedia/Investing_in_Mutual_Funds_Video.html. According to the speaker, are no-load funds free? Should you buy mutual funds near the end of a year? Survey the articles and tools at “Mutual Funds 101” on Yahoo! Finance at http://finance.yahoo.com/funds/mutual_funds_101. According to both this source and the video, what are the two key benefits of mutual funds? How are mutual funds classified? How can you gauge the performance of a mutual fund? What are the costs of owning mutual funds? Where can you get information about a mutual fund?
2. Securities regulations require complete and continuous disclosure, also referred to as transparency, so that investors will know what they are getting into when they invest. This requirement is partly satisfied through a fund prospectus. Read the SEC’s advice on how to read a prospectus and what to look for at <http://www.sec.gov/answers/mfprospectustips.htm>. Then compare that information with the advice offered at <http://www.getrichslowly.org/blog/2009/04/23/how-to-read-a-mutual-fund-prospectus/>. On the same page, browse the “Best of Get Rich Slowly” links, too. How does this information reinforce the idea that you should thoroughly read and understand a prospectus before investing in a fund?
3. View Morningstar’s performance data chart for various categories of mutual funds at <http://news.morningstar.com/fundReturns/CategoryReturns.html>. What general categories of funds are included in the chart? Over what time periods are average returns compared? On July 15, 2009, the chart identified the following funds as having average returns of more than 5 percent after five years: natural resources stock, utilities stock, Latin America stock, Pacific/Asia stock, diversified emerging markets stock, emerging markets bonds, long-term government bonds, and equity precious metals. What is the performance of those funds today?



4. Read Investopedia's article on the costs of investing in mutual funds at <http://www.investopedia.com/university/mutualfunds/mutualfunds2.asp>. What is your management expense ratio (MER)? Do mutual funds with higher expenses generally earn higher returns?
5. Take Investopedia's tutorial on how to read a mutual fund table in the financial news at <http://www.investopedia.com/university/mutualfunds/mutualfunds4.asp>. What do the columns mean? What is being compared? What can you learn from mutual fund tables that may help you choose funds or track the performance of funds you own? Share your ideas with classmates.
6. In My Notes or your personal finance journal, record your study of a fund you choose to track. Read the prospectus, check its ratings, and compare its week-to-week performance with that of similar funds in the mutual funds table in the financial section of a newspaper. Record your observations, questions, and commentary as you go about deciding hypothetically whether or not to invest in that fund.

[1] FinanceScholar.com, <http://www.financescholar.com/history-mutual-funds.html> (accessed June 15, 2009).

[2] The Investment Company Institute, *2009 Investment Company Fact Book*, 49th ed., 2009, http://www.ici.org/pdf/2009_factbook.pdf (accessed June 15, 2009).

[3] The Investment Company Institute, *2009 Investment Company Fact Book*, 49th ed., 2009, http://www.ici.org/pdf/2009_factbook.pdf (accessed June 15, 2009).

[4] The Investment Company Institute, *2009 Investment Company Fact Book*, 49th ed., 2009, http://www.ici.org/pdf/2009_factbook.pdf (accessed June 15, 2009).

[5] The Investment Company Institute, *2009 Investment Company Fact Book*, 49th ed., 2009, http://www.ici.org/pdf/2009_factbook.pdf (accessed June 15, 2009).

[6] The Investment Company Institute, *2009 Investment Company Fact Book*, 49th ed., 2009, http://www.ici.org/pdf/2009_factbook.pdf (accessed June 15, 2009).

[7] Burton G. Malkiel, *A Random Walk Down Wall Street* (New York: W. W. Norton & Company, Inc., 2007), 360.

17.2 Real Estate Investments

LEARNING OBJECTIVES

1. Distinguish between direct and indirect investments in real estate.
2. Identify the four main ways to invest in real estate indirectly.
3. Explain the role and the different kinds of REITs.
4. Discuss the role and uses of mortgage-backed securities.

When you buy a home, even with a mortgage, you are making a **direct investment** because you are both the investor and the owner who holds legal title to the property. For most people, a home is the single largest investment they ever make.

As an investor, you may want to include other real estate holdings in your portfolio, most likely as an **indirect investment** in which you invest in an entity that owns and manages real estate. Studies have shown that real estate is a good diversifier for financial investments such as stocks and bonds.[1]

Direct Investments

Sonia is looking to buy her first home. After graduating from college, she decided to stay on because she liked the town and found a job as an elementary school teacher. She loves her job, but her income is limited. She finds a nice, two-family house in a neighborhood close to the college. It needs some work, but she figures she can use the summer months to fix it up—she’s pretty handy—and renting to students won’t be a problem. The tenants will pay their own utilities. Sonia figures that the rental income will help pay her mortgage, insurance, and taxes, and that after the mortgage is paid off, it will provide a nice extra income.

Many real estate investors begin like Sonia, buying a rental property that helps them to afford their own home. If you actively manage the rental property, there are tax benefits as well. Of course, you have to provide maintenance services and arrange for repairs, and, in Sonia’s case, perhaps give up a bit of privacy. A second or vacation home can be used as a rental property as well, although the tax benefits are less assured. In both cases, the investor is making a direct investment in the property.

The advantages to a direct investment are the additional rental income and tax benefits. The disadvantages are that real estate is relatively illiquid, and the investment concentrates your portfolio in one asset class—residential real estate. Conventional wisdom was that real estate was a good hedge against inflation, but the recent burst of the housing bubble—not only in the United States but also worldwide—has cast a

shadow on that thinking. Also, to realize the tax benefits, you must actively manage the rental property, and being a landlord is not for everyone.

Other direct real estate investments include **commercial property**, or property exclusively for rent, and undeveloped land. Developers buy property or land and seek to profit from quickly improving and reselling it. Both are more speculative investments, especially if purchased with debt financing. They may also prove to be illiquid and to concentrate assets, making them inappropriate investments for investors without a large and diversified portfolio.

Indirect Investments

Investors who want to add a real estate investment to their portfolio more often make an indirect investment. That is, they buy shares in an entity or group that owns and manages property. For example, they may become limited partners in a real estate syndicate.

A **syndicate** is a group created to buy and manage commercial property such as an apartment, office building, or shopping mall. The syndicate may be structured as a corporation or, more commonly, as a limited partnership.

In a **limited partnership**, there is a general partner and limited partners. The general partner manages the entity, while the limited partners invest in partnership shares. The limited partners are only liable for the amount of their investment; that is, they can lose only as much as they have put in. Limiting liability is particularly important in real estate, which relies on leverage or debt financing. Investors find syndicates valuable in limiting liability and in providing management for the property.

Another form of indirect investing is a **real estate investment trust (REIT)** —a mutual fund of real estate holdings. You buy shares in the REIT, which may be privately held or publicly traded on an exchange. The REIT is a fund invested in various commercial properties. Some REITs specialize, concentrating investments in specific kinds of property, such as shopping malls, apartments, or vacation properties.

To qualify as a REIT in the United States (for the allowable tax benefits), a fund must

- be managed by directors as a corporation or trust,
- offer transferrable shares,
- not be a financial institution,
- have at least a hundred shareholders,
- have at least 95 percent of income from interest, dividends, and property,
- pay dividends that are at least 90 percent of the REIT's taxable income,
- have at least 75 percent of its assets invested in real estate,
- get at least 75 percent of gross revenue from real estate.

An equity REIT invests in property, while a mortgage REIT provides real estate financing. A hybrid REIT does both. REITs do for real estate what mutual funds do for other assets. They provide investors with a way to invest with more liquidity and diversity and with comparatively lower transaction costs.

Another way to invest in the real estate market is to invest in the real estate financing rather than the actual real estate. **Mortgage-backed securities (MBS)** are bonds secured by pools of mortgages owned by large financial institutions or agencies of the federal government.

It is difficult to price mortgage-backed securities—to gauge their present and future value and their risk. Like any bond, mortgage-backed securities are vulnerable to interest rate, reinvestment, and inflation risk, but they are also particularly vulnerable to economic cycles and to default risk. If the economy is in a recession and unemployment rises, mortgage defaults will likely rise. When mortgage defaults rise, and the value of mortgage-backed securities falls.

Because they are complicated and risky, mortgage-backed securities are appropriate only for investors with a large enough asset base and risk tolerance to support the investment. MBS investors are usually institutional investors or very wealthy individuals.

KEY TAKEAWAYS

- Direct investments in real estate involve controlling ownership and management of the property.
- Indirect investment involves owning a share of a company that owns and manages the real estate.
- Indirect investments may be structured as
 - a syndicate,
 - a limited partnership,
 - a real estate investment trust (REIT).
- A REIT is designed as a mutual fund of real estate holdings.
 - An equity REIT invests in property.
 - A mortgage REIT invests in real estate financing.
 - A hybrid REIT does both.
- Mortgage-backed securities are another way to invest in a real estate market by investing in its financing, but they are considered too risky for individual investors.

EXERCISES

1. View the video “Top Eight Real Estate Investment Mistakes”

at <http://www.5min.com/Video/Top-Eight-Real-Estate-Investment-Mistakes-24084962>.

According to the speaker, based on eight common mistakes that real estate investors make, what eight things should you do to succeed? The same speaker gives advice on how to be a landlord at <http://www.5min.com/Video/What-Does-It-Take-to-Be-a-Landlord-27579055>. What five points does she identify as most important?

2. What have been your experiences as a landlord or as a tenant? Collaborate with classmates to develop two lists: advantages and disadvantages of direct investing in rental property and of being a tenant in a residential or commercial space. Have you had any experience with developing or “flipping” property for resale? What is your opinion of direct investing in foreclosed homes to flip for profit? For perspectives, see the 2009 Money Talks videos on this subject, such as “Vulture Investing” at <http://www.youtube.com/watch?v=rXF1dIEvtfs&feature=fvw>. According to the MSN article “Flipping Houses Is Harder than It Looks” at <http://realestate.msn.com/article.aspx?cp-documentid=13107725>, why is flipping houses so challenging?
3. Are you already invested in real estate? Record in My Notes or your personal finance journal information about your investment and/or your strategy for including real estate in your investment portfolio. Will you invest directly, indirectly, or both? What is your plan and timetable for executing your strategy? Choose one of the REITs listed at “In Reality” at <http://www.inreality.com/restocks/linmrt.html> to track and to consider hypothetically as an investment. What might be some advantages and risks of investing in this or another REIT as part of your investing strategy?

[1] Jack Clark Francis and Roger G. Ibbotson, *Contrasting Real Estate with Comparable Investments, 1978–2004* (Ibbotson Associates, 2007), <http://corporate.morningstar.com/ib/asp/detail.aspx?xmlfile=1409.xml> (accessed June 24, 2009).

17.3 Commodities and Collectibles

LEARNING OBJECTIVES

1. Define and describe the characteristics and uses of derivative contracts.
2. Explain the roles of precious metals in an investment portfolio.
3. Describe the methods available to individual investors in making commodities investments.
4. Compare and contrast the advantages and disadvantages of using collectibles in an individual investment portfolio.

Some investors prefer to invest directly in the materials that are critical to an industry or market, rather than investing in the companies that use them. For example, if you think that the price of oil is going to rise, one way to profit from the higher price would be to buy shares of oil companies that profit by refining oil and selling gasoline, fuels, and other petroleum products. Another way is to buy the oil itself as a commodity.

Commodities are raw materials—agricultural products, metals, energy sources, currencies, and so on—that go into producing goods and services. Investing in commodities is a way to profit directly from the raw material rather than from its products. As discussed in Chapter 12 "Investing", commodities trading is not new—the first commodities exchange in the United States was established in 1848.

Because they are or rely on natural resources, commodities have a largely unpredictable supply. They have inherent risk, because they are exposed to changes in weather or geology or global politics. Commodities trading began as a way for commodity producers and consumers to manage their risks. These traders are managing risks going forward; that is, they hedge by buying and selling commodities that they expect to exist in the future. This trading is done using future and forward contracts—types of derivatives, discussed in the Chapter 12 "Investing".

Investing in commodities involves transaction costs and a time limit on realizing your gains (or losses), because derivatives are time-sensitive contracts created with an expiration date.

Commodity investing is risky business, because it is done through derivatives—assets whose value depends on the value of another asset. For instance, the value of a contract to buy or sell soybeans at some time in the future depends on the value of the soybeans. When you invest in a derivative, you are taking on the risk of both contract and the asset that it depends on. One strategy to manage this risk is to invest in both, creating a situation in which one investment can act as a hedge for the other. The way this works is if the underlying asset (the soybeans) gains value, you'll lose on the derivative (the futures contract on soybeans); but if the asset loses value, you can gain on the derivative.

One example of this is the “prebuy” offer common in regions where homes are heated by oil. When you heat your home with oil, you are exposed to the risk of volatility in the price of oil. This volatility can upset your household budget and, since heat is a

necessity, can take away from your other spending needs. You could guarantee your winter's cost of oil by buying it all in the summer, but you would need a huge oil tank to store all that oil until winter. As an alternative and to attract customers, some heating oil suppliers offer a prebuy deal. During the summer, customers can buy their winter's supply of oil at a set price, and the oil company will then deliver it as needed over the winter months.

If the price of oil goes up, the customer is protected and gains by not having to pay the higher price. The oil dealer loses the extra profit it could have had. On the other hand, if the price of oil goes down, the dealer is assured its profit, while the customer pays more than necessary without the prebuy deal.

In the language of commodities trading, the customer is “short” oil, that is, needs it and seeks to lock in a price through the prebuy deal. The oil dealer is “long” oil, that is, has a supply and wants to sell it and so seeks to lock in the sale of a certain quantity at a certain price. The customer wants to lock in a low price, while the dealer wants to lock in a high price. Each is betting on what will be “low” and “high” relative to what the real price of oil turns out to be in the future. The hedge of the prebuy deal relieves both the customer and the dealer of the uncertainty or risk. The deal creates its own risks, but if those are smaller than the risk of oil's price volatility, then the dealer will offer the prebuy, and the customer will take it.

When you trade commodities, you are also exposed to the risks of trading in the commodities markets. Another reason that commodities investing is risky for individual investors is because professional commodity investors often take speculative positions, betting on the future price of derivatives without holding investments in the underlying assets. Speculators can influence that future price, which after all is just the market's consensus of what that price “should” be. For individual investors, the risks of commodities trading often outweigh the advantage of whatever diversification they bring to the portfolio.

Gold, Silver, and Precious Metals

Historically, gold and silver have been popular investments of individual investors. For thousands of years, gold and silver have been used as a basis for currency value, either minted into coins or used to back currency value. When a currency is backed by gold, for example, or is “on the gold standard,” there should be a direct relationship between the value of the currency and the value of the gold.

In times of inflation or deflation, investors worry that the value or purchasing power of currency will change. They may invest in gold or silver as a more stable store of wealth than the currency that is supposed to represent the metal. In other words, if investors lose faith in the currency that represents the gold, they may trade their money for the gold.

Most currencies used today are not backed by a precious metal but by the productivity and soundness of the economy that issues them. For example, the value of the U.S. dollar is not related to the value of an ounce of gold, but to the value of the U.S. economy.

When economic or political turmoil seems to threaten the health of an economy and hence the value of its currency, some investors choose to invest in the gold or silver that seems to retain its value. For that reason, gold or silver has historically been regarded as a hedge against inflation.

How exactly do you buy gold? Gold bullion is sold as bars or wafers in units of one kilogram or 32.15 troy ounces. Metal dealers and some banks will sell bars or wafers ranging from 5 grams (or 0.16075 troy ounces) to 500 ounces or more. Transaction costs are relatively high, between 5 percent and 8 percent, and there is the cost of storing and securing the gold bars or wafers.

A more popular way to buy gold is as coins, which are more easily stored and secured. Gold coins are minted by several countries, including the United States, and may be bought from banks, brokers, and dealers for a fee of about 2 percent.

Commodity Indexes and Exchange-Traded Funds

As with stocks, bonds, and real estate, the most popular way for individual investors to invest in any commodities—including precious metals—is through open-end mutual funds or exchange-traded funds (ETF). The fund may invest in a variety of contracts, diversifying its holdings of the commodity. It has professional managers who understand the pricing of such contracts and can research the market volatility and the global economy. Using a fund as a way of investing in commodities thus provides both diversification and expertise. It can also give you more liquidity as fund shares can be quickly traded into the market.

For example, if you expect inflation and want to buy gold, instead of trying to buy gold bars, you could invest in a fund (iShares), an exchange-traded fund (Comex Gold), or mutual funds (Fidelity Select Gold or Vanguard Precious Metals). These funds allow you to “own” gold but also to get diversification, expertise, and liquidity, reducing your risk.

There are mutual funds or exchange-traded funds for nearly every commodity that is traded. There are also passively managed commodity index funds, similar to stock or bond index funds. Investing in commodities can be a way to achieve asset diversification in your portfolio, because often a commodity such as gold is countercyclical to the economy, and therefore is countercyclical to your stock and bond holdings as well. Commodities may also add significant risk to a portfolio, however, so the advantage of adding them as a diversification strategy may be canceled out by the additional risk.

Collectibles and Unique Investments

Any asset that is tradable may become an investment; that is, it may be purchased and held with the expectation that it can be sold when its value increases. So long as there is a market for it—a buyer—it potentially may be sold at a gain.

Collectibles and unique investments include the following:

- Antique furniture
- Stamps
- Coins
- Rare books
- Sports trading cards
- Vintage cars
- Vintage clothes
- Vintage wines
- Vintage vinyl
- Fine art
- Musical instruments
- Jewelry
- Historical curios
- Other ephemera

As investments, collectibles cannot be standardized in the way that stocks, bonds, or even real estate and used cars can be. Each asset has attributes that make it more or less valuable, even among similar assets. Its value is hard to judge, and therefore it is harder for buyer and seller to agree on a price.

Professional appraisers are knowledgeable about both the item and the market and are trained to evaluate such assets. Theirs is a better-educated guess, but it is still just an estimate of value. Individual investors also consult books on collectibles and may purchase professional market research, pricing indexes, and auction records.

Sometimes one person's trash is another person's treasure. It is fun to think that you may unearth a rare "find" at a garage sale or flea market or that some family heirloom has more than sentimental value. Usually, however, your ability to cash in on your luck is limited by your ability to convince someone else of its worth and to sell when its market is trendy.

Collectibles, including "ephemera" such as antique letters and photographs, are usually sold by dealers or collectors or through a private sale arranged between buyer and seller. The dealers may establish a gallery to showcase items for sale. Auction houses such as Christie's or Sotheby's organize auctions of many items or "lots" to attract buyers and provide catalogues with details on the items for sale, such as their "provenance" or ownership history.

The advantage of unique assets as investments is that you may enjoy collecting and having the items as well as watching their value appreciate. If you are a guitarist, for

example, having and being able to play a vintage guitar may mean more to you than the fact that it may be a good investment. For some, collecting becomes a hobby.

The disadvantages of investing in collectibles are

- high probability of mispricing, as markets are inefficient;
- lack of liquidity;
- lack of earnings, as there are no dividends or interest;
- holding costs of the investment.

Unless you are knowledgeable about your item and its markets (and even if you are), it is common to suffer from mispricing. Collectibles' markets are relatively inefficient because trading partners vary widely in their knowledge about pricing. Both buyers and sellers try to persuade each other of an asset's rarity and value. It is easy to be misled and to make mistakes in this market. Online sales and auctions of collectibles at sites such as eBay may be fun for hobbyists, but they typically are not good venues for investors.

If you are trading through a dealer, you can check the dealer's reputation through professional organizations, local business bureaus, and Internet blogs and Web sites, especially where customers can provide a rating or critique. You should also always try to find comparable items to compare prices. If feasible, get a second opinion from an independent appraiser. Knowledge is an important bargaining chip. The more you know, the more likely you are to be satisfied with your investment decision, even if you ultimately walk away from the deal.

Unique investments may not be readily saleable, or their markets may be subject to trends and fashions that cause price volatility. This means that your investment may ultimately be a source of gain but that you cannot count on it as a source of liquidity. If you have foreseeable liquidity needs, it may not be appropriate to tie up your wealth in a Chinese vase, autographed baseballs, vintage action figures, or Navajo rugs.

There are no dividends or interest paid while you hold collectibles, so if you have income needs you should choose a more useful investment. There are also other costs, such as storage, security, maintenance, and insurance. Your investment actually returns a negative net cash flow—costs you more than it brings in—until you realize its potential gain by selling it.

Collectibles can be a source of joy and a store of wealth, and you may realize a healthy return on your investment. In the meantime, however, they create costs so that your eventual return will have to be large enough to compensate for those costs to make them a really worthwhile investment.

KEY TAKEAWAYS

- Commodities are raw materials and agricultural products.

- Commodities are used to produce other goods and so are traded forward using derivative contracts.
 - Derivative contracts can be used to hedge an investment in an asset, or to speculate on the price volatility of the commodity.
 - Because of their volatility, commodities markets are riskier than asset markets.
 - Precious metals, especially gold, are often used to lower portfolio risk by providing a hedge against inflation.
 - Individual investors can invest in commodities using index funds and exchange-traded funds.
- Collectibles and unique assets may appreciate in value, acting as a store of wealth, but the disadvantages of using them as investments are
 - high probability of mispricing,
 - illiquid markets,
 - illiquid returns or no returns until the asset is sold,
 - holding period maintenance costs.

EXERCISES

1. View Bloomberg's commodities and futures charts at <http://www.bloomberg.com/markets/commodities/cfutures.html>. Choose one or two commodities to track and find out all you can about investing in those commodities. Read an article on how to read a commodities price chart at <http://www.thegraintrader.com/chart-patterns/how-to-read-a-commodity-price-chart.html>. Create an annotated drawing to apply the information about reading a commodities chart to an example of a chart taken from the Bloomberg's Web site. Write an interpretation of the chart in My Notes or your personal finance journal.
2. Read Investopedia's article on investing in gold and silver at <http://www.investopedia.com/articles/optioninvestor/06/goldsilverfutures.asp>. According to this source, who should consider investing in gold and silver and for what reason? What are examples of other precious metals in the futures market? How do investors offset futures contracts before their delivery dates?

3. Sample the collectibles listed on eBay at <http://popular.ebay.com/ns/Collectibles.html>. Are there any that interest you that you would consider investment grade? Why or why not? What has been your experience with buying and selling collectibles? In what circumstances might you consider adding investments in a collectible to your portfolio? What would you collect? Research this collectible to determine current pricings, locate markets, and identify dealers and experts. What would you have to sacrifice to invest in this collectible? How much could you make in the future?

Chapter 18 Career Planning

Introduction

Bryon always knew he wanted to be a fireman. He can remember as a kid being elated by the fire trucks as they screamed past on their way to helping people. He has always been sure that a career in protection services is the right choice for him. Given that people will always need those services, Bryon figures he'll have job security, will be able to raise a family, and will have many chances for advancement along with plenty of thrills on the job.

Although she is starting out as a lab technician, Tomika is not clear about her career ambitions. She wants to do something fun and interesting, where she won't hate going to work every day—but mostly she wants a career that will afford her the opportunity for professional advancement, increasing pay, and the chance to raise a family. She has

enjoyed her science courses at school. She figures that since health care is a growth industry, with technological advancements and the aging population, she will choose a career in health.

Some people know what they want to do at an early age. For most people, however, the path is just not that clear. Career planning and development can be a process of trial and error as you learn your abilities and preferences by trying them out. Sometimes a job is not what you thought it would be, sometimes you are not who you thought you would be. The better your decision-making process—the more objective and methodical it is—the less trial and error you will have to endure.

Your financial sustainability depends on having income to support your spending, saving, and investing. A primary component of your income—especially earlier in your adult life—is income from your wages or salary, that is, from working, selling your labor. Your ability to maximize the price that your labor can bring depends on the labor market you choose and your ability to sell yourself. Those abilities will be called on throughout your working life. You will make job and career choices for many different reasons. This chapter looks only at the financial context of those choices.

18.1 Choosing a Job

LEARNING OBJECTIVES

1. Describe the macroeconomic factors that affect job markets.
2. Describe the microeconomic factors that influence job and career decisions.
3. Relate life stages to both microeconomic factors and income needs.
4. Describe how relationships between life stages, income needs, and microeconomic factors may affect job and career choices.

A person starting out in the world of work today can expect to change careers—not just jobs—an average of seven times before retiring.[1]

Those career changes may reflect the process of gaining knowledge and skills as you work or changes in industry and economic conditions over several decades of your working life. Knowing this, you cannot base career decisions solely on the circumstances of the moment. However, you also cannot ignore the economics of the job market.

You may have a career in mind but have no idea how to get started, or you may have a job in mind but have no idea where it may lead. If you have a career in mind, you should research its **career path**, or sequence of steps that will enable you to advance. Some careers have a well-established career path—for example, careers in law, medicine, teaching, or civil engineering. In other occupations and professions, career paths may not be well defined.

Before you can even focus on a career or a job, however, you need to identify the factors that will affect your decision making process.

Macro Factors of the Job Market

The job market is the market where buyers (employers) and sellers (employees) of labor trade, but it usually refers to the possibilities for employment and its rewards. These will differ by field of employment, types of jobs, and geographic region. The opportunities offered in a job market depend on the supply and demand for jobs, which in turn depend on the need for labor in the broader economy and in a specific industry or geographic area.

The economic cycle can affect the aggregate job market or employment rate. If the economy is in a recession, the economy is producing less, and there is less need for labor, so fewer jobs are available. If the economy is expanding, production and its need for labor are growing.

Typically, a recession or expansion affects different industries in different ways. Some industries are cyclical and some are countercyclical. For example, in a recession, consumer spending is often down, so retail shops and consumer goods manufacturers—in cyclical industries—may be cutting jobs. Meanwhile, more people are continuing their education to improve their skills and the chances of getting a job, which is harder to do in a recession, so jobs in higher education—a countercyclical industry—may be increasing.

For example, it would have been a bad time in the spring of 2009 to think about a career in auto manufacturing in the United States with Ford, General Motors, and Chrysler all announcing massive layoffs, plant closings, and facing bankruptcy. The industry may survive, but it probably won't be able to rebuild that fast.

Global events such as an outbreak of war, the nationalization of a scarce natural resource, the price of a critical commodity such as crude oil, the collapse of a vital industry, and so on, may also cause changes in the global economy that affect job markets.

Another macroeconomic factor is change in technology, which can open up new fields of employment and make others obsolete. With the advent of digital cameras, for example, even single-use conventional cameras are no longer being manufactured in great quantity, and film developers are not needed as much as they once were. However, there are more jobs for developers of electronic cameras and digital applications for creating images and using digital images in communications channels, such as mobile phones.

Figure 18.2 Workers in the Vacuum Cleaner Factory at Reedsville, West Virginia



Library of Congress, February 1937

A demographic shift also can change entire industries and job opportunities. A historical example, repeated in many developing countries, is the mass migration of rural families to urban centers and factory towns during an industrial revolution. Changes in the composition of a society, such as the average age of the population, also affect job supply and demand. Baby booms create demand for more educators and pediatricians, for example, while aging populations create more demand for goods and services relating to elder care.

Social and cultural factors affect consumer behavior, and consumer preferences can change a job market. Demand for certain kinds of products and services, for example, such as organic foods, hybrid cars, clean energy, and “green” buildings, can increase job opportunities in businesses that address those preferences.

Thus, changes in demand for a product or service will change the need for labor to produce it. On a larger scale, economies typically shift their focus over time as different industries become “growth” industries, that is, the drivers of growth in the economy. In the mid-twentieth century, the United States was a manufacturing economy, driven by the production of durable and consumer goods, especially automobiles. In the 1990s, the computer/internet/tech sector had a larger role in driving growth in the U.S. economy due to technological breakthroughs. Currently, education and health care services are the growing sectors of the economy due to demographic and political changes and needs. [2]

If you are entrepreneurial and intend to be self-employed, your job opportunities may be affected by the ease with which you can start and maintain a business. Ease of entry, in turn, may be affected by macro factors such as the laws and regulations in the state where you intend to do business and the existing competition in the market you are entering.

The labor market is competitive, not just at an individual level but on a global, industrywide scale. As transportation and especially communication technology has improved, many steps in a manufacturing or even a service process may be outsourced, done by foreign labor. That competition affects the U.S. job market as jobs are moved overseas, but it also opens new markets in developing economies. You may be interested in an overseas job, as American companies open offices in Asian, South American, African, and other countries. Globalization affects job markets everywhere.

Micro Factors of Your Job Market

Whether you are employed or self-employed, whether you look forward to going to work every day or dread it, employment determines how you spend most of your waking hours during most of your days. Employment determines your income and thus your lifestyle, your physical well-being, and to a large extent your satisfaction or emotional well-being. Everyone has a different idea about what a “good job” is. That idea may change over a lifetime as circumstances change, but some specific micro factors will weigh on your decisions, including your

- abilities,
- skills,
- knowledge,
- lifestyle choices.

Abilities are innate talents or aptitudes, what you are capable of or good at. Circumstances may inhibit your use of your abilities or may even cause disabilities. However, you often can develop your abilities—and compensate for disabilities—through training or practice. Sometimes you don’t even know what abilities you have until some experience brings them out.

When Tomika says she is “good with people” or when Bryon says that he is a “natural athlete,” they are referring to abilities that will make them better at some jobs than others. Abilities can be developed and may require upkeep; athletic ability, for example, requires regular fitness workouts to really be maintained. You also may find that you lack some abilities, or think you do because you’ve never tried using them.

Usually, by the time you graduate from high school, you are aware of some of your abilities, although you may not be aware of how they may help or hinder you in different jobs. Also, your idea of your abilities relative to others may be skewed by your context. For example, you may be the best writer in your high school, but not compared to a larger pool of more competitive students. Your high school or college career office may

be able to help you identify your abilities and skills and applying that knowledge to your career decisions.

Your job choices are not predetermined by your abilities or apparent lack of them. An ability can be developed or used in a way you have not yet imagined. A lack of ability can sometimes be overcome by using other talents to compensate. Thus, ability is a factor in your job decisions, but certainly not the only one. Your knowledge and skills are equally—if not more—important.

Skills and knowledge are learned attributes. A skill is a process that you learn to apply, such as programming a computer, welding a pipe, or making a customer feel comfortable making a purchase. Knowledge refers to your education and experience and your understanding of the contexts in which your skills may be applied.

Education is one way to develop skills and knowledge. In secondary education, a vocational program prepares you to enter the job market directly after high school and focuses on technical skills such as baking, bookkeeping, automotive repair, or building trades. A college preparatory program focuses on developing general skills that you will need to further your formal education, such as reading, writing, research, and quantitative reasoning.

Past high school or a year or two of community college, it is natural to question the value of more education. Tuition is real money and must be earned or borrowed, both of which have costs. There is also the opportunity cost of the wages you could be earning instead.

Education adds to your earning power significantly, however, by raising the price of your labor. The more education you have, the more knowledge and skills you have. The smaller the supply of labor with your particular knowledge and skills, the higher the price your labor can command. This relationship is the rationale for becoming specialized within a career. However, both specialization and versatility may have value in certain job markets, raising the price of your labor.

More education also confers more job mobility—the ability to change jobs when opportunities arise, because your knowledge and skills make you more useful, and thus valuable, in more ways. Your value as a worker or employee enables you to command higher pay for your labor.

Statistics show a consistent relationship between education and earnings. Over a lifetime of work, say about forty to forty-five years, in the United States a person with a college degree will earn over a million dollars more than someone with a high school diploma. According to a recent study,

“There is a positive correlation between higher levels of education and higher earnings for all racial/ethnic groups and for both men and women...The income gap between high school graduates and college graduates has increased significantly over time. The earnings benefit is large enough for the average college graduate to recoup both

earnings forgone during the college years and the cost of full tuition and fees in a relatively short period of time.”[3]

Not only are you likely to earn more if you are better educated, but you are also more likely to have a job with a pension plan, health insurance, and paid vacations—benefits that add to your total compensation. Although it may seem quite expensive to you now, your college education is definitely worth it: worth the opportunity cost and worth the direct costs of tuition, fees, and books.[4]

Your choices will depend on the characteristics and demands of a job and how they fit your unique constellation of knowledge, skills, personality, characteristics, and aptitudes. For example, your knowledge of finance, visual pursuit skills, ability to manage stress and tolerate risk, aptitude for numerical reasoning, enjoyment of competition, and preference to work independently may suit you for employment as a stockbroker or futures trader. Your manual speed and accuracy, verbal comprehension skills, enjoyment of detail work, strong sense of responsibility, desire to work regular hours in a small group setting, and preference for public service may suit you for training as a court stenographer. Your word fluency, social skills, communication skills, organizational skills, preference to work with people, and desire to lead others may suit you for jobs in education or sales. And so on.

Lifestyle choices affect the amount of income you will need to achieve and maintain your lifestyle and the amount of time you will spend earning income. Lifestyle choices thus affect your career path and job choices in key ways. Typically, when you are beginning a career and have few, if any, dependents, you are more willing to sacrifice time and even pay for a job that will enhance your skills and help you to progress along your career path. As a journalist, for example, you may volunteer for an overseas post; or as a nurse you may volunteer for extra rotations. As a computer programmer, you may assist in the development of open source software.

As you advance in your career, and perhaps become more settled in your life—maybe start a family—you are less willing to sacrifice your personal life to your career, and may seek out a job that allows you to earn the income that supports your dependents while not taking away too much of your time.

Your income needs typically increase as you have dependents and are trying to save and accumulate wealth, and then decrease when your dependents are on their own and you have accumulated some wealth. Your sources of income shift as well, from relying on income from labor earlier in your life to relying on income from investments later.

When your family has grown and you once again have fewer dependents, you may really enjoy fulfilling your ambitions, as you have decades of skills and knowledge to apply and the time to apply them. Increasingly, as more people retain their health into older age, they are working in retirement—earning a wage to improve their quality of life or eliminate debt, turning a hobby into a business, or trying something they have always wanted to do. Your life cycle of career development may follow the pattern shown in Figure 18.4 "Lifecycle Career Development".

Figure 18.4 Lifecycle Career Development

Life Stage	Career Concerns
Exploration and establishment	Develop your skills, acquire knowledge, explore jobs, start earning income, gain experience
Growth	Advance your career, leverage knowledge and skills, increase earnings
Accomplishment	Achieve your goals, maximize earnings, build on success and reputation
Late career	Redirect knowledge and skills, contribute, mentor successors

Regardless of age, your lifestyle choices will affect your job opportunities and career choices. For example, you may choose to live in a specific geographic region based on its

- rural or urban location,
- proximity to your family or friends,
- differences or similarities to where you grew up,
- cultural or recreational offerings,
- political characteristics,
- climate,
- cost of living.

Sometimes you may choose to sacrifice your lifestyle preferences for your ambitions, and sometimes you may sacrifice your ambitions for your preferences. It's really a matter of figuring out what matters at the time, while keeping in mind the effect of this decision on the next one.

KEY TAKEAWAYS

- Macroeconomic factors affect job markets, including
 - economic cycles,
 - new technology or obsolescence,
 - demographic changes,
 - changes in the global economy,
 - changes in consumer preferences,

- changes in laws and regulations.
- Job markets are globally competitive.
- Microeconomic factors influence job and career decisions, including
 - abilities or aptitudes,
 - skills and knowledge,
 - lifestyle choices.
- Microeconomic factors and income needs change over a lifetime and typically correlate with age and stage of life.
- Job and career choices should realistically reflect income needs.

EXERCISES

1. Record in My Notes or your personal finance journal your work history and current thoughts about your future work life. What jobs have you held? In each job, what experience, knowledge, or skills did you acquire or develop? What are your future job preferences, and why do you prefer them? Do you have a planned career path? What potential advantages and opportunities do your preferences or plans offer? What potential disadvantages and costs may your preferences or plans entail?
2. Go online to find out the differences in definition between an occupation and a vocation, profession, trade, career, and career path. Which combination of concepts best describes the approach you plan to take to satisfy your needs for income from future employment? Sample the links at <http://www.rileyguide.com/careers.html>. Choose and record or bookmark the three best online sources of career information for you.
3. Take a free online career development aptitude test, such as the one at http://www.careertest.us/Career_Aptitude_Survey.htm. (Note that sites offering free aptitude, personality, or job preference tests often require online registration. You should evaluate the reliability, credibility, and security of any site you use to explore your career preferences.) What personality attributes and personal aptitudes are micro factors that may affect your career choices or your chances of success in a particular job? View the kinds of assessments you may be asked to take as a job applicant or employee

at http://www.ppicentral.com/Pdf/Employee_Aptitude_Survey.pdf. What aptitudes are included in the battery of tests that make up the Employee Aptitude Survey? How might an employer use the test results?

4. In My Notes or your personal finance journal, list your most important job skills, aptitudes, and preferences on which you plan to expand or build a career. Then list the specific job skills you feel you need to develop further through additional education or experience. How and where will you get those skills and at what cost? Next, describe the lifestyle you hope to support through income from future employment. What aspects of that lifestyle would be easiest for you to modify or sacrifice for your career or income goals?

[1] U.S. Department of Labor, Bureau of Labor Statistics, “National Longitudinal Survey of Youth,” <http://www.bls.gov/nls/nlsy79r19sup1.pdf> (accessed July 23, 2009).

[2] U.S. Department of Labor, Bureau of Labor Statistics, “Industries with the Fastest Growing and Most Rapidly Declining Wage and Salary Employment, 2006–16,” in “Industry Output and Employment Projections to 2016,” *Monthly Labor Review*, November 2007, <http://www.bls.gov/emp/empfastestind.htm> (accessed August 5, 2009).

[3] Sandy Baum and Jennifer Ma, *Education Pays: The Benefits of Higher Education for Individuals and Society* (Princeton, NJ: The College Board, 2007).

[4] Sandy Baum and Jennifer Ma, *Education Pays: The Benefits of Higher Education for Individuals and Society* (Princeton, NJ: The College Board, 2007).

18.2 Finding a Job

LEARNING OBJECTIVES

1. List and describe venues for finding job opportunities.
2. Explain the value of networking.
3. Trace the steps in pursuing a job opportunity, specifically your cover letter, résumé, and interview.
4. Identify the critical kinds of information that should be provided in a job offer.

A job search is a part of everyone’s life, sooner or later. It may be repeated numerous times throughout your career. You may initiate a job search in hopes of improving your position and career or changing careers, or you may be forced into the job market after

losing your job. Whatever the circumstances, when you look for a job you are seeking a buyer for your labor. The process of having to “sell” yourself (your time, energy, knowledge, and skills) is always revealing and valuable.

Finding a Job Market

Before you can look for a job, you need to have an idea of what job market you are in. The same macro factors that you consider in your choice of career may make your job search easier or harder. Ultimately, they may influence your methods of searching or even your job choice itself. For example, as unemployment has increased in the wake of the most recent financial crisis, the labor market has become much more competitive. In turn, job seekers have become much more creative about advertising their skills—from broader networking to papering a neighborhood with brochures on windshields—and more accepting of job conditions, including lower compensation. A good place to start is the U.S. Department of Labor’s “Occupational Outlook Handbook.” [1]

The handbook is updated annually. For hundreds of industries and specific jobs it tells you the training and education you need, what you will earn and what your job prospects are, what the work entails, and what the working conditions are like. The site also offers valuable tips on conducting job searches.

Knowing the job classification and industry name will focus your search process and make it more efficient. Once you understand your job market, look at the macro and micro factors that affect it along with your personal choices. For example, knowing that you are interested in working in business, transportation, or the leisure and hospitality industry, you are ready to research that field more and plan your job search.

You are looking for a buyer of your labor, so you need to find the markets where buyers shop. One of the first things to do is find out where jobs in your field are advertised. Jobs may be advertised in

- trade magazines,
- professional organizations or their journals,
- career fairs,
- employment agencies,
- employment Web sites,
- government Web sites,
- company Web sites,
- your school’s career development office.

Figure 18.5 "Sources of Information about Jobs" describes these venues in more detail.

Figure 18.5 Sources of Information about Jobs

Trade magazines	Publications that have classified ads listing jobs in your field or area of interest.
Professional organizations	Associations that run ads or postings for jobs via their journals, Web sites, and discussion lists.
Career fairs	Employers gather to recruit job applicants, often in a particular industry or region.
Employment agencies	Businesses that work as “headhunters” for employers, who pay the agency a fee for finding and screening a good recruit.
Employment Web sites	Places where employers and job seekers post and respond to information about job opportunities and work availability. You will find evaluations of employment Web sites at http://www.employmentwebsites.org (the International Association of Employment Web Sites).
Government Web sites	Career information and current listings for state and federal government jobs. Listings for federal jobs are at http://federaljobs.net/federal.htm and http://www.usajobs.gov . State government jobs may be found at http://www.statelocalgov.net/50states-jobs.cfm .
Company Web sites	Current job listings posted by a company’s human resource personnel on the company’s Web site.
College career development office	Job placement services on campus for graduates and alumni, run by career counselors.

Consider Sandy, for example, who is graduating with a bachelor’s degree in hospitality management. Her dream job is to work at an inn or bed and breakfast in a resort location. The Professional Association of Innkeepers International (PAII) offers a Web site and journal—good places to start reading and learning about the industry. It also lists upcoming trade conferences that may be a good opportunity for Sandy to meet some people in the industry.[2]

Browsing online, Sandy learns about a big job fair coming to her region, sponsored by the PAII in association with a chamber of commerce and an economic development agency. This is her chance to meet recruiters in her industry and find out about actual opportunities. Each prospective employer will have a table, and Sandy will go from table to table, getting information, dropping off her résumé, and possibly setting up interviews.

She also plans to register with an employment agency that specializes in hotel management for smaller hotels and inns. The agency will screen her application and try

to match her with appropriate jobs in its listings. For a specified time it will keep her résumé on file for future opportunities.

Sandy's strategy includes posting her résumé on employment web sites, such as Monster.com, and Careerbuilder.com. Browsing jobs online, Sandy discovers there is a strong seasonal demand for hospitality workers on cruise ships, and this gives her an idea. If the right choice doesn't come up right away, maybe a summer job working for a cruise line would be a good way to develop her knowledge and skills further while looking for her dream job in management.

Sandy needs to research destinations as well as businesses and wants to talk with people directly. She knows that cold calls—calling potential employers on the phone as a complete unknown—is the hardest way to sell herself. In any industry, cold calling has a much lower success rate than calling with a referral or some connection—otherwise known as networking.

Networking is one of the most successful ways of finding a job. It can take many forms, but the idea is to use whatever professional, academic, or social connections you have to enlist as many volunteers as possible to help in your job search. According to popular theory, your social networks can be seen as assets that potentially help you build wealth. That is, the number and positions of people you can network with and the economically viable connections you can have with them are a form of capital—**social capital**.

Word of mouth is a powerful tool, and the more people know about your job search, the more likely it is that they or someone they know will learn of opportunities. Sandy's strategy also includes joining online career networking sites, such as LinkedIn, and discussion lists for people in the hospitality industry. Sandy finds a helpful Yahoo! group called The Innkeeper Club and posts a query about what employers look for in a manager.

While Sandy was in college getting her degree in hospitality management, her best friend from high school was happily styling hair in a local salon. Sandy never thought to network through her friend, but it turns out that one of her friend's clients has a sister who owns a country inn with her husband, and they are thinking about hiring someone to manage their enterprise. After driving several hours to meet them, Sandy learns they have changed their minds and are not hiring now. However, they know of two other innkeepers who may be looking for help. Since they are impressed with Sandy, they are happy to pass along her name and résumé.

That's how networking works—you just never know who may be helpful to you. The obvious people to start with are all the people that you know: former professors, former employers, friends, family, friends of family, friends of friends, family of friends, and so on. The more people you can talk with or send your résumé to (i.e., impress), the greater the chances that someone will make an offer.

Another good networking strategy is to call or e-mail people working in the industry, individuals who are currently in or just above the position you'd like to have, and ask to talk with them about their work. If you make it clear that you are not asking for or expecting a job offer from them, many people will be happy to take a half hour to discuss their jobs with you. They may have valuable tips or leads for you or be willing to pass along your name to someone else who does.

Selling Yourself: Your Cover Letter and Résumé

To get a job you will have to convince someone who does not know you that you are worth paying for. You have an opportunity to prove that in your cover letter and résumé and again in your interview.

The cover letter, whether mailed or an e-mailed, is your introduction to your prospective employer. You have three paragraphs on one page to briefly introduce yourself and show how you can make a profitable contribution to the company. The objective of the cover letter is to get the reader to look at your résumé with a favorable impression of you created by the letter.

Your first paragraph should establish your purpose in making contact, the reason for the letter. You should make it clear what job you are applying for and why you are making this particular contact. If someone referred you, mention him or her by name. If you met the addressee previously, remind him or her where and when that was, for example, "It was great to chat with you at the Jobs Fair in Cleveland last week." The more specifically you can identify yourself and separate yourself from the pool of other job seekers, the better.

The second paragraph of your cover letter should summarize your background, education, and experience. All this information is on your résumé in more detail, so this is not the place to expound at length. You want to show briefly that you are qualified for the position and have the potential to make a contribution.

Your third paragraph is your opportunity to leave the door open for further communication. Make it clear where and how you can be reached and how much you appreciate the opportunity to be considered for the position.

The **résumé**, the summary list of your skills and knowledge, is what will really sell you to an employer, once you have made a good enough impression with the cover letter to get him or her to turn the page. A good résumé provides enough information to show that you are willing and able to contribute to your employer's success—that it is worth it to hire you or at least to talk to you in an interview.

List the pertinent facts of where and how you can be reached: address, phone number, e-mail address. Your qualifications will be mainly education and experience. List any degrees, certificates, or training you have completed after high school. Be sure to include

anything that distinguishes your academic career, such as honors, prizes, or scholarships.

List any employment experience, including summer jobs, even if they don't seem pertinent to the position you are applying for. You may think that being a camp counselor has nothing to do with being a radiology technician, but it shows that you have experience working with children and parents, have held a position where you are responsible for others, and that you are willing to work during your school breaks, thus showing ambition. If you are starting out and can't be expected to have lots of employment experience, employers look for hints about your character—things like ambition, initiative, responsibility—that may indicate your success working for them.

Internships that you did in college or high school are also impressive, showing your willingness to go beyond the standard curriculum and learn by working—something an employer will expect you to continue to do on the job, too. While you are in school, you should recognize the value added by experiential learning and the positive impression that it will make. An internship can also give you a head start in networking if your supervisor will be a good reference or source of contacts for you. The internship may even result in a job offer; you may not necessarily want to accept, but at the very least, having an offer to fall back on takes some of the pressure off your search.

For each job, be clear about the position you held and the two most important duties or roles you performed. Don't go into too much detail, however. The time to expand on your story is in the interview.

If you have done internships or volunteer work or if you are a member of civic or volunteer organizations, be sure to list those as well. They are hints about you as a person and may help you to stand out in the pool of applicants.

A common mistake is to list too much extra information on your résumé and to focus too much on what you want. For example, stating an objective such as “to obtain a great position in hotel management.” Your employer cares about what you can do for the company, not for yourself. The following are some tips for developing your résumé:

- Avoid adjectives or adverbs when describing your past performance. If you were an achiever in school, that will be reflected in your grades, degrees, honors, and awards. “Hype” can sound boastful; besides, you can discuss your performance in detail at the interview.
- Be honest and state your case without exaggeration. It is easier than ever for employers to check on your history, and they will. Falsification of information on your résumé may become grounds for dismissal, if you are hired.
- Don't include personal details unless they are strongly relevant to the job you are seeking. Employers typically do not want to know that you love dogs, were raised in Singapore, or are a single mother.
- Be correct. Proofread your résumé and have someone else proof it as well. This is your opportunity to make a good impression. Any error indicates not just that

you made an error, but that you are sloppy, lazy, or willing to let your work go public with errors.

- Keep it to one page, if possible. Employers typically are looking at many résumés to fill one position, so make it easy and quick for the reader to see how qualified you are.

A myriad of sample résumés and sample cover letters may be found online, but be wary of templates that may not fit you or your prospective job. Employers in your field may have particular expectations for what should be on your résumé or how it should be structured. Maybe you should list your skills or perhaps your education first. Perhaps it would be preferable to list your past employment experiences in reverse chronology (with your most recent job first). Advice is plentiful about how to write a résumé, but there is no one right way or best way. Choose an appropriate style and format for your job category that will present you in the best possible light as a prospective employee.

Many employers want you to fill out an application form independently of or instead of a résumé. They may also ask for references, especially from former employers who are willing to recommend you. Be aware that hirers and human resources department personnel routinely follow up on references and letters of recommendation. Find out more about filling out employment applications at About.com at <http://jobsearch.about.com/cs/jobapplications/a/jobapplication.htm> and other sites.

There are many resources available in print and online to help you write a good résumé. In addition, résumé writing workshops and short courses are often held at community colleges or adult education centers.[4]

Selling Yourself: Your Interview

The interview—a face-to-face conversation with a prospective employer—is your chance to get an offer. You want to make a good personal impression: dress professionally but in clothes that fit well and comfortably. Be polite and cordial but also careful not to assume too familiar a tone.

You may be asked a series of predetermined questions, or your interviewer may let the conversation develop through open-ended questions. The interviewer may let you establish its direction in order to learn more about how you think. However the conversation is guided, you want to be able to showcase your suitability for the job and what you bring to it. Figure 18.8 "Questions Prospective Employers Commonly Ask" identifies some questions employers commonly ask in job interviews.

Figure 18.8 Questions Prospective Employers Commonly Ask

Tell us a little about yourself and what brings you here today. Why did you leave your last job?
Why do you want this job? What do you know about us? Why do you want to work for us?
How does your education/background/experience make you a good fit for this job? Why do you think you're the best person for the job? What qualities and skills can you bring to the job?
Do you feel you have strong communication skills/technology skills/writing skills (etc., as relevant)?
What can you do for our company? How will you be an asset to us? How can you help us improve our efficiency/productivity/products/services/ bottom line (etc., as relevant)?
What are your career goals? Where do you see yourself in five years' time?
Are you a team player? Have you had much experience working as part of a team? What was your contribution to the team? What were the results of the team effort?
What are your strengths and weaknesses? What successes and failures have you experienced in your career so far?
How would you handle a situation in which...? What would you do if...? Have you ever had a problem with...?
What is your ideal job? What qualities do you look for ideally in a position/company/boss/coworker?

Be prepared for interviewers who prefer to focus on general behavioral questions rather than on job specific questions. **Behavioral interviews** emphasize your past actions as indicators of how you might perform in the future. The so-called **STAR Method** is a good approach to answering behavioral questions, as it helps you to be systematic and specific in making your past work experiences relevant to your present job quest. The STAR Method[5]

is a process of conveying specific situations, actions, and outcomes in response to an interviewer's question about something you did.

- **Situation:** Give specific details about the situation and its context.
- **Task:** Describe the task or goal that arose in response to the situation.
- **Action:** Describe what you did and who was involved.
- **Result:** Describe the (positive) outcome.

For example:

Question: We are looking for someone who is willing to take initiative in keeping our office systems working efficiently and who can work without a lot of direct supervision. Does that describe you?

Answer: Absolutely. For example, in my last job I noticed that the office supply system was not working well. People were running out of what they needed before letting me know what to order (**Situation**). I thought there needed to be a better way to anticipate and fill those needs based on people's actual patterns of use (**Task**). So, I conducted a poll on office supply use and used that information to develop a schedule for the automatic resupply of key items on a regular basis (**Action**). The system worked much more smoothly after that. I mentioned it in my next performance review, and my boss was so impressed that she put me in for a raise (**Results**).

There are some questions employers should *not* ask you, however. Unless the information is a legal requirement for the job you are interviewing for, antidiscrimination laws make it illegal for an employer to ask you your age; your height or weight; personal information such as your racial identity, sexual orientation, or health; or questions about your marital status and family situation, such as the number of children you have, whether you are single, or if you are pregnant or planning to start a family.

It is also important for you to have questions to ask in an interview, so you should prepare a few questions for your interviewer. Questions could be about the company's products or services, the company's mission or goals, the work you would be doing, who you would be reporting to, where you would be located, and the opportunities for advancement. You want your question to be specific enough to show that you have already done some research on the company, its products, and markets. This is a chance to demonstrate your knowledge of the job, company, or industry—that you have done your homework—as well as your interest and ambition.

Unless your interviewer mentions compensation, don't bring it up. Once you have the job offer, then you can discuss compensation, but in the interview you want to focus on what you can do for the company, not what the company can do for you.

You can also use the interview to learn more about the company. Try to pick up clues about the company's mission, corporate culture, and work environment. Are people wearing business attire or "business casual"? Are there cubicles and private offices or a more open workspace? Are people working in teams, or is it more of a conventional hierarchy? You want to be in a workplace where you can be comfortable and productive. Be open-minded—you may be able to work quite well in an environment you have never worked in before—but think about how you can do your best work in that environment.

After your interview, send a thank you note, and follow up with a phone call if you don't hear back. You may ask your interviewer for feedback—so that you can learn for future interviews—but don't be surprised and be gracious, if you don't get it. Always leave the door open. You never know.

Accepting an Offer

A job offer should include details about the work you will be performing, the compensation, and the opportunity to advance from there. If any of that information is missing, you should ask about it.

In many jobs, you may be asked to do many things, especially in entry-level jobs, so the job description may be fairly vague. Your willingness to do whatever is asked of you (within the law and according to ethical standards) should be compensated by what you stand to gain from the job—in pay or in new knowledge and experience or in positioning yourself for your next job. Some jobs are better looked at as a kind of graduate education.

Your **compensation** includes not only your wages or salary but also any benefits that the employer provides. As you read in previous chapters, benefits may include health and dental insurance, disability insurance, life insurance, and a retirement plan. Compensation also includes time off, sick days, and vacation days. You should understand the company's policies and flexibility in applying them.

Know what your total compensation will be and whether it is reasonable for the job, industry, and current job market. Asking around may help, especially on online discussion groups with relative anonymity. People often are reluctant to disclose their compensation, and companies discourage sharing this information because it typically reveals discrepancies. For example, people hired in the past may be receiving less (or more) pay than people hired recently for the same position. In addition, gender gap—in which men receive higher pay than women in the same position—is often a problem.

To gauge how reasonable a job offer is, you can research professional associations about pay scales or find statistical averages by profession or region. Online resources include simple salary comparison calculators, such as the one at <http://monster.salary.com>. You also will find data and related articles linking salaries to specific job titles, area codes, states, educational levels, and years of work experience, for example, at [http://www.payscale.com/research/US/Country=United States/Salary](http://www.payscale.com/research/US/Country=United_States/Salary).

Realistically compare the job offer to your needs. Different geographic areas have different costs of living, for example, so the same salary may afford you a very different lifestyle in Omaha than in New York City. Your employment compensation is most likely an important source—perhaps your only source—of income. That income finances your plan for spending, saving, and investing. A budget can help you to see if that income will be sufficient to meet your financial goals. If you already have financial responsibilities—student loans, car loans, or dependents, for example—you may find that you can't afford the job.

You can negotiate your compensation offer; many employers expect you to try, but some will just stand by their offer—take it or leave it. Your ability to negotiate depends in part on the number of candidates for that particular job and how quickly the employer needs

to fill it. You will find guidelines online for evaluating job offers and negotiating your compensation, for example, among the useful links at <http://www.rileyguide.com/offers.html>. Another resource includes the simple “Job Offer Checklist” at <http://www.collegegrad.com/offer>.

In some cases, your employer may offer you a contract, a legal agreement that details your responsibilities and compensation and your employer’s responsibilities and expectations. As with any contract, you should thoroughly understand it before signing. If you will be employed as a member of a trade union or labor union under a **collective bargaining** agreement, the terms of the contract may be applicable to all union members and therefore not negotiable by individual employees.

It is exciting to get a job offer, but don’t let the excitement overwhelm your good sense. Before you accept a job, feel positive that you can live with it. You never really know what a job is like until you do, but it is better to go into it optimistically. When you are just starting a career or trying one out, it is most important to be able to learn and grow in your job, and you may have a period of “paying your dues.” But if you are really miserable in a job, you won’t be able to learn and grow, no matter how “golden” the opportunity is supposed to be.

KEY TAKEAWAYS

- Venues for finding jobs include
 - trade magazines,
 - professional organizations or their journals,
 - career fairs,
 - employment agencies or “headhunters,”
 - employment Web sites,
 - company Web sites,
 - government Web sites,
 - your school’s career development office.
- Networking is a valuable way to expand your job search.
- Selling your labor to a prospective employer usually involves sending a cover letter and résumé, filling out an application form, and/or having an interview.
 - The cover letter should get a prospective employer to read your résumé.
 - The résumé should get the employer to offer you an interview.
 - The interview should get the employer to offer you the job.

- A job offer includes information on the
 - job;
 - compensation, including benefits;
 - opportunities for advancement.
- Accepting a job offer may involve
 - evaluating the offer in relation to your needs,
 - examining a job contract, or
 - negotiating the compensation.

EXERCISES

1. Read “Tomorrow’s Jobs” at the Bureau of Labor Statistics Web site at <http://www.bls.gov/oco/oco2003.htm>. What job categories are showing the greatest growth? Which job categories show negative growth? In what sector of the economy or in what industry will you seek a job or develop your career? Record or chart your thoughts in My Notes or your personal finance journal. What are the reasons for your choices? What education, knowledge, skills, aptitudes, preferences, and experiences do you bring to them?
2. In My Notes or your personal finance journal, list all the individuals and groups you can think of to tell about your job search or career development quest. Include their contact information. Write a message you could adapt, as needed, for each audience to send when you are ready. Then go online to research other individuals and groups you could include in your networking or could go to for more information about job opportunities. Read up on developing your practical networking skills online at Boston.com (“Flex Your Networking Skills,” http://www.boston.com/jobs/bighelp2009/january/flex_your_network). Make a fact-finding appointment with a contact you find through networking and record your thoughts on the outcomes. Were you able to practice key networking skills? What did you learn?
3. Write or revise your résumé and draft a general cover letter you could adapt for different job openings. Network with classmates to get critiques and ideas for clarifying or improving these tools to attract a prospective employer. What other supporting documents could you include in your job application?

4. How will you prepare for a job interview? Read a *New York Times* interview with the CEO of Cisco Systems, John Chambers, about corporate leadership and recruitment at <http://www.nytimes.com/2009/08/02/business/02corner.html?th&emc=th>. In the second half of the article, the interviewer asks, “How do you hire?” What qualities of new recruits to corporate management does this CEO look for? Read the articles on interviewing at the following Careerbuilder.com URLs:

- http://www.careerbuilder.com/jobposter/small-business/article.aspx?articleid=ATL_0174INTERVIEWBLUNDERS
- http://www.careerbuilder.com/jobposter/small-business/article.aspx?articleid=ATL_0089INTERVIEWSTYLES
- http://www.careerbuilder.com/jobposter/small-business/article.aspx?articleid=ATL_0087INTERVIEWNO-NOS
- http://www.careerbuilder.com/jobposter/small-business/article.aspx?articleid=ATL_0082INTERVIEWQUESTIONS

5. Anticipate the questions you may be asked in an interview. For example, what could you say in a behavioral interview? Prepare your answer using the examples found at <http://webat102.officearrow.com/job-search/the-star-method-of-interviewing-oaiur-107/view.html>. For edification and fun, collaborate with classmates to do role-plays of job interviews. Videotape your interviews. View the videos and read the twenty tips on “How to Nail an Interview” at <http://www.howtonailaninterview.com/#vid>. Also see the Vault.com videos of interviews at <http://www.youtube.com/watch?v=S1ucmfPOBV8>. As an employer, would you hire yourself? What interviewing preparations and skills do you think you need to work on?

[1] See, for example, U.S. Department of Labor, Bureau of Labor Statistics, <http://www.bls.gov/oco>, and “Tomorrow’s Jobs,” <http://www.bls.gov/oco/print/oco2003.htm> (accessed July 20, 2009).

[2] The Professional Association of Innkeepers International, <http://www.paii.org> (accessed July 23, 2009).

[3] Robert Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon & Schuster, 2000).

[4] Ellen Gordon Reeves, *Can I Wear My Nose Ring to the Interview?* (New York: Workman Publishing, 2009).

[5] The STAR Method: <http://web.mit.edu/career/www/guide/star.html>, <http://www.drexel.edu/SCDC/resources/STAR%20Method.pdf>, http://www.officearrow.com/home/articles/the_officearrow_career_center/human_resources_and_job_search/p2_articleid/294/p142_id/294/p142_dis/3 (accessed August 5, 2009).

18.3 Leaving a Job

LEARNING OBJECTIVES

1. Describe the processes of voluntary job loss.
2. Describe the processes of involuntary job loss.
3. Identify the financial impacts of an involuntary job loss.
4. Identify major federal legislation that addresses employment issues and describe its importance in labor markets.

Statistically, it is almost impossible for you to expect to have one job or career for your entire working life. At least once and possibly many times, you will change jobs or even careers. You will have to leave your current or former job and find another. Handling that transition can be difficult, especially if the transition is not what you would have preferred. How you handle that transition may affect your success or satisfaction with your next position.

You may leave your job voluntarily or involuntarily. When you leave voluntarily, presumably you have had a chance to make a reasoned decision and have decided that the net benefits of moving on are more than the net benefits of staying.

Leaving Voluntarily

You may decide to leave a job and move to another for the following reasons:

- move to a position with more responsibility, opportunity to advance, or compensation
- be in a more compatible work environment or corporate culture
- learn a new skill
- become self-employed by beginning an entrepreneurial venture
- make a transition from a military to a civilian job

In other cases, you may leave employment permanently or temporarily because of the following reasons:

- further your education
- assume family care, for example of a child or parent
- take time off for recreation
- retire

Whatever your motivation for leaving your job, your decision should make sense; that is, it should be based on a reasoned analysis of how it will affect your life. If you have dependents, you will have to consider how your decision may affect their lives too.

Since your job is a source of income, leaving your job means a loss of that income. You need to consider how you can maintain or change your current use of income (i.e., spending and saving levels) with that loss.

If you are changing jobs, your new job will replace that income with new income that is more than, equal to, or less than your old paycheck. If it is equal to or more than your former income, you may maintain or even expand your spending, saving, and investing activities. Extra income will provide you with more choices of how to consume or save. If it is less than your former income, you will have to decrease your spending or saving to fit your current needs. Your budget can help you foresee the effects of your new income on your spending and saving.

If you are leaving employment, then there will be no replacement income, so your spending and saving activities should reflect that loss, unless you have an alternative source of income to replace it. If you are going on to graduate school, perhaps you have a fellowship or scholarship. If you are assuming family care responsibilities, perhaps another family member has offered financial support. If you are retiring, you should have income from invested capital (e.g., your retirement savings) that can be used to replace your wages or salary.

If you are initiating the job change, be sure you try to cause the least disruption and cost to your employer. Let your employer know of your decision as soon as is practical, and certainly before anyone else in the company knows. “Two weeks notice” is the convention, but the more notice you can give, the less inconvenience you may cause. Offer to help train your successor or be available to provide information or assist in the transition. The more cordially you leave your job, the better your relationship with your former employer will be, which may reflect well on you in future networking.

If you participated in a defined contribution retirement plan you own those funds to the extent that you are vested in your employer’s contributions and have contributed your own funds. You can leave those funds as they are invested, or you can transfer them to your new job’s plan and invest them differently. There may be some time limits to doing so, and there may be tax considerations as well, so be sure you consult with your former employer and understand the tax rules before moving any funds.

The decision to leave a job and perhaps to leave employment means leaving nonincome benefits that can create opportunity costs, including

- intellectual or emotional gratifications of the work,
- enjoyment of your colleagues,
- opportunities to learn.

If you have had a negative work experience, leaving may allow you to reduce boredom, eliminate job dissatisfaction, end conflict, avoid unwanted overtime, or reduce stress, but these are reasons for leaving a job that you probably should not share with a new or prospective employer.

Surveys reported in 2005 had this to say about job satisfaction in the United States:[1]

- Job satisfaction generally declined since 2000.
- Forty-five percent of workers say they are either satisfied or extremely satisfied with their jobs.
- Twenty percent feel very passionate about their jobs.
- Thirty-three percent believe they have reached a dead end in their career.
- Twenty-one percent are eager to change careers.
- Older workers are the most satisfied and the most engaged in their work.
- Younger workers are the most distressed and feel the least amount of loyalty to their employers.
- Small-firm employees feel far more engaged in their work than their corporate counterparts.
- Job security, health care coverage, and professional development are valued above additional compensation.

According to a 2009 Salary.com survey, only around 15 percent of workers said they were “extremely satisfied” with their jobs. Working retirees and those in the health care and Internet industries were the most satisfied, while workers under thirty and those working in finance-related fields were the least satisfied. At the time of the survey, about 60 percent of workers were looking around for another job, despite most claiming they were generally satisfied with their wages or salaries. Many were worried about being laid off in a down economy.[2]

As you can see, many micro and macro factors may enter into a decision to leave a job. You spend many of your waking hours working, and deciding to change jobs is about much more than just income. It is still a decision about income, however, so you should carefully weigh the effects of that decision on your personal financial well-being.

Leaving Involuntarily

If you leave your job involuntarily, you will have to make adjustments for a loss of income that you were not planning to make. That may be difficult, but not so much as you think.

Involuntary job loss may be due to your employer’s decision, an accident or disability, or unexpected circumstances, such as the acquisition, merger, downsizing, or closing of the

company you work for. Your employer also may decide to lay you off or fire you. A layoff implies a temporary job loss due to a circumstance in which your employer needs or can afford less labor.

If the layoff is due to an economic recession when there is less demand for the product you create, then it may be affecting your entire industry. That would mean you would have a harder time finding a similar job. If layoffs are widespread enough, however, there may be federal, state, or local government programs aimed at helping the many people in your situation, such as a retraining program or temporary income assistance.

You may get laid off because your employer is no longer as competitive or profitable and so has to cut costs or because the company has lost financing. If the layoffs are specific to your employer, you may be able to find a similar position with another company or you may be able to establish your own competitive business in the same industry.

When you are fired, the employer permanently terminates your employment based on your performance. **Involuntary termination**, or getting fired, will cause a sudden loss of income that usually requires sudden adjustments to spending and saving. You may have to use your accumulated savings to finance your expenditures until that income can be replaced by a new job.

An injury or illness—to you or a dependent—may create a temporary or permanent involuntary job loss. It usually also means a period of unemployment. Depending on the circumstances, your employer may be willing to help ease the transition, perhaps by offering you a more flexible schedule, adjusting your responsibilities, or providing specialized equipment to enable you to do a job.

By law, employers may not discriminate against people with disabilities so long as they are able to do a job. A **job accommodation** is any reasonable adjustment to a job or work environment that makes it possible for an individual with a disability to perform or continue to perform job duties.

If you become disabled and unable to work, you may be able to replace some or all of your wage income with insurance coverage, if you have disability insurance that covers the specific circumstances (as discussed in Chapter 10 "Personal Risk Management: Insurance"). If your disability is permanent, you may qualify for federal assistance through Social Security. If someone else is liable for your disability, in the case of an accident or through negligence, his or her insurance coverage may provide some benefit, or you may have a legal claim that could provide a financial settlement.

If your employer initiates your job change, be sure to discuss his or her obligations to you before you leave. Some employer responsibilities are prescribed by law, as shown in Figure 18.11 "Major U.S. Employment Legislation". Other responsibilities are prescribed by union contract, if applicable, and some are conventions or courtesies that your employer may—or may not—choose to extend.

Severance is compensation and benefits offered by your employer when you are fired. Your employer is not obligated to offer any severance, but “two weeks pay” is the convention for wages. Your employer is also not required to “pay” for your remaining sick days or vacation days or to extend your benefits, including retirement contributions or life insurance, unless specified in a contract. In most cases, your employer is required under federal law to offer you the opportunity to remain covered under your employee health insurance plan if you assume the cost. This continuation of health coverage is provided by COBRA, the Consolidated Omnibus Budget Reconciliation Act of 1986 (discussed in Chapter 10 "Personal Risk Management: Insurance"). Employers must also provide proof of “insurability,” which enables unemployed workers to purchase private health insurance, if they wish, without having to undergo medical exams.

Employment Protection

Federal and state laws govern relationships between employers and employees. A large part of employment law addresses hiring and firing issues as well as working conditions. You should be familiar with the laws that apply where you work (as they differ by state and sometimes by county) so that you understand your responsibilities to your employer and your employer’s obligations to you.

Major federal legislation that addresses these issues is outlined in Figure 18.11 "Major U.S. Employment Legislation".

Figure 18.11 Major U.S. Employment Legislation[3]

Legislation	Regulation	Applies to
National Labor Relations Act, 1935	Prevents employees who engage in union activity from being fired	Employers whose business is engaged in interstate commerce
Fair Labor Standards Act, 1938	Established minimum wage and overtime	All private employees, amended in 1974 to include state and local employees
Title VII, The Civil Rights Act, 1964	Prohibits discrimination on the basis of race, color, religion, sex, or national origin	Employers with at least 15 employees
Age Discrimination in Employment Act, 1967	Prevents discrimination on the basis of age against employees who are over 40 years old	Employers having at least 20 employees
Occupational Safety and Health Act, 1970	Established safety standards and employees' right to refuse to work in unsafe conditions	All employers
Employee Retirement Income Security Act, 1974	Prevents employees from being discharged solely to prevent them from vesting or qualifying for benefits under qualified pension plans	Employers who maintain qualified pension plans for their employees' benefit
Immigration Reform and Control Act, 1986	Prevents discrimination against employees on the basis of national origin or citizenship status	Employers having at least 4 employees
Consolidated Omnibus Budget Reconciliation Act (COBRA), 1986	Guarantees extension but not funding of health insurance coverage after termination for employees and dependents	Employers having at least 20 employees
Americans with Disabilities Act, 1990	Prevents discrimination against disabled employees	Employers having at least 15 employees
Family and Medical Leave Act, 1993	Guarantees a 12-week unpaid leave for illness, childbirth, or to care for an ill relative	Employers having at least 50 employees
Health Insurance Portability and Accountability Act, 1996	Limits exclusion from employer-sponsored coverage because of preexisting condition or medical history	All employers that offer employer-sponsored health insurance

These laws cover all aspects of employment: hiring, negotiation, working conditions, compensation, benefits, and termination. Workers can sue a company for **wrongful discharge**—for being fired for any reason barred by an employment law.

Employers often seek to protect themselves from suits by requiring terminated employees to sign a form releasing the company from liability.

Companies have ethical standards for dealing with the hiring and firing of employees, but they also may have informal practices for encouraging unwanted employees in good standing to leave. Employment laws cannot protect workers against some unethical practices, but they have clauses that prohibit **retaliation** against employees who invoke those laws or enlist government assistance to enforce them. The laws also protect **whistleblowers** who report employer infractions to government authorities.

The federal government provides unemployment compensation insurance through the Federal-State Unemployment Insurance Program to employees who “lose their jobs through no fault of their own.”[4]

You must meet eligibility requirements to qualify, and the benefits are limited, although they may be extended in certain circumstances. Benefits were extended in February 2009, for example, to as long as seventy weeks in many states, as the number of unemployed workers rose to six million.

Your job and eventually your career will play many roles in your life. It will determine how you spend your time, who you spend your time with, where you live, and how you live. It will probably be a primary determinant of income and therefore of how much you can spend, save, and invest. How you chose to spend, save, and invest is up to you, and your financial decisions can have far-reaching consequences. The more you know and the more you understand, the more you can make decisions that can satisfy your dreams.

KEY TAKEAWAYS

- You can expect to leave a job at least once in your career.
- You can leave a job voluntarily or involuntarily.
- You may leave voluntarily to change jobs or to leave employment, temporarily or permanently.
- You may leave a job involuntarily through a
 - layoff,
 - disabling accident or injury,
 - firing.
- Leaving a job involuntarily means a sudden loss of income.
- Involuntary job loss may be compensated with
 - severance,

- employment insurance,
- continuation of health and other benefits.
- Federal, state, and local laws address employment issues, including hiring, working conditions, compensation, and dismissal. Laws exist to protect workers.

EXERCISES

1. What do you look for in a job? Record in My Notes or your personal finance journal the characteristics of a job that you value most when seeking a job and the characteristics that bother you the most or would cause you to consider leaving a job voluntarily. Take an online job satisfaction survey or collaborate with classmates to develop questions for a job satisfaction survey that you can administer to other students. What do you find are the top ten characteristics of a great job offering a lot of job satisfaction?
2. View the list of “Red Light” reasons for leaving a job—reasons you should not use in a job interview in which you are asked why you left your last job—at http://www.career-advantage.net/Training/reasons_for_leaving_a_job.html. Have you ever cited one of those reasons as the reason you left your job? For each item on the list, brainstorm with classmates why it would be better not use it in a job interview. What does the item say about you as a worker or as an employee? What could you possibly do differently to prevent each “Red Light” item from being the reason you leave a job?
3. Record in My Notes or your personal finance journal the outcome of every job you have held. For each job, have a column for listing your reason(s) for taking it and another column listing your reason(s) for leaving it. Also, note what you liked most and least about each job. Do you notice any patterns emerging in the data about your job history? Is there anything about those patterns that you would like to change?

[1] Job Satisfaction,
http://www.careervision.org/About/PDFs/MR_JobSatisfaction.pdf,
http://www.conference-board.org/utilities/pressdetail.cfm?press_id=2582 (accessed July 21, 2009).

[2]

http://www.salary.com/personal/layoutscripts/psnl_articles.asp?tab=psn&cat=cat011&ser=ser032&part=par1352 (accessed August 5, 2009).

[3] U.S. Department of Labor, “Summary of the Major Laws of the Department of Labor,” <http://www.dol.gov/opa/aboutdol/lawsprog.htm> (accessed July 21, 2009).

[4] U.S. Department of Labor, “Unemployment Insurance,” <http://www.dol.gov/dol/topic/unemployment-insurance/index.htm> (accessed July 21, 2009).