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PERSONAL FINANCIAL PLANNING IN ACTION

Developing a Personal Financial Plan

Starting Point

Go to www.wiley.com/college/bajtelsmit to assess your knowledge of developing a personal financial plan.
Determine where you need to concentrate your effort.

What You'll Learn in This Chapter

▲ Personal financial planning and decision-making strategies
▲ Factors that influence financial planning
▲ The stages of successful financial planning

After Studying This Chapter, You'll Be Able To

▲ List the five steps in the personal financial planning process
▲ Examine the factors that personal financial planning decisions
▲ Begin to construct a comprehensive financial plan
▲ Consider opportunity costs and marginal effects in making personal finance decisions

INTRODUCTION

Knowing how to manage your finances can help you be more successful in life. In this chapter, we first look at the five-step financial planning process and then the factors that influence it, and we discuss the elements of a comprehensive financial plan. Finally, we explore strategies for making effective financial decisions. With this framework, you will be able to gain the tools for successful personal financial management.

1.1 The Personal Financial Planning Process

In your life, you've probably already faced some financial challenges. For example, maybe you've asked yourself one or more of the following questions:

- Should I take out a student loan to pay for college expenses?
- How can I get out from under my credit card debt?
- Can I afford to replace my car's transmission?
- Where should I buy my auto insurance?
- Would graduate school be a good investment for me?
- How much should I contribute to my 401(k) retirement plan?
- Should I start a savings plan to fund my child's college education?
- How do I decide among the employee benefit options that my employer offers?

These questions are all related to **personal finance—**a specialized area of study that focuses on individual and household financial decisions, such as budgeting, saving, spending, insurance, and investments. Understanding these topics will help you in many ways. For example, you'll make better decisions when you buy an auto, shop for a home mortgage, choose a career, and save for retirement. You may also be able to pay less in taxes and interest. **Personal financial planning** is the process of developing and implementing an integrated, comprehensive plan designed to meet financial goals, to improve financial well-being, and to prepare for financial emergencies.

The primary goal of personal financial planning is to develop and achieve financial goals, such as

- Buying a first home or a bigger home.
- Making a major consumer purchase.
- Supporting a growing family.
- Preparing financially for retirement.

People who have their finances in order gain important social and psychological benefits as well. Generally, they feel less stressed and experience improved

Figure 1-1

The five-step financial planning process.

relationships with friends, family members, and coworkers. As many couples know, financial difficulties are a major contributor to marital problems. Most people also find that the self-sufficiency that eventually results from good financial planning improves their self-esteem.

In this section, we introduce the five-step personal financial planning process (see Figure 1-1) and examine each step in detail. It's important as you read about the steps to recognize the circular flow of the planning process. Although you use the process to develop a personal financial plan, your plan won't ever be a finished product; you'll need to reevaluate and revise it continually as your life circumstances change. The process of personal financial planning is a lifelong activity.

1.1.1 Step 1: Analyze Your Current Financial Position

At the end of the month, many people struggle to meet their expenses. "Where did all the money go?" is a common lament. Before you can move forward with your financial plan, you need to determine where your money is coming from and where it is going.

Analyzing your current financial position requires that you take the following steps:

1. Collect and organize all your financial information.
2. Create personal financial statements.
3. Quantitatively evaluate your current financial position to establish a baseline against which you can measure improvement in the future.

This last step may involve hard work for those who are "organizationally challenged." Nevertheless, careful record keeping is vital to good financial planning, because it enables you to track actual expenditures and identify small financial problems before they turn into big ones. In Chapter 2, we explain how to analyze your current finances to determine your financial condition.

1.1.2 Step 2: Develop Short-Term and Long-Term Financial Goals

Everyone has a personal conception of "success." Have you thought about where you want to be 5 years from now? 10 years from now? For some, success may be defined in monetary terms and for others, in levels of personal satisfaction. However you define success, the second step in the personal financial planning process requires that you identify and prioritize specific goals and objectives.

The process of setting goals should involve some introspective assessment of why you have the goals you have. For example, are your objectives focused on your own needs or the needs of others? Are your objectives related to pressures from family members or peers?

Keep in mind that short-term and long-term goals change over time and may be influenced by changes in economic circumstances.

1.1.3 Step 3: Identify and Evaluate Alternative Strategies for Achieving Your Goals

Although every person's goals and objectives are unique to his or her circumstances, the strategies for achieving them are similar from person to person. In general, in order to have more money available to meet current or future goals, you either have to reduce spending or increase earnings. Step 3 in the personal financial planning process requires that you identify alternative strategies for achieving goals and compare the costs and benefits of each.

1.1.4 Step 4: Implement a Plan for Achieving Your Goals

Using the information developed in step 3, you are now prepared to decide on the best strategies for achieving your goals so that you can implement your plan. How do you make such decisions? How do you know which strategies are the best ones for achieving your goals? You acquire fundamental knowledge and master analytical tools that help you to make effective personal financial planning decisions. The result will be a personal financial plan that meets your basic household needs, builds wealth over time, and protects your income and assets.

1.1.5 Step 5: Regularly Reevaluate and Revise Your Plan

Many changes occur over the course of your life. Not only do changes in your personal circumstances (e.g., graduation, a new job, marriage, children) affect

FOR EXAMPLE

When Goals Must Change

In 2006, Jack Naughton was employed as a superintendent for a large residential construction firm. He and his wife lived comfortably on his $50,000 salary and felt lucky that he had been able to work his way up in the business, despite his lack of a college degree. They had recently stretched their finances to buy a larger house, and they planned to increase their retirement account contributions and to begin a college savings plan for their daughter.

Due to a real estate downturn, Jack was unexpectedly laid off from his job, and the Naughtons' goals had to change drastically. Instead of retirement and college savings, their new goals were to pay their bills and find a new job for Jack. After his layoff, Jack found a new job but had to take a significant pay cut, and his earnings no longer covered the family's expenses. To meet expenses, the Naughtons might use one or more of the following strategies:

- Mrs. Naughton could get a job.
- They could sell the house or possibly refinance it at a lower interest rate to reduce their monthly mortgage payments.
- They could sell other assets.
- They could dip into savings.
- They could borrow money.

Each of these strategies has costs and benefits that must be carefully identified and evaluated.

your financial planning objectives and strategies, but economic conditions may necessitate revision of the plan as well. An effective financial plan must be adaptable to changing circumstances. Thus, step 5 takes you continually back to steps 1 through 4.

SELF-CHECK

1. Define **personal finance** and **personal financial planning.**
2. **List the five steps of the personal financial planning process.**

1.2 Factors That Influence Personal Financial Planning

As you build your financial plan, you need to consider many factors that influence your spending and saving behavior. Some are unique to you, such as where you are in your life cycle, your family composition, your values, and your attitudes. Others, such as inflation and interest rates, affect everyone to some extent. Both types of factors can be expected to change over time, so your plan needs to continually adapt to new circumstances.

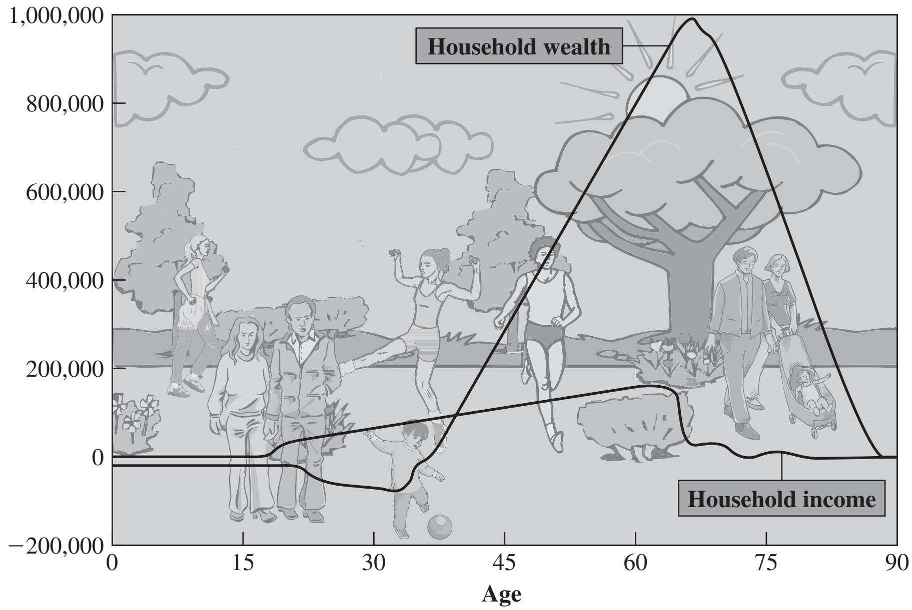
1.2.1 Changing Needs over the Life Cycle

Your household goes through several phases over your life cycle, and your financial situation changes as well. Figure 1-2 illustrates how a person's income and wealth might change over the life cycle. There are many different types of family situations. Although everyone's situation is unique, for everyone, there are significant differences in planning needs over the life cycle.

In general, your income level through your early 20s is lower than it is later, and your wealth may even be negative—that is, you may have more debts than assets at this point in your life. That's because you're making investments in your education that have not yet paid off.

Marriage, career development, the purchase of a home, and investments in your children's education will likely occur from your late 20s through your 40s.

Figure 1-2



Household income and wealth over the life cycle.

During this time, your household will focus on setting goals, establishing savings, and protecting the family against unexpected negative events, such as premature death or job loss due to illness or disability. This is also the beginning of the wealth accumulation phase, which continues through your 50s to early 60s.

As retirement approaches, most people in their 50s and 60s pay closer attention to meeting retirement income and health needs and preserving wealth for their heirs. The earlier you plan for these needs, the better off you are when you get to that stage in the life cycle. During your retirement period, which generally begins at age 65, you decumulate, or spend, your accumulated wealth. Your goals during retirement may include maintaining an active lifestyle, including travel and leisure activities, and having sufficient income throughout your retirement period.

1.2.2 Values and Attitudes

People have different money styles—different values and attitudes regarding money and its use. A person's money style is generally the result of both learned behaviors and inherent tendencies. For example, if you were raised in a household where money was tight and consumer purchases were made with careful deliberation, you might carry the money skills learned from your parents' example into your adult life.

Whether your parents were spendthrifts or tightwads, however, your own genetic makeup also affects your personal money style. Individuals who are impulsive by nature often have difficulty controlling their spending, just as those with a tendency to orderliness are more likely to have their finances in order. Thus, both nature and nurture help to form your values and attitudes toward money. In fact, it is not uncommon to find that siblings raised in the same households have very different money styles. We explain here what we mean by values and attitudes:

- ▲ **Values** are fundamental beliefs about what is important in life. What do you think is most important: family, friends, things, education, religious faith, financial success, fame, health, self-sufficiency? The weight you place on each influences the goals you set and the strategies you develop to achieve your goals.
- ▲ **Attitudes** are opinions and psychological differences between people that affect their decisions. Are you an optimist or a pessimist? conservative or liberal? Do you like to have everything planned out in advance or just go with the flow?

Of particular importance to financial planning is your attitude toward risk, or uncertainty: Are you a risk-taker, or do you tend to avoid risk? What if you already know that you have a problem with money? Is it possible to overcome your biological makeup and your learned values and attitudes? Of course! You must first recognize what your values and attitudes are, particularly where they may run counter to achieving your goals. If you are a spender, you may need to approach your budget differently than someone who is naturally inclined to be more conservative in spending. Similarly, if you are a natural risk taker, you may need to learn to be more cautious, like someone who tends to avoid risk.

1.2.3 Life Situation

Family composition and demographic characteristics—such as age, marital status, income, and wealth—significantly affect financial planning. Households with children, for example, tend to have higher expenses and therefore less ability to save during their child-rearing years.

Children's college expenses can take a big bite out of family savings. Double-income couples, particularly those with no children, tend to be better off financially than singles. Those without children are also more able to focus on career goals and therefore can more quickly move up the employment ladder. However, the financial and social support provided by children to their parents in old age may eventually offset the increased earlier costs.

Also, education plays a critical role in financial success. College-educated people, particularly those with specialized skills (e.g., business, education, engineering), tend to receive higher starting salaries and larger wage increases over their careers. White-collar employees are also more likely to receive retirement plans and benefits packages.

Demographic factors such as gender, age, income, and education have also often been linked to risk attitudes. If you are male, childless, educated, and high income you are more likely to be a risk taker.

1.2.4 General Economic Conditions

A fundamental truth about the economy is that it is very unpredictable. Even experts cannot say with certainty what the future may hold. Nevertheless, some factors in the economy have a known influence on personal finances, and it's important for you to recognize these factors and incorporate them into your financial planning decisions. Many economic factors affect financial planning. Some factors that are highly likely to affect your future are

- ▲ Inflation.
- ▲ Interest rates.
- ▲ Employment conditions.
- ▲ Political unrest and global issues.

Everyone has at one time or another heard an older person say, "When I was a kid, it was a lot less expensive to . . . ." Such statements describe the effects of **inflation,** or the change in general price levels over time. Occasionally, we have a negative inflation rate—that is, the prices of goods and services actually decline over a given period. Generally, however, inflation refers to an increase in prices. As prices of goods and services go up, the spending power of your money goes down—a dollar will not purchase as much as it previously did.

Inflation affects nearly every aspect of your finances. Your grocery bills are probably higher this year than they were last year. You're likely paying more for gasoline now than in the past. Your monthly rent will probably go up next year, too. As prices of goods get higher over time, you can maintain your standard of living only if your income after taxes also rises by the same amount. For your standard of living to improve, your income must rise at a rate faster than the inflation rate. Inflation affects your investments as well. If the costs of goods rise at a rate of 4 percent, but your savings account is paying only 3 percent, then you are actually losing spending power.

For the overall U.S. market, inflation is measured by the change in the **consumer price index (CPI)**, reported monthly by the Bureau of Labor Statistics. The CPI tracks prices of a representative basket of more than 400 goods and services used by urban households, including food, housing, consumer goods, gasoline, and clothing.

Whereas the price of a college education has tripled since 1980, that of gasoline has increased only 78 percent over the same period. Depending on various factors, you may experience a larger or smaller change in expenses than the price changes indicated by the CPI. For example, some areas of the country have higher rates of inflation than average, primarily because of higher fuel and housing costs. Housing in areas of the country that are in high demand can be extremely costly. According to the National Association of Realtors, at the end of 2005, the median price of a home in Indianapolis, Indiana was only $122,000, whereas the median resale price in San Francisco, California, was $718,700.

A person also has different demands for goods and services at different stages in the life cycle. For example, health care costs, which have risen at a much faster rate than other elements of the CPI, are a bigger component of a retiree's expenses—12.6 percent of total household expenses, compared with only 2.5 percent for those under age 25 and 4 percent for households aged 35 to 44. Housing costs, in contrast, have less importance for retirees because many retirees have paid off their home mortgages. Furthermore, inflation can be particularly problematic for people on fixed incomes. If your retirement income doesn't increase over time, but your expenses do, your standard of living gradually declines.

Although inflation has averaged 4.8 percent per year since 1970, the annual rates of inflation have ranged from 1.2 to 13.3 percent. Over that same period, the federal minimum wage rate has increased from $1.60 to $5.15, the equivalent of only 3.6 percent per year. Similarly, the average wage for production workers in private industry has increased 4.3 percent. These statistics illustrate an important economic reality—wages don't always keep up with prices—and this is particularly true during periods of high inflation. For example, in 1979, when inflation hit a high of 13.3 percent, production workers' average wages that year increased only 8.5 percent. Because 8.5 percent probably seemed like a good raise at the time, it's likely that the average worker didn't realize that his or her standard of living had actually declined.

Interest rates also affect general economic conditions. The **interest rate** is a measure of your earnings, or return, on an investment When you borrow money, the interest rate is a cost to you. Interest is usually expressed as a percentage of the amount lent or borrowed. Interest rates can also be thought of as a cost of spending money today instead of saving for tomorrow. How much additional money will you need to get in the future to be willing to delay spending that money on goods and services you can enjoy right now? For example, if your roommate asks you to lend him $1,000 and promises to pay you back exactly one year from now, how much will you require that he pay you at that time? If you have to take the money out of a savings account that pays you 4 percent interest per year, you'll probably want him to pay you at least the $1,000 plus 4 percent interest. But what if lending him the money means that you will have to forego a trip to Mexico over spring break? How much additional money in the future will it take to convince you to give up spending the money on the trip now?

What makes interest rates go up or down? Like the prices of goods and services, interest rates are driven by supply and demand. When there is a lot of demand for borrowing but not a lot of money available to borrow, interest rates go up. In recessions, when businesses do not need or want to invest in growth, the demand for borrowing is lower, and rates may go down.

Actions taken by the **Federal Reserve Bank** (referred to as "the Fed")—the central bank that controls the money supply in the United States—affect the

FOR EXAMPLE

How the Fed Moves Interest Rates

Between 2000 and 2003, the Federal Reserve several times took action to lower the **federal funds rate**—the rate that banks charge each other for short-term loans—in an attempt to stimulate the sluggish economy. By reducing the rate from 6.5 to 1.0 percent gradually over that time period, the Federal Reserve actions reduced short-term borrowing rates, which in turn resulted in lower commercial loan and mortgage loan rates. These actions helped to pull the country out of the recession. In June 2004, the Fed reversed this trend and began to increase rates. In addition to actions by the Federal Reserve, inflation and other economic conditions cause interest rates to go up and down over time, and, through a series of increases over the next two years, brought the rate back up to 5.25 percent by October 2006 in order to keep inflation in check.

finances of the average person, although they may not be aware of what the Fed is doing. Sometimes the Fed takes actions to increase or decrease the supply of money in the economy in order to manipulate the rate of interest on short-term, low-risk borrowed funds. When these rates go up, it becomes more expensive for people to obtain credit, to finance their mortgages, and to use credit cards. This slows down the economy. Conversely, lower rates increase economic activity by making it easier for people to obtain credit.

Although the ups and downs in interest rates tend to track each other, there are differences among interest rates on various types of loans at any given time. These differences are primarily due to differences in risk. For example, what is the chance that payments will not be made on time or that a loan will not be repaid? The higher the chances, the riskier the loan and the higher the rate charged by lenders. If the borrower does not pay the loan as agreed, does the lender have any way of recouping the loan? If not, the loan is riskier than it would otherwise be. Consumer loans and credit cards are riskier in that the borrower is an individual rather than a financial institution and might be unable to pay if his or her financial situation changes in the future. However, car loans have much lower rates than credit cards because the bank normally has the right to take back the car in the event of nonpayment. The riskier the investment or loan, the higher the interest rate because the lender or investor must be compensated for the risk of not being repaid.

Your personal finances are also affected by cyclical business and employment conditions, known as the **economic cycle,** or the historical pattern of ups and downs common to the U.S. economy:

- ▲ A low point in the cycle is called a **recession** (or, in the extreme, a depression), and is characterized by reduced business investment and high unemployment rates.
- ▲ Economic **expansion** periods are characterized by increased business investment and employment opportunities.

FOR EXAMPLE

Boom and Bust in Silicon Valley

During the technology boom of the 1990s, even undistinguished computer science majors had multiple job offers at graduation and were constantly bombarded by headhunters trying to entice them to different jobs for better pay and benefits. A few years later, new graduates in these fields were happy to get any job at all. Widespread layoffs at technology firms meant that new graduates were competing in the job market with individuals who had many more years of experience.

In times of growth and low unemployment, salaries tend to rise more quickly, and there are better opportunities for advancement. Your future will be less sensitive to changes in employment conditions if you choose an area of study that is likely to have continuing strong demand over time. You can also minimize the risk of layoff by keeping your skills up-to-date.

Political and global factors can also affect your personal finances. For some time following September 11, 2001, the looming threat of terrorism had a negative impact on the U.S. economy. The stock market, which had already seen substantial declines from its high of the previous year, continued to plummet, losing more than 20 percent of its value from September 2001 to September 2002; unemployment increased rapidly; and governmental spending on homeland security cut into state budgets.

SELF-CHECK

1. Define **inflation, CPI, interest rate,** and **federal funds rate.**
2. List the personal factors that affect financial planning.
3. What is a low point in the business cycle called?

1.3 Elements of a Comprehensive Financial Plan

There are four stages in developing a comprehensive financial plan, all of which are covered in various sections in this book:

1. **Establishing a firm foundation:** The first step to success in your personal finances is to establish the necessary foundations, including an understanding of the personal financial planning process, the necessary tools, and the tax effects of your financial decisions.
2. **Securing basic needs:** The second step is to secure your basic needs. This step includes meeting your consumption and housing needs, setting aside funds for financial emergencies, protecting your assets with insurance, establishing a career path, and making educated employee benefits decisions.
3. **Building wealth:** After you have secured your basic needs, you can begin to think about wealth building to meet future needs, such as retirement and college funding. With financial security comes the need to protect your wealth.

4. **Protecting wealth and dependents:** The final stage in the process of developing a comprehensive financial plan includes the protective elements of life insurance, long term care insurance, and estate planning.

SELF-CHECK

1. What are the basic needs you need to meet after you have a financial foundation?
2. What are four stages of a comprehensive financial plan?

1.4 Making Effective Decisions

As you work on your financial plan, you need to make many important decisions. After you identify your goals, you need to make decisions about consumption, savings, and investment alternatives. These decisions can more effectively help you achieve your goals if you use these decision-making strategies:

- **Base your decisions on reasonable assumptions:** Don't be unreasonably optimistic about your finances.
- **Apply marginal reasoning:** *Marginal* refers to the change in outcome or the additional benefit that will result from the decision you make.
- **Consider opportunity costs:** An opportunity cost is a measure of what you have to give up in order to take a particular action.
- **Use sensitivity analysis:** A sensitivity analysis asks the question "What effect would it have on my personal finances if my assumptions turned out to be wrong?"

Let's look at each of these strategies in more detail.

1.4.1 Making Reasonable Assumptions

Most financial decisions require you to forecast, or predict, future events and economic circumstances: What will your needs be 5 or 10 or even 20 years from now? What will your family circumstances require from you financially? When will you retire? How long will you live? Which investments will perform best over time? What will the rate of inflation be in the future? What rate will you earn on your investments? What kinds of risks will you face?

Life is, of course, unpredictable. But even if you don't know an outcome for certain, you can still use the information available to you to come up with a reasonable assumption. This is a critical component of successful decision making.

FOR EXAMPLE

Retirement Squeeze

Karen and Luke Amato were planning to retire in 2001, when both would reach the age of 65. They had invested all their retirement funds in the stock market over the 1990s, accumulating a total portfolio of about $1.5 million by the time the market reached its peak, an amount they thought would be more than adequate to meet their expected retirement needs. Unfortunately, one year later, they had to reconsider their plans because the value of their retirement nest egg had fallen by more than one-third, to less than $1 million. Although the Amatos might have limited their losses by moving their money to safer investments earlier, they, like many other investors, had unrealistically clung to the hope that the stock market would recover. In fact, they were lucky—some investors experienced much larger losses. If they had applied more realistic assumptions, based on a longer-term history of stock market returns, the Amatos and others might have avoided such extreme losses and been able to retire as they had planned.

One of the biggest mistakes people make in their finances is that they are too optimistic in their assumptions. During the 1990s, the stock market enjoyed a long period of strong growth. Investors who had never experienced a market downturn actually thought that stocks would continue to earn such high rates of return indefinitely. Unreasonably optimistic investors eventually lost a large percentage of their investment portfolios when the market declined.

1.4.2 Applying Marginal Reasoning

In choosing among potential strategies to achieve your financial goals, it is important to apply **marginal reasoning.** The term *marginal* refers to the change in outcome, or the additional benefit, that will result from the decision you make.

Suppose you and your spouse share a car and you're considering buying a second car. In applying marginal analysis, you need to consider only the additional benefits that the second car brings and not the general benefits of having a car in the first place. Similarly, if you're choosing between two possible cars, you need to consider how much extra benefit you would get from the more expensive of the two and balance that against the extra cost.

1.4.3 Considering Opportunity Costs

Every financial decision you make has an opportunity cost. An **opportunity cost** is a measure of what you have to give up in order to take a particular action. Opportunity costs can be personal costs, such as time and effort, but they are often financial costs, such as lost dollars or return on investment.

As explained in Section 1.2.4, your spending decisions often involve a trade-off because if you spend money, you are giving up the interest you could have earned on the money if you had invested it instead. When you invest, your money earns interest. If you leave your money invested for long periods of time, your money earns compound interest, or interest on interest. So, if you earn 10 percent interest on $1000 for one year, you will have $1100 at the end of the year. But if you leave the interest in the account, you will earn the 10 percent interest on the entire $1,100, so your interest the second year will be $110. This allows it to grow faster and is often referred to as the *time value of money*. The opportunity cost of missing out on earning compound interest is an important component of financial decision making.

For example, suppose you're faced with the decision of whether to take money from savings for your college education or to work while attending school to earn the money. If you choose to take money from savings, you give up what you could have earned on that investment—this is your opportunity cost. But if you otherwise would have to work 30 hours per week while you attend school, the lost investment earnings might be small relative to the personal costs you would incur—less time and energy to apply to your studies and extracurricular activities. Evaluating opportunity costs carefully results in better decisions.

1.4.4 Using Sensitivity Analysis

Suppose you are deciding on the purchase of a new home. Although the loan payment will be a bit of a stretch for you the first year, you anticipate that you

FOR EXAMPLE

The Power of Compound Interest

Marie receives a tax refund of $3,000. She wants to use the money for a college fund for her daughter who is three years old. If she invests this in an account that earns 5% interest and leaves it to earn compound interest for 15 years, she can calculate the amount she will have at the end using the equation: Future value = Present Value $\times$ $(1 + r)^n$. So, in fifteen years, Marie will have $6,237 = $3,000 $\times$ $(1.05)^{15}$. As a shortcut to figuring out how much difference interest will make to your decisions, you can use Figure 1-3. Find the column for the interest rate you expect to earn on your investment and look down to the number in the row corresponding to the number of years you plan to leave the money invested. That number is the amount you can multiply times your original investment to determine how much it will grow to. If Marie could earn 8 percent on her investment, the multiplier from the table is 3.17, so her $3,000 will grow to $3,000 $\times$ 3.17 = $9,510.

Figure 1-3

Years Invested	*Interest Rate Earned on Investment*							
	3%	*4%*	*5%*	*6%*	*7%*	*8%*	*9%*	*10%*
1	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10
2	1.06	1.08	1.10	1.12	1.14	1.17	1.19	1.21
3	1.09	1.12	1.16	1.19	1.23	1.26	1.30	1.33
4	1.13	1.17	1.22	1.26	1.31	1.36	1.41	1.46
5	1.16	1.22	1.28	1.34	1.40	1.47	1.54	1.61
6	1.19	1.27	1.34	1.42	1.50	1.59	1.68	1.77
7	1.23	1.32	1.41	1.50	1.61	1.71	1.83	1.95
8	1.27	1.37	1.48	1.59	1.72	1.85	1.99	2.14
9	1.30	1.42	1.55	1.69	1.84	2.00	2.17	2.36
10	1.34	1.48	1.63	1.79	1.97	2.16	2.37	2.59
15	1.56	1.80	2.08	2.40	2.76	3.17	3.64	4.18
20	1.81	2.19	2.65	3.21	3.87	4.66	5.60	6.73
25	2.09	2.67	3.39	4.29	5.43	6.85	8.62	10.83
30	2.43	3.24	4.32	5.74	7.61	10.06	13.27	17.45

Future Value Multipliers

will get a good raise next year, which will make the payment affordable. But what if this assumption is wrong—what if you do not get the raise or, even worse, are laid off from your job?

Sensitivity analysis asks the question "What effect would it have on my personal finances if my assumptions turned out to be wrong?" By considering how the outcome might change with changes in other uncertain variables, you can reduce the risk that your plan will have an adverse impact on your finances.

Psychology research has shown that people exhibit different decision-making styles, many of which result in less-than-optimal outcomes. Even if you are naturally inclined to make decisions in a different way, you can still learn to apply the strategies and tools discussed in this chapter in order to make more effective decisions.

SELF-CHECK

1. List the decision-making strategies available to you for financial planning.
2. Define **opportunity cost** and **sensitivity analysis.**

SUMMARY

Personal financial planning can mean the difference between financial success in your life and problems down the road. The five-step planning process is a continuous cycle that helps you assess your position and get to where you want to be. Personal factors as well as general economic factors influence the planning process. The stages of a plan include laying a foundation, securing basic needs, building wealth, and protecting wealth and dependents.

KEY TERMS

Attitudes — Opinions and psychological differences between people that affect their decisions.

Consumer price index (CPI) — A U.S. government index that tracks prices of a representative basket of goods and services.

Economic cycle — A pattern of ups and downs experienced by the U.S. economy.

Expansion — Periods characterized by increased business investment and employment opportunities.

Federal Reserve Bank — The central bank that controls the money supply in the United States.

Federal funds rate — The rate banks charge each other for short-term loans.

Inflation — The change in general price levels over time.

Interest rate — A cost of money, expressed as a percentage.

Marginal reasoning — A strategy that takes into account the change in outcome or additional benefit resulting from a decision.

Opportunity cost — What you have to give up in order to do something.

Personal finance — A specialized area of study that focuses on individual and household financial decisions, such as budgeting, saving, spending, insurance, and investments.

Personal financial planning — The process of developing and implementing an integrated, comprehensive plan designed to meet financial goals, to improve financial well-being, and to prepare for financial emergencies.

Recession — A low point in the business cycle.

Sensitivity analysis — Consideration of how an outcome changes with changes in other variables.

Values — Fundamental beliefs about what is important in life.

ASSESS YOUR UNDERSTANDING

Go to www.wiley.com/college/bajtelsmit to assess your knowledge of developing your personal financial plan.
Measure your learning by comparing pre-test and post-test results.

Summary Questions

1. Which of the following is not normally considered an area of personal finance?
   (a) budgeting
   (b) investments
   (c) choice of a career
   (d) choice of a marriage partner
2. Personal financial planning skills are applicable only in the early years of a person's life. True or false?
3. Which of the following is the best definition of personal finance?
   (a) the study of individual and household financial decisions
   (b) the study of individual investment planning
   (c) the study of personal wealth
   (d) the study of personal money management
4. Which of the following is not one of the steps in the personal financial planning process?
   (a) developing short-term and long-term financial goals
   (b) identifying and evaluating alternative strategies for achieving goals
   (c) implementing a plan for achieving goals
   (d) determining the appropriate risk level of a participant
5. An effective financial plan should be inflexible in order to achieve the goals set. True or false?
6. A person's fundamental beliefs concerning what is important in life are referred to as:
   (a) values.
   (b) attitudes.
   (c) opinions.
   (d) judgments.
7. For a person's standard of living to improve, his or her:
   (a) income must be above the average standard of living.
   (b) expenses must decrease.

(c) assets must rise in value faster than his or her expenses
(d) income must rise faster than the inflation rate.

8. For the overall U.S. market, inflation is measured by the change in the:
   (a) producer price index.
   (b) consumer price index.
   (c) gross domestic product.
   (d) wholesale price index.
9. You are considering adding a wood shop to your home. You enjoy woodworking and could make items for sale. In considering this addition, you look only at the extra cost of the shop and the potential benefits of having the shop. This is an example of:
   (a) opportunity cost decision making.
   (b) sensitivity analysis.
   (c) marginal analysis.
   (d) reasonable assumptions.
10. When a person begins to spend his or her accumulated wealth, this is known as the distribution phase. True or false?
11. You decide to take a part-time job to help with your college expenses. The hours available for study are thus reduced. The reduction in study hours would be your:
   (a) fixed cost.
   (b) direct cost.
   (c) variable cost.
   (d) opportunity cost.

Applying This Chapter

1. Name three benefits of having a better understanding of personal finance.
2. Explain how your financial planning needs are likely to change over your life cycle.
3. Under what circumstances might the Federal Reserve take action to increase short-term interest rates?
4. Identify where each of the following fits into a comprehensive financial plan: career development, checking and savings accounts, stock investing, retirement planning, and life insurance.
5. Sanjay, an engineer at a major technology firm, earns $50,000 per year. He thinks that having an MBA degree will increase his chances of being promoted to a management position. He is trying to decide whether to

enroll in a part-time evening program that will take two years or in a one-year full-time MBA program. Identify the factors that Sanjay should consider in making this decision. What are the opportunity costs of each alternative?

6. How can marginal reasoning be applied to the analysis of Sanjay's situation in Question 5?

YOU TRY IT

And Then There Were Three

Kenny and Ellen are married during their senior year in college. They plan and save $3,000 for a honeymoon trip to Europe after graduation. They both have offers for jobs that begin in July. Two months before graduation, they discover that Ellen is pregnant.

1. Should they change their honeymoon plans?
2. Explain why they should reevaluate their honeymoon decision based on the change in their life circumstances.
3. If they invest the $3,000 instead of spending it, how much will it be worth in 10 years if they earn 7 percent per year on their investment. (Hint: Use Figure 1-3)

What Happens if the Car Breaks Down?

Miranda is a single mother of two, struggling to make ends meet. Her salary of $40,000, after taxes and child-care expenses, doesn't go very far. Miranda is a careful budgeter, and she has been setting aside $40 per month for Christmas presents for her kids. By October, she is proud to have $400 in her savings account. But disaster strikes: Her car breaks down, and the mechanic tells her the cost of fixing it will be $350.

1. What are Miranda's options?
2. Taking Miranda's situation into consideration, at what stage is she in her comprehensive financial plan? Which elements do you think she needs to focus on in the short term (one year or less)? Which elements should she focus on over the next five years?